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The makers of Lichenology, to the end of the 20th century

Abstract

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This paper, initially conceived as an appendix to a forthcoming History of Lichenology, presents brief biographical accounts of 611 lichenologists who were active before the end of the 20th century. We have sought to cover the principal lichenological contributions of each individual, not merely recording the bare facts but, where possible, illuminating the circumstances surrounding their work. These short biographies will constitute an initial baseline for an online searchable database, which is intended to be expanded and amended in the coming years by the lichenological community.

Key words: Biographies, botany, history, mycology, lichenologists.

Introduction

Krempelhuber's *Geschichte der Lichenologie* (1867–1872), a classic of the genre, is a goldmine of information which, however, remains largely inaccessible to contemporary lichenologists due to its archaic, academic German. Consequently, several years ago, David Galloway and Per Magnus Jørgensen planned to fill this gap by completing a *History of Lichenology* in English. Sadly, Galloway passed away just as they had begun their work. Robert Lücking eventually agreed to join the project, but he subsequently had to withdraw due to other demanding duties. The original intention was to include a biographical addendum within the volume of the *History* for the lichenologists mentioned in the text, who were active before the end of the 20th century. As the work progressed, however, this section grew into a substantial manuscript, far too large to function merely as an addendum. At this point, Pier Luigi Nimis took over the task of thoroughly correcting, completing, and editing the English text of the biographies, which is presented here as a standalone work.

These biographies do not claim to be comprehensive; rather, they aim to cover the principal lichenological contributions of each individual. We have sought not merely to record bare facts but, where possible, to illuminate the circumstances surrounding each person's lichenological work. As a rule, we have excluded, with very few exceptions, all those born after 1970, as well as those who published relevant work in lichenology after the year 2000.

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We have relied on several standard sources, such as Desmond (1977), Dörfelt & Hecklau (1998), Grummann (1974), Hertel (2012), Stafleu & Cowan (1976–1988), Laundon (1979), and Wikipedia (2014–2020). In addition, a number of specialised works have been consulted, such as Kärnefelt et al. (2012), alongside many obituaries; these are cited at the end of each entry. In many cases, we have also benefited from personal information supplied by colleagues, indicated as *pers. comm.* In several instances, the 'official' names of the individuals treated here were different from, or much longer than, those they used in their scientific publications. In such cases, the parts of their names which they never, or very rarely, used are not highlighted in bold. Whenever available, a small portrait has been also added. The herbaria are abbreviated following Holmgren & al. (1990).

Figure 1 shows the temporal distribution (by decades) of the lichenologists treated here, arranged by date of birth. Four main periods can be distinguished:

The Early Pioneers (1470s–1770s)**:** For the first 300 years, the chart shows near-baseline numbers, rarely exceeding 5 births per decade. During this period, Lichenology did not exist as an independent field. Lichens were treated by general herbalists and early micro-anatomists. The minor uptick in the mid-1700s correlates with the introduction of Linnaean binomial nomenclature, which provided naturalists with a unified framework to begin naming and categorizing lichens.

The Taxonomical and Technological Awakening (1780s–1910s): A permanent upward shift occurs starting in the 1780s, with birth counts consistently sustaining levels between 15 and 26 individuals per decade. This acceleration aligns perfectly with major milestones in the discipline. Individuals born in the late 18th century came of age during the foundational work of Erik Acharius, who separated lichens into their own independent taxonomic system mainly on the base of fruiting bodies morphology. Those born between 1820 and 1860 entered a scientific community electrified by improved achromatic microscopes developed by Giovanni Battista Amici. This generation also witnessed and participated in the fierce academic debates surrounding Simon Schwendener's 1867 "dual hypothesis," which proved lichens were composite organisms.

The Modern Scientific Boom (1920s–1950s): The mid-20th century represents the golden age of lichenology in terms of sheer numbers, reaching a historic maximum of 58 births in the 1950s**.** This generation revived lichenology after the Second World War, and also includes the first pioneers in advanced molecular phylogenetics, chemical profiling, and ecological mapping. This cohort also firmly established lichens as vital ecological indicators for air pollution and climate change studies.

The Apparent Decline (1960s–1970s): The lower count in the final decades is by no means real; it simply reflects the fact that newer, living scientists born in these decades are still currently active in their careers. Most of them pioneered the dawn of the molecular era which totally changed lichenology and is still ongoing, so that a final historic evaluation will have to wait

We are fully aware of the shortcomings of this work, most notably its incomplete nature. While the alphabetical list of authors contains a substantial 611 entries, it certainly does not encompass every important lichenologist worldwide. The individuals featured in this paper represent merely an initial selection from a much larger number of people who contributed to the advancement of lichenology up to the end of the 20th century. Particularly problematic were the borderline cases of lichenologists who published a handful of papers

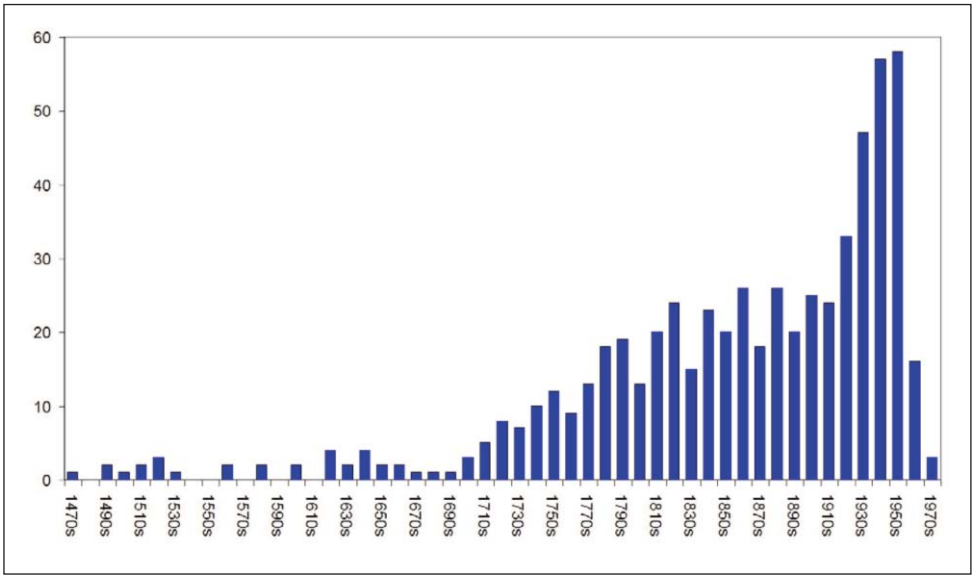


Fig. 1. Temporal distribution (numbers of births per decade) of the lichenologists treated here.

during the final decade of the 20th century, yet whose defining contributions to the field emerged after 2000. Nonetheless, these concise biographies will provide a foundational baseline for an online searchable database, which we intend for the lichenological community to complete, expand, and amend in the coming years.

It is fascinating to observe how recruitment into the field has been so varied and often haphazard. The development of lichenology, of course, follows general trends in botany and broader historical events. It is noteworthy that most of the individuals involved were not recruited from academic families. One notable exception is the Swedish Fries family: Elias Fries (1794–1878) and his son Theodor Magnus Fries (1832–1913), both professors of botany at Uppsala and prominent lichenologists. The father of lichenology, the Swede Erik Acharius (1757–1819), however, was the son of a clerk in the Swedish customs; he nevertheless pursued academic studies, took a medical degree, and became a respected physician and director of a new hospital. Many early lichenologists trained in medicine, among them the Frenchman Dominique Villars (1745–1814), who began life as a shepherd, a profession that brought him into close contact with the natural environment.

A remarkable centre of activity was Regensburg in Bavaria (Bayern, Germany), within the circle surrounding the physician David Hoppe (1760–1846). There, a number of emerging cryptogamists were active in his lyceum, among them Franz Gerhard Eschweiler (1796–1831), who discovered the importance of spores in lichen taxonomy. Many of these workers later turned to pharmacy, a profession that recruited a notable number of leading lichenologists. For many years, German lichenologists met at the pharmacy of Heinrich Christian Funck (1771–1839) in Gefrees, Bavaria. Independently, French pharmacists also

took up lichenology: a notable example is Antoine Fée (1789–1874), who ran a pharmacy in Paris and studied lichens on medicinal bark from exotic countries, outlining a new system based on spore characteristics. Around the same time (the first half of the 1800s), the French pharmacist Pierre-Antoine Bébert (1805–1886) was the first to characterise a lichen acid (vulpinic acid). A more prominent modern example is the Japanese pharmacologist Yasuhiko Asahina (1881–1975), who devised a new method to recognise taxonomically important lichen substances.

Other frequently recorded professions among lichenologists are teachers, clergy and, surprisingly, military officers. The latter were particularly numerous in nineteenth-century France, where they were often recruited from noble families, like the great naturalist Jean-Baptiste Lamarck (1744–1829). The leading military lichenologist was Jean-Baptiste Bory de Saint-Vincent (1778–1846), who assisted many botanically inclined colleagues in the forces. Military lichenologists were also found in the German lands; the most important was Julius von Flotow (1788–1856), who, after being seriously wounded in the Napoleonic Wars, retired to his estate in Silesia (Schlesien) and turned to lichenology, becoming an influential mentor in the region and supporting the work of Gustav Wilhelm Körber (1817–1885).

While the origins of military involvement in lichenology are difficult to explain, it is more readily understandable that teachers of natural history would take up the subject. The French teacher Georges Clauzade (1914–2002) found no suitable texts on lichens for his pupils and began to develop a small textbook for classroom use; this gradually developed into a major work, *Les Lichens*, co-authored with the botanist Paul Ozenda. Similarly, the Swedish teacher Adolf Hugo Magnusson (1884–1964) produced a simple lichen flora for Scandinavia. He was closely affiliated with his German colleague Christian Erichsen (1867–1945) and the Swiss Eduard Frey (1888–1974), both important continental European lichenologists. In the British Isles, the teacher Walter Watson (1872–1960) even attempted a new lichen system, as did his Finnish colleague Veli Räsänen (1888–1954).

Ecclesiastical interest in the field often rested on a curiosity about God's creation: there was a widespread belief that God could be understood through two documents, the Bible and Nature. This view is clearly expressed in a letter from Linnaeus, himself the son of a vicar, to the Norwegian bishop Johan Ernst Gunnerus (1718–1773), who had a keen interest in botany. In North America, the Lutheran *Herrnhuter* (Moravian) community contributed significantly to the early development of lichenology on the continent: Ludwig von Schweinitz (1780–1834), the grandson of the sect's founder D. von Zinzendorf, lived in Pennsylvania and is regarded as the father of American mycology. A generation earlier, members of the same sect had settled in eastern Greenland and Labrador, contributing the first known lichen collections from those regions. The Catholic Church, particularly the Jesuits, also fostered the study of natural history. The first to recognise lichens as a distinct taxon, the Frenchman Joseph Tournefort (1656–1708), was educated at a Jesuit school; his ideas were further developed by the Italian Pier Antonio Micheli (1679–1737), who had been educated by monks. The order sent missionaries to distant parts of the world, and several of them studied the natural environment; a prominent example is the French missionary Urbain Faurie (1847–1915), who pioneered collecting from Sakhalin south to Taiwan, and especially in Japan.

Lichens have attracted people from a surprisingly wide range of professions, which were often non-academic. Notable examples include the French jeweller Maurice Choisy (1897–1966), the Norwegian farmer Johan Havaas (1864–1956), the German ironmonger Oscar Klement (1887–1980), the Czech shoemaker Filip Kovář (1863–1925), the American photographer George Knox Merrill (1864–1927), the German baker Heinrich Sandstede (1859–1919), and the Italian poet Camillo Sbarbaro (1888–1965). These cases highlight the importance of individuals to the study of lichens, even though most were active when the field was already well established and experts were available for consultation. Individual biographies provide further detail about these and other contributors to the accumulated knowledge of lichens; there are hundreds of such figures, far more than can be included here. Some made considerable contributions, others more modest ones; some achieved results only after great patience, steadfastness and personal sacrifice. Two prominent examples of such dedication are the German Siegfried Huneck (1928–2011) and the Finn Edvard August Vainio (1852–1929).

A striking feature of the history of lichenology, and of the natural sciences in general, is the severe underrepresentation of women, who account for less than eight per cent of the historical figures included in this paper. For centuries, the institutional pathways of botany were tightly policed by a masculine elite. In the Victorian era, botany was widely promoted as a safe, virtuous pastime for well-to-do women, provided it remained a non-professional hobby, meaning women were encouraged to collect specimens and create beautiful herbaria yet were actively barred from the elite spaces where taxonomy was decided. Consequently, many brilliant female lichenologists functioned as the invisible scaffolding for famous male authorities. The very first woman to break into lichenology was the Belgian Marie-Anne Libert (1782–1865), whose early contributions throw into sharp relief the immense difficulties women faced when trying to pursue higher education, as well as the formidable institutional barriers that deliberately blocked their enrolment and advancement in the academic world. Another stark example is Annie Lorrain Smith (1854–1937), who, despite arriving at the British Museum in 1888 to work on its extensive cryptogamic collections, could not be officially employed due to her gender, was paid from a special fund, and even after completing her monumental, two-volume *Monograph of the British Lichens,* which became the definitive textbook for generations and established her as the leading authority in the country, found that institutional leadership and equal pay remained strictly out of reach. In the first half of the twentieth century, female lichenologists remained exceedingly rare; nevertheless, a few notable exceptions managed to carve out a legacy, some of whom even entered academia, including the Americans Clara Cummings (1855–1906), Carolyn Harris (1849–1910), and Grace Howard (1886–1978), the British-born Ethel Doidge (1887–1965), and the Italian Eva Mameli-Calvino (1886–1978), who at the age of just 29 secured her *libera docenza* (habilitation) in botany, shattering contemporary academic glass ceilings as the first woman in Italy to achieve this status in the discipline. Others, however, still faced considerable difficulties, such as the Irish lichenologist Matilda Knowles (1864–1933), for whom gender bias delayed an official promotion to Assistant Keeper until shortly before her death, the Italian Maria Cengia-Sambo (1888–1939), who never succeeded in gaining an academic position at all, or the American Joyce Hedrick (1897–1980), who took on the monumental and exhausting task of completing Bruce Fink's American lichen flora with little recognition by her colleagues. By the mid-

twentieth century, highly influential figures began to emerge, such as the German taxonomist Aino Henssen (1925–2011), who developed a new lichen system based primarily on painstaking studies of fruit-body ontogeny, and the American chemotaxonomist Chicita F. Culberson (1931–2023), who revolutionised the study of lichen substances with a method that has since become standard practice in the field. Ultimately, it was only after the Second World War that the number of women entering the discipline increased substantially, a figure that is presently growing exponentially, but because this volume terminates its coverage with individuals who produced substantial contributions to lichenology before the close of the twentieth century, that broader modern influx is not fully reflected within these pages.

Biographies



Abbas, Abdulla (1951–) – Born in Urumqi, Xinjiang Province, China. Following his foundational education, he undertook advanced botanical training under the supervision of Professor Ji-nong Wu. Throughout his highly productive career, Abbas has collected lichens extensively across China, focusing primarily on his native autonomous region. His floristic surveys resulted in the publication of a pioneering illustrated manual and a baseline textbook written in the Uyghur language, making lichenology accessible to local student cohorts. His research group at Xinjiang University (XJU) has grown to become the largest and most influential hub for lichen taxonomy in China outside Beijing. This regional placement is scientifically vital, as it has enabled his team to systematically document the diverse cryptogamic flora of the botanically rich Altay, Kunlun, and Tian Shan mountain ranges. Abbas was instrumental in establishing the Arid Land Lichen Research Center of Western China at Xinjiang University, which serves as an important regional repository. His field expeditions have yielded more than 10,000 meticulously prepared specimens, which are preserved at XJU. Ref.: *Pers. comm.*



Abbayes des, Henry Nicollon **(1898–1974)** – Born in Vihiers, Maine-et-Loire, France. He grew up in the Vendée department and studied at the *Collège Richelieu* in Luçon, demonstrating a remarkable early aptitude for classical languages and graduating with a *baccalauréat* in Latin, Greek, and philosophy in 1915. He subsequently enrolled at the *Université Catholique de l'Ouest* in Angers, but his studies were abruptly halted by the First World War, during which he was mobilised into active combat. In the challenging economic climate following the armistice, he worked temporarily as a wine merchant, only discovering his profound passion for lichenology after 1920. He eventually secured a post as an assistant at the University of Rennes, working initially in the zoology department before transferring to botany in 1933, a transition that marked the true beginning of his illustrious scientific career. In 1934, des Abbayes successfully defended his doctoral dissertation at the University of Paris (the Sorbonne) on the lichens of the Armorican Massif, that remains a cornerstone of French cryptogamic literature. He rose through the academic ranks at Rennes, ultimately being appointed Professor of Botany in 1952. Des Abbayes focused much of his research on the floristics, ecology, and phytogeography of Atlantic Europe, particularly western France. From 1947 onwards, his reputation as a meticulous taxonomist led to his receiving vast botanical shipments from various French overseas territories and colonies, including French West Africa, French Indochina, and Madagascar. Although he never traveled to these tropical regions himself, he described hundreds of exotic species from these collections, contributed to the taxonomy of *Cladonia,* and issued three exsiccatae series, including one of lichens from Madagascar, the first and only work of its kind. He was also a highly gifted educator, co-authoring the influential textbook

Traité de Botanique: Les Végétaux inférieurs (1963) alongside Marius Chadefaud and Jean Feldmann. His herbarium is housed at REN. Ref.: Chadefaud (1975); Letrouit-Galinou & Massé (1976).



Acharius, Erik (1757–1819) – Born in Gävle, Sweden, he was the son of a customs clerk, Johan Eriksson Acharius, and of Catharina Margaretha (née Hagtorn), who came from a prominent and wealthy bourgeois family of merchants and early industrial entrepreneurs. After completing his primary education in his native town, he matriculated at Uppsala University in 1773 to read medicine and natural history. In 1776, he successfully defended his dissertation, *Planta aphyteia*, under the premiership of Carl Linnaeus, marking the final occasion on which the great naturalist presided over an academic defense. Acharius was highly regarded as one of Linnaeus's favourite pupils; indeed, Linnaeus had selected him to join a Spanish crown expedition to South America, though political circumstances prevented the voyage from materialising. A remarkably gifted illustrator, Acharius worked for the Royal Academy of Sciences in Stockholm for four years from 1778. He continued his medical training across Stockholm and Lund University, defending his doctoral thesis in medicine in 1782. He subsequently developed a successful medical practice, serving as a provincial physician in Landskrona from 1785, and later relocating to Vadstena in 1789. In 1795, he was appointed director of the newly established Vadstena hospital, where he faced the psychological and physical strain of managing a specialised facility under demanding wartime conditions. A historical memorial plaque still marks the house in Vadstena where he lived until his death, though his grave in the monastery churchyard has long since disappeared. It was during his years in Vadstena that Acharius laid the foundations of modern lichenology. Although he was awarded the title of Professor in 1803, he received no university salary and conducted his research entirely in his spare time. He had first developed an interest in the "lower plants" during his student days alongside peers such as J. P. Westring, F. Ehrhart, and S. G. Ljung. During the 1790s, an extensive correspondence with O. Swartz stimulated him to design a novel approach to classification. At a time when Linnaeus recognised only a single, massive genus (*Lichen*), Acharius turned his attention to the internal morphology of the fruiting bodies, a shift likely inspired by the mycological frameworks of C. H, Persoon. His innovative system was first introduced in his *Methodus Lichenum* (1803), and later expanded into his global synthesis, *Lichenographia Universalis* (1810). The production of this latter work was severely disrupted by the Napoleonic Wars; though the text was completed in 1807, publication was long delayed, and Acharius spent months in despair, fearing the manuscript had been lost in transit to Göttingen. While awaiting its release, he published a suite of smaller papers describing new Swedish species, many of which now hold nomenclatural priority over the names in the 1810 book. In these papers, he rigorously defined many technical terms still utilised today, striving for an anatomical precision that corrected the vague descriptions of earlier authors. He intended to include only species he had personally evaluated, explicitly marking the few taxa known solely from literature with a dagger symbol (†). Acharius was the first to write treatments of individual genera, using the term 'monograph'; his largest is on

Pyrenula (1814), his first on *Thelotrema* (1810). He increasingly used the microscope, in contrast to his teacher Linnaeus, and died of a stroke after a day spent at the microscope studying a newly arrived Spanish collection. Acharius described numerous lichens, including many common genera such as *Alectoria, Arthonia, Cetraria, Chiodecton, Cyphelium, Evernia, Gyalecta, Lecanora, Lecidea, Parmelia, Porina, Pyrenula, Ramalina, Solorina* and *Thelotrema*. His personal lichen herbarium was purchased for the University of Helsinki by Gustaf Johan Billberg and arrived in 1834; it remains at H. Duplicates taken by Anders Johan Agrelius were acquired by the Swedish Academy and are now at UPS. Acharius sent a collection to the Linnean Society in London when he became a fellow in 1802; that collection is now in BM and is particularly important because it reflects his taxonomic views at the time of *Methodus*. Smaller Acharius collections are held at LD and S, the latter containing specimens he sent to Swartz. Acharius has rightly been called 'the father of lichenology', and the IAL issues a medal in his name to honour distinguished lichenologists. Ref.: Berzelius (1819); Frödén (2009); Kärnefelt & Frödén (2007); Krempelhuber (1868); Sernander (1918); Tehler (ined.); Vitikainen (1976).



Adanson, Michel (1727–1806) – Born in Aix-en-Provence, France. Although older biographies often repeated the myth that his family was of Scottish Jacobite descent, genealogical records have confirmed that his ancestry was rooted entirely in the Auvergne region of central France. He was educated in Paris at the *Collège Sainte-Barbe* and subsequently worked in the prestigious private natural history cabinets of René Antoine Ferchault de Réaumur (1683–1757) and, more pivotally, Bernard de Jussieu (1699–1777), whilst also studying at the Jardin du Roi. Between 1749 and 1754, he was employed by the French East India Company in Senegal, where he collected natural history specimens extensively. Although his primary focus lay with vascular plants, he also demonstrated a keen interest in cryptogams, particularly marine and freshwater algae. Following his return to Paris, Adanson was elected a member of the *Académie Royale des Sciences* in 1759 and was later appointed royal botanist to King Louis XV. His masterpiece, *Familles des Plantes* (1763), sought to organize the vegetable kingdom into natural families based on a multi-character system originally suggested by Pierre Magnol, a methodological approach that stood in stark contrast to Linnaeus's artificial sexual system of classification In that work he described eight new genera of lichens at a time when all lichens were placed in a single genus (*Lichen*), for example *Gabura*, *Graphis*, and *Usnea*, which remain in use. Significantly, he recognised the structural and reproductive affinities of lichens, classifying them alongside the fungi rather than grouping them with the mosses, a major conceptual advance for eighteenth-century cryptogamic botany. His herbarium is housed at PC. Ref.: Cuvier (1807); Lawrence (1963).

Ahlner, Sten Gustav **(1905–1991) –** Born in Gävle, Sweden the son of teachers Oscar Ahlner and Anna (née Karlsson). In 1925, he matriculated at Uppsala University to read natural sciences, specialising in botany and joining the academic circle surrounding the flamboyant professor Rutger Sernander, director of the *Växtbiologiska Institutionen*. Alongside Gunnar Degelius and Thorsten E. Hasselrot, Ahlner formed a notable trio of



brilliant young lichen students. They operated under a rigorous phytogeographical research programme established by G. Einar Du Rietz. Ahlner's specific designation was to document the lichen flora of boreal coniferous forests; his monumental treatment of this subject yielded numerous significant discoveries made during extensive expeditions across Fennoscandia, which he famously conducted using a light motorbike. Among his most remarkable finds was a species of *Erioderma*, a genus previously entirely unrecorded in Europe. He successfully defended his doctoral thesis, *Utbredningstyper bland nordiska barrträdslavar* ("Distribution types among Nordic coniferous lichens"), in 1948. In 1950, he was appointed curator at the Swedish Museum of Natural History (*Naturhistoriska Riksmuseet*) in Stockholm, where he remained until his retirement in 1971. He also served as the long-term editor of the journal *Svensk Botanisk Tidskrift* from 1952 to 1969. Ahlner was deeply devoted to the meticulous curation of cryptogamic collections and was an exceptionally keen field worker. He greatly contributed to the baseline knowledge of the Scandinavian flora, famously discovering *Solorinella asteriscus* (now *Gyalidea asteriscus*), a rare, disjunct steppe element, within the dry, continental valleys of Gudbrandsdalen, Norway. Several species were named in his honour. His large herbarium is housed at S. Ref.: Degelius (1993).



Ahmadjian, Vernon (1930–2012) – Born in Whitinsville, Massachusetts, USA, to Armenian immigrant parents. He began his undergraduate studies at Clark University in 1952, but his education was interrupted by military service during the Korean War. Returning to his studies in 1954, he completed an MA in 1956. During a marine botany course in 1955, he met the lichenologist Ivan Mackenzie Lamb (then based at the Farlow Herbarium, Harvard), who subsequently supervised his PhD. After receiving his doctorate in 1960, Ahmadjian returned to Clark University as an assistant professor. He remained there for the entirety of his career, eventually becoming a full professor. Inspired by Lamb's interest in the relationship between algal photobionts and their fungal partners, Ahmadjian pursued experimental studies. He became the first scientist in modern times to develop successful laboratory techniques for synthesising fully grown lichen thalli from isolated algal and fungal cultures. His pioneering work revealed the fundamental factors regulating early thallus development and clarified the taxonomy of several poorly understood algal partners. Ahmadjian's 1966 *Science* article on the resynthesis of *Cladonia cristatella* caused a sensation, and his seminal book, *The Lichen Symbiosis* (1967), remains his best-known work. Although primarily a laboratory-based scientist, he also conducted field observations, notably during a research stay at McMurdo Station in Antarctica. In recognition of his work, an ice-covered peak in the Queen Alexandra Range was named Ahmadjian Peak in his honour. He played an active role in the formation of the International Association for Lichenology (IAL) and was awarded the Acharius Medal in 1996. Beyond lichenology, he was a champion of his local flora, publishing a comprehen-

sive book on the flowering plants of Massachusetts in 1979. His herbarium is housed at CUW. Ref.: Smith & Seaward (2013).

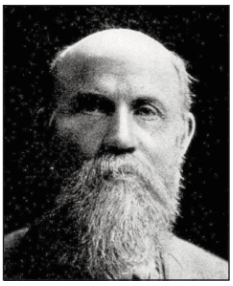


Ahti, Teuvo ('Ted') Tapio **(1934–) –** Born in Helsinki, Finland, the son of a truck driver, Ahti developed an early interest in plants while staying at his uncle's farm in the countryside, which later led him to study botany at university. In 1961, he earned his doctoral degree with a thesis on reindeer lichens (*Cladina*), a work that remains the definitive standard for the group. The idea for his research originated from field work begun in the summers of 1955-56 in surveys of reindeer and caribou ranges across the lichen-rich regions of Lapland and Newfoundland. Although his formal academic supervisor was the bryologist Professor Risto Tuomikoski (1911–1989), Ahti's primary mentor in lichenology was Rolf Santesson in Uppsala. Ahti began his professional career at the Botanical Museum in Helsinki in 1963 as curator of the cryptogamic herbarium, additionally overseeing the phanerogams between 1965 and 1968. Appointed Professor of Cryptogamic Botany in 1979, he is now Professor Emeritus. While his scientific interests are broad, encompassing biogeography and nomenclature, he specialised in the genus *Cladonia*. He is globally recognised as the leading authority on this large and complex genus, having produced numerous international publications and a projected world monograph. He has collected 75,000 specimens, mainly lichens, in numerous countries, including Europe, Canada, United States, Mexico, Costa Rica, Venezuela, Guyana, Brazil, Argentina, Mongolia, Siberia, China, Japan, the Philippines and Australasia. He served as president of the International Association for Lichenology (IAL) from 1975 to 1981 and was awarded the Acharius Medal in 2000. The genera *Ahtiana* Goward, *Ahtia* M.J. Lai, *Teuvoahtiana* S.Y. Kondr. & Hur, and *Teuvoa* Sohrabi & S.D. Leav., alongside many species, have been named in his honour. His herbarium is housed at H. Ref.: *Pers. comm.*; Burgaz (2001); Vänskä (1994).

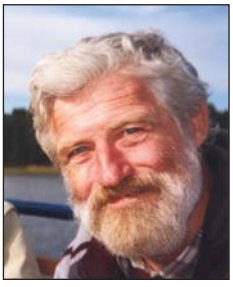


Almborn, Ove (1914–1992) – Born in Ronneby, Blekinge, southern Sweden, he was the son of an industrial worker and a dedicated homemaker who entirely devoted herself to the care, well-being, and future of her family. As a youth, he studied lichens under the guidance of a local amateur, the high school teacher Bertil Hedvall. This mentorship left him well acquainted with the lichen flora and vegetation of southern Sweden, an area that had not been extensively studied by the Uppsala group. Inspired by Gunnar Degelius, Almborn chose this region as the theme for his doctoral thesis, which he completed at Lund University in 1948. From 1938, he taught at the *Högre Allmänna Läroverket* in Malmö, and in 1966 he was appointed head of the botanical herbarium in Lund, a post he held until his retirement in 1980. Almborn maintained a lifelong interest in the genus *Pertusaria* and was widely known for his numerous, meticulous reviews of lichenological publications. His principal lichenological work, how-

ever, concerned the lichen flora of South Africa, a region he visited several times (in 1953, 1981, 1983 and 1984), producing rich collections and numerous papers, including pioneering phytogeographical studies. Between 1956 and 1992, he issued a renowned lichen exsiccatae series titled *Lichenes Africani* (comprising 150 numbers), which remains the only exsiccatae series from that region specialising exclusively in lichens. The genera *Almbornia* Essl. and *Ovealmbornia* S. Y Kondr. *et al.*, alongside several species are named after him. His herbarium is housed at LD. Ref.: *Pers. comm.*; Kärnefelt (1994).



Almquist, Siegfried Oscar Immanuel **(1844–1923) –** Born in Stockholm, Sweden, to Oskar Julius August Almquist, a vicar, and Johanna (née Johansson)**,** he grew up in Skogstibble near Uppsala. Coming from a family of botanists, he enrolled at Uppsala University in 1862 and graduated in 1869. Under the influence of Thore Magnus Fries, his doctoral thesis focused on the lichen genus *Arthonia*, which he examined microscopically and illustrated with meticulous detail. Almquist subsequently pursued a distinguished career within Stockholm's school system, eventually serving as the principal of the *Högre Allmänna Läroverket* in Norrmalm. An original and outstanding pedagogue, he is best known for co-authoring a celebrated school flora with Torgny O.B.N. Krok. This work, *Svensk flora*, introduced generations of Swedish schoolchildren to floristic botany and remains a classic textbook; its 29th edition was published in 2013. Despite his heavy educational commitments, his most significant lichenological contribution remains his rigorous monograph on the genus *Arthonia*, notable for its detailed microscopic research. His younger brother, Dr. Ernst Bernhard Almquist (1852–1946), served as the medical officer on the famous *Vega* expedition (1878–1880), during which he made extensive lichen collections. Although Ernst published accounts on the general botany of the Beringian region and northern Japan, the definitive scientific treatment of the expedition's lichens was eventually published by Edvard August Vainio in 1909. Several species are named after him. Almquist's collections are held at S and UPS, and the Vega expedition material at S and H. Ref.: Almquist (1944); Lagerstedt (1918).



Alstrup, Vagn (1944–2015) – Born in Nautrup, Viborg County, Jylland, Denmark. From childhood, he was deeply drawn to the natural world and eventually became a pupil of the prominent botanist Mogens Skytte Christiansen. Alstrup worked for many years at the ecological laboratory of the University of København, earning his licentiate degree (equivalent to a PhD) in 1982. While holding several short-term academic appointments, he dedicated significant time to organising field excursions for young people, introducing them to nature and the study of lichens. In Denmark, he was a passionate advocate for nature conservation and co-authored the country's first red list of lichens alongside Ulrik Søchting in 1989. From 1990 onwards, Alstrup focused his research on Greenlandic lichens, developing a particular expertise in parasitic and lichenicolous species. He described numerous new

taxa and became a leading global authority in this field.Beginning in 1987, he collaborated with the Danish International Development Agency (DANIDA) on environmental initiatives in East Africa. This work led to his appointment as an associate professor at the University of Dar es Salaam in Tanzania, where he served from 1996 to 2000. He later settled on a Tanzanian farm to tend the land and continue his fieldwork. Tragically, he was fatally shot during an armed robbery at his home. Despite his untimely death, his extensive field collections and papers made an enduring contribution to African lichenology. The genus *Vagnia* Hawksw. & Miądl., alongside several species are named after him. His herbarium is housed at C. Ref.: *Pers. comm.*; Søchting & Kärnefelt (2016).

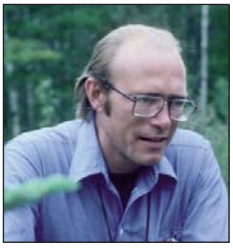


Ammann, Klaus (1940–2023) – Born in Bern, Switzerland, he pursued his childhood passion for botany, earning a doctorate from the University of Bern in 1972 with a thesis on alpine vegetation and glacier history, while in 1966 he had also studied at the University of Bergen in Norway, working on palynology with Knut Faegri (1909-2001). As a research assistant, he contributed to the Swiss Atlas of Plant Distribution and established Switzerland's first lichenology research group. He pioneered breakthroughs in bio-indication by developing the *'Calibrated Lichen Indication Method'*, which correlated multivariate deposition data of multiple air pollutants directly with epiphytic lichen community shifts. This research established an integrated biological measuring system for monitoring total air pollution across Switzerland. His method, slightly modified, was adopted by Pier Luigi Nimis in Italy, and ultimately formed the baseline for the European protocol of lichen biomonitoring later approved by the European Committee for Standardization. He lectured at the University of Bern and ETH Zürich, later serving as Director of the Botanical Garden of Bern and receiving an honorary professorship in 2000. Following his retirement in 2006, Ammann became a prominent global voice in biotechnology and biosafety, holding visiting professorships at Delft University of Technology and Sabanci University. He co-founded the International Society for Biosafety Research and actively advocated for science-based risk assessments of genetically modified crops with the Public Research and Regulation Initiative. He remained active in ecological and holistic research until his passing in Neuchâtel. His herbarium is housed at BERN. Ref.: Clerc (2024); Scheidegger & Senn-Irlet (2024).



Anders, Josef (1863–1936) – Born in Kletschen, Austrian Empire, Bohemia (Böhmen), now Kletečná, Czech Republic, he was the son of a crofter. Educated as a teacher in Leitmeritz (now Litoměřice), he embarked on a long and distinguished career within the Bohemian school system, eventually serving as the director of a girls' school in Leipa (now Česká Lípa) from 1919. While teaching in Barzdorf (now Božanov) in 1886, he pursued private studies in the natural sciences, with a particular focus on botany. He eventually dedicated himself to lichenology, likely under the influence of Professor Franz Wurm in Leipa. Finding the contemporary literature inadequate for his

research, Anders corresponded extensively with the leading lichenologists of his day, most notably F. Arnold. He conducted rigorous regional field research across Bohemia and, in 1906, published a flora of the fruticose and foliose lichens of northern Bohemia at his own expense. He later achieved wider recognition with his definitive textbook, *Die Strauch- und Laubflechten Mitteleuropas* (1928). This widely adopted work profoundly influenced a younger generation of lichenologists, including O. Klement and V. Grummann. Anders described several new lichen species and issued an important exsiccatae series focusing on the lichen flora of northern Bohemia. His herbarium is housed at PRC. Ref.: Halda (2009); Klement (1936); Mattick (1937).



Anderson, Roger Arthur **(1935–1995) –** Born in Madison, South Dakota, USA. He studied biology at Augustana College, graduating in 1958, and subsequently taught the subject at secondary level. He then moved into postgraduate research at the University of Colorado as a teaching fellow, where he studied botany under the prominent lichenologists S. Shushan and W.A. Weber. In 1964, he earned his doctorate under Weber's supervision, completing a thesis on the taxonomically challenging crustose genus *Lecidea* within Rocky Mountain National Park. Anderson was subsequently appointed assistant professor of botany at the University of Montana. In 1975, he moved to the University of Denver, Colorado, as Professor of Botany, where he spent the remainder of his academic career. A wide-ranging lichenologist, he made numerous important additions to the known lichen flora of the United States, focusing his field efforts primarily on Colorado and the Dakotas. Although long-term ill health unfortunately prevented him from publishing a comprehensive monograph on his lifetime work with *Lecidea*, he successfully described several new taxa and issued a recognised exsiccatae series. Many species are named after him. His herbaria are at DU, BYU and COLO. Ref.: Brodo (2000); L. StClair, *pers. comm.*



Andreev, Mihail Petrovich **(1954–) –** Born in Leningrad (now Saint Petersburg), Soviet Union (now Russia), the son of a construction engineer. His uncle, a forester in Karelia (Karelen), fostered his interest in the forested landscape. As a schoolboy he became affiliated with the Komarov Institute and in 1970 worked in E. I. Slepjan's laboratory, taking part in an expedition to the Kirov region. He studied botany at Leningrad State University (1971–76), beginning with geobotany under Professor Ilya Kh. Blumenthal. After Arctic expeditions (Chukotka) he specialised in lichens and, as a postgraduate under Nina S. Golubkova (1976–79), produced a dissertation on the lichens of the Anyu Plateau (western Chukotka), defended in 1980. From 1979 he held scientific posts at the Komarov Institute and later became Head of the Laboratory of Lichenology and Bryology after earning a higher doctoral degree for work on saxicolous lecideoid lichens in Russia. He has collected widely in the Soviet Union and abroad, notably in Antarctica since 1985. He edited a new Russian lichen flora, the first volume of which includes a

valuable chapter on the history of lichenology in Russia. He has described several taxa; his herbarium is housed at LE. Ref.: *Pers. comm.*



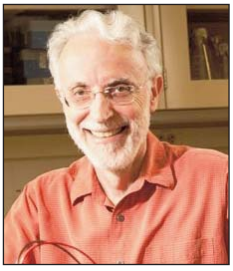
Anzi, Martino (1812–1883) – Born in Bormio, Sondrio Province, Regno Lombardo-Veneto (now Italy), the son of a municipal clerk from a devout Veronese family. He attended the gymnasium in Bormio and later studied at the theological seminary in Como, being ordained a priest in 1835. He held various positions in the curia of Como, first as vicar at Morignone, a part of Valdisotto, and became professor of theology at the diocesan seminary in 1847. An avid botanist, he explored the Italian Alps around his home, walking and climbing extensively and collecting especially lichens, thereby greatly expanding knowledge of alpine lichens in Lombardy. He famously remarked that that science recognises no political borders, stopping only at the natural boundaries formed by valleys, rivers, and mountains. Supported by Santo Garovaglio, who provided identified specimens and access to collections and library resources, Anzi mastered several foreign languages and corresponded with leading foreign lichenologists. He adopted taxonomic principles aligned with Körber and Th. Fries rather than those of Massalongo, with whom he appears not to have had a close relationship, regarding his taxonomy with scepticism. He published a catalogue of Sondrio lichens in 1860, recording 541 species, several new to science. The genera *Anzia* Stitzenb. and *Anzina* Scheid., alongside several species, are named after him. Three important exsiccatae series from northern Italy issued by him are held in major herbaria. His herbarium is housed at TO. Ref.: Isocrono & al. (2014); Nimis (1993); Regazzoni (1884).



Aptroot, André (1961–) – Born in Heemskerk, the Netherlands, the son of an interim manager. He developed an interest in the natural world as a boy and collected his first lichen at eleven. He started to work in zoology and botany and published his first scientific paper in 1979, at the age of 18, as coauthor with Jan Kerkhoven, in the Dutch entomological journal *Stridula*, on ground beetles. Early contacts included the Dutch lichenologist Rudolf Maas Geesteranus and the bryological group at Utrecht led by Rob Gradstein. From 1981 onwards, André studied Biology at the University of Utrecht where he, under the guidance of Prof. Dr. S. R. Gradstein, obtained his Master's degree in 1988. For his Master's thesis, he worked on a monograph of *Pyxinaceae* (now *Caliciaceae*) in the Guianas. After doctoral work in 1993 (defended with Harrie Sipman as unofficial supervisor) he worked at the *Centraalbureau voor Schimmelcultures* (1996–2006) and later founded and curated the ABL herbarium. After the new director of the *Centraalbureau* changed the research scope of the institution, he started his own business (*Adviesbureau voor Bryologie en Lichenologie*), conducting botanical surveys, and greatly extending his international network during many collecting trips. Between 2008 and 2019, he was also working as scientific curator at the *Pinetum Blijdenstein* and conducted botanical surveys for the largest private nature conservation organization, *Natuurmonumenten.*

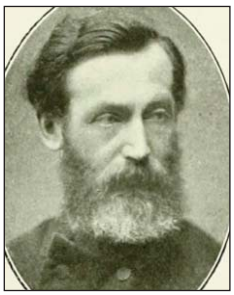
Between 2019 and 2023, André had an extended stint as visiting professor at the *Universidade Federal de Mato Grosso do Sul* in Campo Grande, Brazil, continuing his work on Brazilian lichens in collaboration with numerous colleagues, resulting in numerous publications and culminating in the recently published Brazilian lichen checklist, enumerating the largest number of known taxa for any country to date. André collected lichens in many tropical regions, such as Mexico, Costa Rica, Ecuador and the Galapagos, the Guianas, Brazil, Madagascar, China, Thailand, Vietnam, Taiwan, the Philippines, Papua New Guinea, and Australia, becoming fascinated by the rich flora and challenging pyrenocarpous lichens. Although he contributes to Dutch lichenology, his most significant work concerns tropical lichens, including a major survey of New Guinea (with Sérusiaux and Sipman, 1997) and worldwide revisions of pyrenocarpous taxa. An avid collector, he has amassed about 100,000 specimens, published 1,230 scientific works (a historical record for a lichenologist), and described 1,265 new species and 65 genera. His herbarium is mainly housed at BR, B and M. The tropical genus *Aptrootia* Lücking & Sipman, alongside many species, is named after him. Ref.: *Pers. comm*.; Kärnefelt (2009)*;* Lücking & al. (2026).

Archer, Alan William (1930–) – Born in London, England, UK, the son of a silversmith. He developed an early interest in chemistry and studied part time at Northampton Polytechnic and later at City University, London, becoming an Associate of the Royal Institute of Chemistry. In 1970 he earned a PhD in chemistry at City University for a thesis on 1,5 benzodioxepine under the supervision of Paul Claret. He held positions in analytical chemistry in Cyprus (during military service), Salisbury (then Rhodesia), and at Merck in Montreal before emigrating to Australia in 1970, where he worked for the NSW Department of Health until retirement. While in Australia, his interest in botany was sparked when he encountered William Martin and J. Child's illustrated book on New Zealand lichens; he was particularly inspired by a photograph of a red-fruited *Cladonia*. Shortly thereafter, after reading Chicita F. Culberson's seminal paper on the use of Thin-Layer Chromatography (TLC) to identify lichen compounds, he took up lichen chemistry as a serious hobby. This research led him to befriend the chemist and lichenologist J. Elix. Initially working on *Cladonia* and related genera, he later revised the difficult genus *Pertusaria* for Australia (1990, 1991) and elsewhere, describing many species. Several species are named after him. His herbarium is held in NSW. Ref.: *Pers. comm.*



Armaleo, Daniele (1947–) – Born on a ship as his parents, an Italian physician and his Jewish wife who escaped Germany, were returning to Italy from Africa where WWII had taken them, he grew up in Rome. He graduated in biology from the University of Rome (1967–1972), specialising in *Aspergillus nidulans* genetics. On a Duke University scholarship, he earned a 1984 doctorate in biochemistry and genetics with a comparative structural analysis thesis on *Neurospora crassa* nuclear RNA polymerases. His academic path shifted to lichenology following a pivotal meeting with Chicita F. Culberson, who sparked his interest. While in her laboratory, Armaleo met Swiss lichenologist Philippe Clerc, leading to a collaboration and a co-authored paper on lichen chimeras. Armaleo has used *Cladonia grayi* as a model orga-

nism, studying its in vitro development, mycobiont DNA methylation in symbiosis, and uncovering, with Culberson, the first lichen gene cluster responsible for depside and depsidone synthesis. In 2019, he and colleagues published the first paper on the genomics of both the myco- and photobiont of *Cladonia grayi*. In 2021, he and Lilly Chiou, an undergraduate at the time, described using CRISPR to introduce a ribosomal intron from *C. grayi* into all rDNA repeats of *Saccharomyces cerevisiae*, showing that lichen rDNA introns might contribute to slow growth and increase desiccation tolerance. Elucidating the still debated, not fully understood biological roles of lichen depsides and depsidones remains Armaleo's enduring interest. Ref.: *Pers. comm.*



Arnold, Ferdinand Christian Gustav **(1828–1901) –** Born in Ansbach, Königreich Bayern (now Germany), into a highly stable, educated, and prominent upper-middle-class Bavarian family (his father practised as a lawyer). Arnold showed a precocious and passionate interest in botany during his adolescence, exploring and collecting plants across the München countryside alongside childhood friends. Despite his scientific inclinations, he followed his father's advice and read jurisprudence at the University of München and the University of Heidelberg to secure a stable livelihood. He entered the legal profession in 1853 and maintained a distinguished judicial career throughout Bayern, ultimately rising to the rank of *Oberlandesgerichtsrat* (Higher Regional Court Judge) in München. Arnold seamlessly balanced his demanding judicial duties with a prolific parallel career in cryptogamic botany. He initially focused on vascular plants and bryophytes before shifting his primary attention to lichenology. He is best remembered for his colossal field research in the Alps, culminating in his monumental, 30-part publication series *Lichenologische Ausflüge in Tirol* (1868–1898), as well as his 32-part *Lichenologische Fragmente* (1867–1893). These papers, known for their meticulous attention to substrate specificities and micro-localities, completely redefined the floristic understanding of Central European montane and alpine habitats. A highly collaborative figure, Arnold spoke several foreign languages, maintained cordial relations with Nylander despite differing taxonomic views, and remained friendly with Schwendener despite disagreeing with his dual-nature theory of lichens. He issued several widely acclaimed, multi-fascicle series, including *Lichenes exsiccati* (1859–1879) and *Lichenes Monacenses exsiccati* (1889–1900), and co-edited several fascicles of *Cladoniae exsiccatae* with the mycologist Heinrich Rehm. Throughout his lifetime, he published around 140 scientific papers and described numerous new taxa. The genus *Farnoldia* Hertel, alongside many species, commemorate him. His private herbarium, containing some 120,000 lichen specimens, is now housed at M. Ref.: Hertel (1997); Holzner (1902); Radlkofer (1901); Rehm (1902).

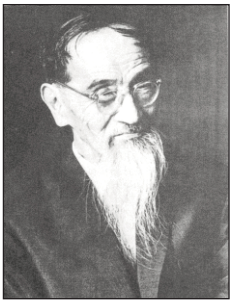
Arup, Ulf Gunnar **(1959–) –** Born in Stockholm, Sweden, Arup studied biology at Lund University from 1981 onwards, joining the prominent lichenological research group centered around Ove Almborn and Ingvar Kärnefelt, which maintained a strong focus on the family *Teloschistaceae*. In 1995, Arup completed his doctorate on the littoral *Caloplaca* species of North America under the supervision of Ingvar Kärnefelt. Since then, he has



worked extensively on the *Teloschistaceae* on a global scale. In 1997 he started a 2-years postdoctoral period at the University of Graz (Austria), where he learned molecular work from Martin Grube. His pioneering application of molecular phylogenetic methods has led to a major revision of the family's generic framework in the landmark 2013 monograph (with U. Søchting ann P. Frödén), *A new taxonomy of the family* Teloschistaceae, which overhauled the polyphyletic genus *Caloplaca* by breaking it apart into distinct, chemically and genetically defined monophyletic genera. In addition to this work, he has conducted taxonomic studies on the genus *Lecanora* and participated in vital conservation research regarding rare and red-listed lichen species within Sweden. Arup has spent his entire professional career at Lund University, where he served as the curator of the lichen collections at the Botanical Museum from 2007. He has described several new taxa, and his herbarium is housed at LD. Ref.: *Pers. comm.*



Arvidsson, Lars (1949–) – Born in Göteborg, Sweden, the son of a military officer, he studied biology at the University of Göteborg from 1968 and became acquainted with the lichenologist Gunnar Degelius. In 1983, Arvidsson earned his doctorate with a landmark monograph on the family *Coccocarpiaceae*; his research was heavily influenced by Degelius. Professionally he has worked largely in nature conservation alongside university posts at Göteborg, becoming a professor in 2003. His principal lichenological contributions concern the flora of Ecuador, where he participated in several expeditions and made extensive collections that resulted in numerous papers, often in collaboration with D. Galloway and P. M. Jørgensen. He has described several taxa; his herbarium is housed at GB. Ref.: *Pers. comm.*; Renner (1993).



Asahina, Yasuhiko (1881–1975) – Born in Tokyo, Japan. His father was a postal administrator, his mother, born into a well-established Nakayama family line, died while giving birth to Yasuhiko. He showed an early interest in plants. He studied pharmacy in Tokyo and earned a doctoral degree in 1905 for work on medicinal plants of East Asia, then continued studies in Zürich (with R. Willstätter) and Berlin (with E. Fischer). Returning to Japan in 1912, he was appointed Professor of Pharmacy and served until his retirement in 1941. His interest in lichen substances began in 1925 when he edited and published Yasuda's posthumous manuscript on Japanese lichens (1926); thereafter he published widely on lichen taxonomy and floristics. Together with his student Shoji Shibata, he co-authored the seminal textbook *Chemistry of Lichen Substances* in 1954, and developed the microcrystallisation method for identifying lichen substances, a major advance used before thin-layer chromatography became widespread. An avid collector, he

described many new Japanese species, issued the first Japanese lichen exsiccatae series and published a three-volume lichen flora of Japan (1950–1956). The genus *Asahinea* W. Culb. & C. F. Culb., alongside several species, are named after him. His herbarium is housed at TNS. Ref.: Culberson & Culberson (1976); Hisauchi & Hara (1975); Sato (1976); Shibata (2000).



Ascaso, Carmen Ciria **(1949–)** – Born in Castillo de Pompién, Huesca, Spain, she specialised in microscopy, ultrastructural cellular biology, and complex symbiotic systems. Her career became permanently linked with the Spanish National Research Council (CSIC), initially at the *Instituto de Edafología y Biología Vegetal* (later *Centro de Ciencias Medioambientales*). Through decades of pioneering research, she rose to Full Research Professor in the Department of Biogeochemistry and Microbial Ecology at the *Museo Nacional de Ciencias Naturales* in Madrid. Ascaso established herself as a global authority on the cellular mechanisms of lichen symbiosis. Her early work used advanced electron microscopy to examine the ultrastructure of lichen symbionts and their interactions with the substrate. Her laboratory became an international hub, hosting American lichenologist W. B. Sanders for a pivotal postdoctoral fellowship under her mentorship in 1989. By the late 1990s, Ascaso expanded her research to thallus-substrate interactions and biodeterioration, founding the influential ECOGEO research group. Applying geomicrobiology, she investigated how lithobiontic microbial communities and lichen hyphae chemically weather and structurally damage rock surfaces. Her expertise was heavily sought for heritage conservation across Europe and South America. She studied the biodeterioration of ancient stone and evaluated biocide efficacy on major historical landmarks in Spain Portugal; and Peru. In her later career, Ascaso applied her knowledge of rock-dwelling organisms to extreme environments, establishing major research lines in astrobiology and polar ecology. Working with frequent collaborators J. Wierzchos, L. G. Sancho, and A. de los Ríos, her team conducted landmark investigations into cryptoendolithic microbial communities in Chile's hyper-arid Atacama Desert. Their discovery of viable photosynthetic life thriving inside salt rocks redefined the boundaries of terrestrial survival. This research directly translated into outer space exploration; Ascaso served as a principal researcher on the European Space Agency (ESA) BIOPAN V and VI missions, exposing extreme lithobiontic lichens to cosmic vacuum and solar radiation to evaluate the potential for life on Mars. Ref.: A. de los Rios, *pers. comm*.



Asta Giacometti**, Juliette (1941–2025) –** Born in Grenoble, Isère, France, she studied biology at Joseph Fourier University in Grenoble and became a distinguished pupil of Paul Ozenda, who introduced her to lichenology. In 1970, she completed her doctorate focusing on the distribution of lichen vegetation across the environmental zones surrounding Grenoble. She enjoyed a long and dedicated career as a tenured *Maître de conférences* (Senior Lecturer) in plant biology at the Université Joseph-Fourier, after which she taught biology at a regional teacher training college.

Following her retirement in 2003, she returned to the university as an honorary researcher to continue her fieldwork on the lichen vegetation of the Western Alps, frequently collaborating with Claude Roux. She also conducted extensive research into the effects of atmospheric pollution, playing a role in developing standardised European guidelines for mapping lichen diversity as an indicator of environmental quality. Asta co-authored several popular, lavishly illustrated reference books on regional lichens, most notably contributing to the landmark multi-volume series *Guide des Lichens de France*. Her herbarium is housed at GREN. Ref.: *Pers. comm.*; Van Haluwyn *&* Gavériaux (1995).



Awasthi, Dharani Dhar **(1922–2011) –** Born in the village of Naret near Askote in what was then Uttar Pradesh (now Uttarakhand), India. After completing his primary and secondary education in Pithoragarh, he studied at Lucknow University from 1941. Between 1946 and 1948, he worked on systematic botany and taxonomy at the Royal Botanic Garden in Calcutta (now Kolkata), where he collaborated with Kalipada Biswas (1899–1969) on the cryptogamic collections curated at the Central National Herbarium (CAL). From 1952 he lectured in botany at Lucknow University and in 1961 obtained an Indian doctoral degree for *Studies on lichens from India and Nepal*, largely based on his own collections. He spent 1960–1963 in Boulder, Colorado, with William A. Weber, earning an American doctoral degree for a monograph on *Dirinaria*. Awasthi devoted his career to compiling a comprehensive flora of Indian lichens, culminating in a monumental treatment of Indian macrolichens (2007) covering about 900 species with full descriptions and keys. He trained numerous students and is widely regarded as the 'Father of Indian lichenology'; he received the Acharius Medal from the IAL in 1992. Several genera, including *Awasthia* Essl. and *Awasthiella* K. P. Singh, alongside many species, commemorate him. His large herbarium is housed at LWG. Ref.: Singh (1980); Yoshimura (1993); Upreti (1994).



Babington, Churchill (1821–1889) – Born at Rothley Temple in Leicestershire, England, UK, he was the son of the Reverend Matthew Drake Babington (1788–1851), the Perpetual Curate of Whitwick and an eminent classical scholar who educated his son at home; his mother Hannah (née Churchill) belonged to a comfortable and highly literate layer of English society, a background that enabled her to foster a deeply academic home environment. From boyhood, Babington displayed a keen aptitude for classical languages, alongside a passionate interest in botany and ornithology. He was a cousin of Charles Cardale Babington (1808–1895), who later became Professor of Botany at Cambridge in 1861. In 1839, Babington entered St John's College, Cambridge, where he studied alongside the archaeologist Charles W. Goodwin and completed his MA in 1846. By this period, he was already collaborating closely with his cousin, who introduced him to William Borrer during the compilation of the *Lichenographia Britannica*, as well as to Sir Joseph Dalton Hooker. Showing precocious talent, Babington had a paper entitled *'On some species or varieties of Lichens and*

Fungi… new to our flora' read before the Linnean Society of London in February 1839, though he was not formally elected a Fellow of the Society until 1853. Following his MA, Babington visited Italy, where his parents had relocated for health reasons. There, he amassed substantial botanical and antiquarian collections. From 1848 to 1861, he served as the vicar of Horningsea, near Cambridge, a rural post that, according to his cousin's memoirs, afforded him ample opportunity to pursue natural history by rising in the early hours of the morning. In 1865, he was elected Disney Professor of Archaeology at Cambridge, a chair he held until 1880 while focusing heavily on Greek and Roman pottery and numismatics. Following his marriage in 1869 and his appointment as rector of Cockfield in Suffolk, he adopted a quieter, parochial life and eventually abandoned active lichenological research. His principal contribution to lichenology lies in his descriptions of New Zealand lichens sent to Cambridge by Joseph Hooker, following the death of Thomas Taylor (Hooker's lichen expert) in 1847. Babington began working on these specimens in 1852, after completing work on material from Arctic expeditions. The final results of his efforts were published in the second volume of Hooker's *New Zealand Flora* (1855), where they appeared with magnificent drawings by Walter H. Fitch (1817–1892), and thus occupy an important place in the lichenology of New Zealand. His herbarium is housed at BM and CBG. Ref.: Galloway (1991); Walters (1981).



Baglietto, Francesco (1826–1916) – Born in Voltri, Genova, Kingdom of Sardinia (now Italy), he was educated as a physician. He also trained extensively in botany as a pupil of G. De Notaris, with whom he formed a close, lifelong friendship after relocating to Genova in his youth. Baglietto worked as an assistant at the Botanical Garden of the University of Genova, where he also served as a docent. He maintained a particular research interest in cryptogams, developing an expertise in lichens. He published numerous papers on the subject, specifically focusing on the regional floras of Liguria, Sardinia, the Western Alps, and Ethiopia. Baglietto undertook meticulous field studies in Sardinia and Valsesia, the latter in close collaboration with the abbot Antonio Carestia, which resulted in the description of several new taxa. A significant contribution to the development of Italian lichenology is undoubtedly his involvement with the *Erbario Crittogamico Italiano*. This massive exsiccatae series of Italian cryptogams was launched in 1858 under his direction alongside De Notaris and Vincenzo de Cesati. He also acted as a mentor to the young Martino Anzi during the early stages of Anzi's career. A. Massalongo appreciated his contributions and named the genus *Bagliettoa* A. Massal. in his honour. His herbarium is housed at MOD. Ref.: De Toni (1922); Nimis (1988, 1993), Tretiach & Dallai (1990).

Bailey, Frederick Manson **(1827–1915)** – Born in Hackney, London, England, UK, he attended the Independent Church School in Hackney, which was the only formal education he is known to have received. In 1838, he immigrated to Australia with his parents, arriving in Adelaide in March 1839. His father, John Bailey (1800–1864), was a trained horticulturist who became the first Colonial Botanist of South Australia and established a local nursery where young Frederick assisted him. Frederick later moved to New Zealand, resid-



ing there from 1858 to 1861. In 1861, he abandoned his farm in the Hutt Valley due to the outbreak of the First Taranaki War (part of the New Zealand Wars) and relocated to Brisbane, Queensland. There, he worked as a seedsman while simultaneously exploring the region's rich flora. He was appointed Colonial Botanist of Queensland in 1881, subsequently publishing several seminal floras of the state. Bailey also collected lichens, which were largely identified by Charles Knight in New Zealand. His lichenological discoveries were featured in his *Synopsis of the Queensland Flora* (1883), a highly influential work in Australian lichenology that inspired John Shirley's subsequent research. His herbarium is housed at BRI. Ref.: Anonymous (1915); Mennell (1892).



Balansa, Gaspard Joseph **Benedict ('Benjamin') (1825–1891)** – Born on a barge on the canal near Narbonne, Aude, France, his mother came from a family of Toulouse boatmen, while his father worked as a shipping merchant. As a boy, he displayed a keen interest in the natural world, breaking away from the family tradition of maritime trade on the *Canal du Midi*. While exploring the local hills, he met monks from a nearby monastery who assisted him with plant identification. At the age of fourteen, he enrolled at the school of Sorèze, and spent his leisure time exploring the nearby *Montagne Noire* and its adjacent valleys. He established contacts with botanical experts in Paris and became particularly close to C. Roumégère (1828–1892). Although he does not appear to have taken a formal degree in Paris, he was nevertheless employed by the *Muséum National d'Histoire Naturelle* as a plant collector, launching a lifelong international career. His first major expeditions were to North Africa in 1847–1848 and 1850–1853, the latter partly funded by the wealthy Swiss botanist Pierre Edmond Boissier (1810–1885), with whom he became friends. He also collected for the scientific exploration project directed by Michel Charles Durieu de Maisonneuve, with his lichen specimens being studied and published by Nylander. From 1854 into the 1860s, Balansa explored and lived intermittently in Turkey (Smyrna), returning to France in 1866. Driven by a restless desire for exploration, he was commissioned by the Paris Museum to travel to New Caledonia and the Loyalty Islands, which had become French territories in 1853. He lived in New Caledonia from 1868 to 1872, serving as the director of the Botanical Garden in Nouméa. Upon his return to France, he was made an honorary member of the Natural History Museum in Toulouse, but soon resumed his travels, embarking on two major expeditions to Paraguay (1874–1877 and 1880–1884). Based on the dried collections Balansa shipped back to Europe, C. L. Spegazzini subsequently described and published numerous new fungal and lichenised species. Finally, Balansa was stationed in Tonkin, Indochina (1885–1889), a region of significant French colonial interest, from where he also travelled to Java. His final journey, in 1891, ended in Hanoi, Vietnam, where he succumbed to dysentery. Wherever he travelled he collected lichens, and this constitutes his greatest importance for lichenology. His collections were mostly revised and published

by Nylander, with some by Müller Argoviensis. Several fungal genera, such as *Balansia* Speg. were named after him. His herbarium is housed at PC, with some duplicates in G. Ref.: Astre (1947), Chevalier (1942).



Barkman, Jan Johannes **(1922–1990)** – Born in Medemblik, the Netherlands, Barkman studied biology at the University of Leiden, where he earned his doctorate in 1958. His monumental thesis, *Phytosociology and Ecology of Cryptogamic Epiphytes*, became a foundational work on the sociology of corticolous and epiphytic lichen communities, establishing the framework upon which subsequent European phytosociological studies were based. In 1958, he was appointed director of the *Biologisch Station Wijster* (which had been transferred to the Agricultural University Wageningen), and later, in 1973, he became Professor of Vegetation Science and Plant Sociology at Wageningen. Under his leadership, the station at Wijster developed into a premier centre for studying cryptogams and their ecological responses to environmental conditions. Barkman characterised and described numerous new lichen communities, and his work attracted a generation of young botanists. This surge of interest led to the formation of a highly active research group at the University of Utrecht, which became instrumental in advancing Dutch lichenology. His herbarium is housed at L. Ref.: Aptroot, *pers. comm.*; Arnolds & al. (1991); Werger & Westhoff (1990).



Barreno Rodríguez, Eva (1950–) – Born in Madrid, Spain, she was the daughter of a railway wagon inspector and a dressmaker. She spent three months every summer in a rural village in Asturias, where her grandfather and uncle introduced her to lichens, as well as the uses and habitats of various plants. At university, the geobotanist Professor S. Rivas-Martínez (1935-2020) taught her the scientific principles behind the plant communities she had already come to understand intuitively, while Ana Crespo served as her tutor in lichenology. Together with X. Llimona, the three of them significantly broadened the scope of lichenology in Spain. Eva's first positions in Madrid were in the Faculties of Biology (1973–1977) and Pharmacy (from 1977). In 1986 she was appointed Full Professor of Botany at the University of Valencia, a position she held until her retirement. Her early research focused on floristics, vegetation science, and biomonitoring using lichens, during which time she also described several new species. In later years, mentored by Lynn Margulis (1938-2012), she increasingly incorporated physiological and molecular approaches into her work, particularly concerning the role of phycobionts in the lichen symbiosis, which went on to influence research groups beyond Spain. Alongside L. Muggia (Italy) and S. Leavitt (USA), she co-founded the "*Trebouxia* Working Group" to investigate the diversity and evolutionary relationships of species-level lineages within the most widespread photobiont of phycolichens. She was awarded the Acharius Medal by the IAL in 2026. Her herbarium is housed at VAL. Ref.: *Pers comm.*; Crespo & al. (2020).



Barth, József (1833–1915) – Born in Táblás, Transylvania, then part of the Austrian Empire (now Dupuș, Romania), into a family of farmers. Following his primary education, he undertook theological studies at the Protestant seminary in Vienna. In 1864, he was appointed pastor of the Protestant congregation in Hosszúaszó (now Hussuazul, part of the Valea Lungă commune), a position he held until his retirement in 1905, after which he relocated to Nagyszeben (now Sibiu). He was closely associated with his older colleague Michael Fuss, who encouraged his botanical pursuits, particularly regarding the cryptogams of the Transylvania (*Siebenbürgen*) region. Barth published several papers on the regional flora, and his issued exsiccatae of Transylvanian plants contained a dedicated section focusing on lichens. His herbarium, primary focused om vascular plants, is housed at BP. Ref.: Drăgulescu (2008); Vershegy (1963).



Bary, Heinrich **Anton de (1831–1888)** – Born in the free state of Frankfurt am Main (now Germany), into a noble family of Walloon origin. His mother came from a prominent German family that produced at least two highly renowned scientists, while his father was a physician with a keen interest in natural history, a passion that deeply influenced his son, who frequently attended lectures by his father's learned colleague, Georg Fresenius (1808–1860). When choosing his field of study, Anton followed in his father's footsteps, studying medicine at Heidelberg, Marburg, and finally Berlin, where he worked under Alexander Braun and Christian Gottfried Ehrenberg. He earned his doctorate in 1853 and briefly practised medicine in Frankfurt the following year before moving to Tübingen, where he habilitated in botany under the guidance of Hugo von Mohl (1805–1872). He became Professor of Botany at Freiburg, serving as extraordinary professor from 1855 and full ordinary professor from 1859. In 1867, he succeeded Dietrich von Schlechtendal (1794–1866) as Professor of Botany and Director of the Botanical Gardens in Halle, but in 1872 relocated to a chair at the newly established University of Strasbourg, where he founded an influential mycological laboratory and served as its director. De Bary has widely been hailed as the "father of modern mycology" due to his meticulous microscopic studies, which interpreted fungi within a functional and developmental framework. This research culminated in his seminal treatise *Morphologie und Physiologie der Pilze, Flechten und Myxomyceten* (1866). In this work, he observed that gelatinous lichens contain *Nostoc*, which forms thalli when associated with fungal mycelium. He was among the first to introduce the term "symbiosis" (*Symbiose*) to define this biological association in 1878 (published 1879), though his colleague Albert Bernhard Frank (1839–1900) in Leipzig had coined the term *Symbiotismus* a year earlier, in 1877. De Bary also published an important early paper on the germination of lichen spores. The fungal genus *Barya* Fuckel (now a synonym of *Neobarya* Lowen) is dedicated to him. His herbarium is housed at STR and partly at BERN. Ref.: Mägdefrau (1981); Migula (1900); Mitchell (2014); Reess (1888).

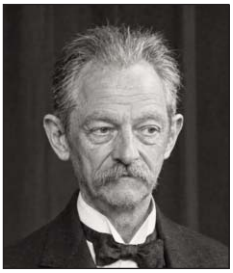


Batista, Augusto Chaves **(1916–1967)** – Born in Santo Amaro, Bahia, Brazil. Following his primary and secondary education, he studied at the *Escola Agrícola da Bahia*, graduating at the top of his class as an agronomist in December 1937. During his studies, he was deeply influenced by the eminent Jesuit mycologist Padre Camille Torrend (1875–1961), who taught him plant pathology and steered his interest towards the fungi. Throughout 1938 and 1939, Batista worked as a field agronomist in Rio de Janeiro and Mato Grosso, before returning to Salvador to teach natural sciences from 1940 to 1942. He then pursued advanced scientific training in the United States, studying bacteriology and plant pathology at the A&M Graduate School in College Station, Texas (1942–1943), and working as a visiting researcher at the National Collections of Fungi in Beltsville, Maryland. He later conducted research at the Commonwealth Mycological Institute in Kew, England, establishing vital career connections with leading international specialists. While Batista was an exceptionally prolific generalist who did not restrict himself to a single fungal group, he developed a significant taxonomic interest in foliicolous lichens and their micro-fungal associates. In 1946, he was appointed Professor of Phytopathology and Agricultural Microbiology in Pernambuco, and in 1954 he founded and became Director of the *Instituto de Micologia da Universidade do Recife,* which he rapidly transformed into South America's premier centre for mycological research. A dynamic organiser and charismatic educator, he was celebrated both nationally and internationally for his generosity and for inspiring a generation of Brazilian botanists. He described numerous new lichenised and lichenicolous taxa. Several fungal genera, such as *Batistia* Cif. and *Batistina* Peres, are named after him. His herbarium is housed at URM. Ref.: Carneiro (1968); Singer (1968).



Bauhin, Caspar (Gaspard) (1560–1624) – Born in Basel, Switzerland, he began his academic journey at the philosophical faculty of the University of Basel in 1572–1573. He transitioned to the study of medicine in 1575, continuing his education in Padua in 1577, followed by further periods in Montpellier (1578) and Paris (1579), where he studied anatomy under Laurent Joubert. He returned to Basel in 1580, earning his doctorate in medicine in 1581. He was appointed Professor of Greek at Basel in 1582, became the university's first full Professor of Anatomy and Botany in 1589, and was ultimately named Professor of Medicine in 1614. His masterpiece, *Pinax theatri botanici* (1623), represents a highly sophisticated early attempt to compile and index the known plants of his era, categorising approximately 6,000 species. This compilation included a variety of lichens, which he primarily classified under the broader groupings of mosses or fungi. Owing to his systematic approach to nomenclature and his introduction of early binomial descriptions, he is widely regarded as a major precursor to Linnaeus. His herbarium is housed at BAS. Ref.: Hess (1860); Felfe (2025); Fuchs-Eckert (1977–1979), Herburger & Jurca (2024).

Bayer, Edvin (1862–1927) – Born in Chotieborsch, Bohemia, then part of the Austrian Empire (now Chotěboř, Czech Republic). His mother raised a highly successful, literate



household that allowed her sons to excel in their academic interests, while his father was a notary with a keen interest in botany, particularly lichens and mosses. This domestic environment deeply influenced young Edvín, who eagerly collected these organisms from an early age. When he began his university studies in Prague in 1882, he initially enrolled in law and philosophy before transitioning to natural sciences and botany, earning his doctorate in 1891. In 1892, he was appointed assistant to Ladislav Josef Čelakovský (1834–1902) in the herbarium of the National Museum in Prague, where he subsequently became curator and eventually director of the botanical department. Over time, Bayer gradually shifted his research focus towards the region's rich fossil flora, making groundbreaking contributions to phytopalaeontology, stratigraphy, and geological dating. Although his administrative and palaeobotanical duties left him with little time for active lichenology in his later years, he published several important floristic contributions on lichens before 1900, followed by a final paper in 1922. He spent years preparing a comprehensive monograph on Czech lichens, which ultimately remained uncompleted at his death. However, his massive, meticulously organised manuscript and extensive collection notes did not go to waste; they served as a vital foundation for Jindřich Suza, who heavily utilised Bayer's rich manuscript data to significantly advance lichen floristics in the region. Bayer did not describe any new lichen taxa. His lichen collections are housed at PR. Ref.: Klášterský & al. (1977); Krahulec (2012).



Bellemère, André (1927–2014) – Born in Triel-sur-Seine, in the former Département Seine-et-Oise, France. While completing his undergraduate coursework at the Sorbonne, he supported himself by working as an assistant school monitor (*surveillant d'externat*) at the Lycée Turgot. It was during his time at the Sorbonne that he met Marius Chadefaud (1900–1884), whose pioneering research into the structural mechanics of ascomycete asci sparked a lifelong mentorship. After completing his *baccalauréat* and qualifying as a secondary school teacher, Bellemère taught briefly at lycées in Beauvais and Orléans. In 1955, he joined the faculty of the *École Normale Supérieure* de Saint-Cloud, where he remained until 1989, being appointed Full Professor in 1970. Bellemère expanded significantly upon Chadefaud's theories by utilizing transmission electron microscopy, often collaborating closely with Marie-Agnès Letrouit-Galinou. In 1968, he defended his doctoral thesis in Paris, which focused on the structural development of apothecia in inoperculate discomycetes. His enduring legacy in lichenology stems primarily from his meticulous ultrastructural investigations of the asci and apothecia in lichenised fungi, work that proved foundational for modern late-20th-century fungal systematics and taxonomy. Recognizing his profound contributions, his Austrian colleague Josef Hafellner, alongside Claude Roux and Pere Navarro-Rosinés, honoured him by naming the lichen genera *Bellemerea* Hafellner & Roux and *Bellemerella* Nav.-Ros. & Roux. Ref.: Van Haluwyn & al. (1998); Van Haluwyn & Roux (2015).

Beltramini de' Casati, **Francesco (1828–1903)** – Born in Bassano del Grappa, Vicenza, Regno Lombardo-Veneto (now Italy), into a prominent and wealthy aristocratic family. Professionally trained as a chemist, he applied his scientific background to a methodical study of the physical and microchemical properties of lower plants. He lived and worked in Bassano, which was a vibrant hub of botanical exchange shaped by regional natural history collections and its proximity to the Botanical Garden of the University of Padova. His principal botanical interest lay in cataloguing and illustrating the cryptogamic flora of his native region. His major scientific achievement was *I Licheni Bassanesi* (1858), a monumental 314-page regional inventory widely praised for its meticulous descriptions and lithographic plates depicting microscopic spore anatomy. In this work, Beltramini formally circumscribed the valid lichen genus *Placidiopsis*. Beltramini was a close friend, correspondent, and protégé of Abramo Massalongo, who served as his taxonomic mentor. His contemporary, Vittore Trevisan, honoured his contributions by establishing the genus *Beltraminia* (1857), a name that endures in modern lichenology through the definition of the *"Beltraminia-type"* ascospores of *Rinodina*. In later years, Beltramini directed his scholarly attention towards bibliography, local history, and specialised agriculture. He also entered public service, serving as a long-time city councillor and eventually as the *Assessore* (alderman) of Bassano del Grappa. His herbarium is housed at BASSA, with duplicates in VER and PAD. Ref.: Saccardo (1909).



Berdau, Feliks (1826–1895) – Born in the free city of Kraków (now Poland), he studied pharmacy at the Jagiellonian University, though his academic inclinations lay firmly in botany. He served as an assistant at the university's botanical institute from 1847 to 1854, during which time he began his lifelong exploration of the natural history of the Tatra Mountains. He taught natural history at a secondary school in Warsaw (1856–1857) and travelled widely across Europe, attending botanical lectures in Rome, Vienna, and Berlin. He earned his doctorate from Kraków in 1868, though his monumental *Flora of the Tatras, Pieniny and Western Beskids* was not published until 1890. In 1862, he was appointed professor in Puławy, teaching first at the Institute of Polytechnics and Agriculture (1862–1863), and later at the Institute of Rural Economy and Forestry (1869–1886). To secure his standing within the Russian imperial academic system, Berdau successfully validated (*nostrified*) his doctoral degree at the University of Kharkiv in 1876. That same year, he published his sole lichenological treatise, which stands as the first Polish academic work to focus heavily on lichen anatomy and physiology. Written in Russian for the Imperial Warsaw Educational District, this seminal paper detailed the lichens of the Warsaw region. The work was profoundly influenced by the prominent morphologist Alexander Fischer von Waldheim (1839–1920), who had established a state-of-the-art botanical laboratory in Warsaw in 1871. Severe illness forced Berdau to retire from lecturing in 1886. His herbarium is housed at KRA, with duplicates at KW. Ref.: Hryniewiecki (1935).

Berger, Franz (1952–) – Born in Vöcklabruck, Oberösterreich, Austria, Berger developed a passion for the natural sciences while attending the *Bischöfliches Gymnasium*



Petrinum in Linz, where his biology mentor, Professor Karl Rohregger, introduced him to the complexities of lichenology. After completing his *Matura* in 1971, he pursued a career in medicine. For 33 years, he served as a highly respected community doctor (*Gemeindearzt*) and general practitioner in Kopfing im Innkreis, eventually earning the Austrian title of *Medizinalrat* and being named an Honorary Citizen (*Ehrenbürger*) of the municipality for his decades of dedicated local clinical service. Alongside his medical practice, Berger maintained a highly prolific parallel career as a self-taught field researcher, ultimately receiving the official title of *Konsulent für Wissenschaft* (Science Consultant) from the Government of Oberösterreich for his extraordinary contributions to cryptogamic botany. Although actively associated with the Department of Organismic Biology at the University of Salzburg, his international reputation within European mycology is anchored in his extensive, independent fieldwork. Beyond Austria, his collaborative expeditions have significantly expanded the known geographical footprints of Atlantic lichens and their associated fungi, notably resulting in co-authored baseline inventories of the unique lichen flora of Bermuda. In his home country, he remains a central figure in regional conservation, spearheading large-scale mapping projects and field inventories alongside international research teams to monitor and protect endangered "Red List" species across threatened alpine and subalpine habitats. He has described or co-described more than 50 new taxa, predominantly lichenicolous fungi, and the genus *Bergerella* Diederich & Lawrey was named in his honour. He amassed a renowned private collection, which includes tens of thousands of specimens. Ref.: *Pers. comm*.; Hertel & al. (2017).



Bernhardi, Johann Jakob **(1774–1850)** – Born in Erfurt, Kurfürstentum Mainz (now Germany), he received his education in his native city, graduating from the University of Erfurt with degrees in philosophy and medicine in 1799. That same year, he was appointed Director of the Erfurt Botanical Garden (*Gartenstraße*), and in 1800 he published a systematic inventory of the region's flora. He continued his career within the medical faculty, becoming an extraordinary professor in 1805 and a full professor of botany, zoology, and *materia medica* in 1809. Following the political closure and dissolution of the University of Erfurt by Prussian authorities in 1816, Bernhardi fought to preserve the botanical garden from liquidation, continuing to manage it with great personal financial sacrifice until his death. In his later career, his research shifted away from cryptogams to focus primarily on the comparative anatomy, seed germination, and structural properties of cultivated plants. Bernhardi's enduring significance in lichenology rests upon his pioneering 1797 treatise attempting to classify the gelatinous "jelly lichens", a work recognised as one of the earliest specialised monographs in the discipline. Following his death, his massive private herbarium, containing approximately 60,000 specimens, was acquired by the German-American botanist George Engelmann and subsequently presented to Henry Shaw (1800–1889) at MO, where it remains. Ref.: D'Arcy (1971), Schlechtendal (1850); Ziegenspeck (1955b).



Beschel, Roland Ernst **(1928–1971)** – Born in Salzburg, Austria, Beschel developed an early passion for the natural world during childhood excursions with his parents, who died young. He began conducting microscopic work as a teenager. Following his primary education and a period of military conscription, he read botany at the University of Innsbruck under the mentorship of Helmut Gams, whose cryptogamic courses and field excursions profoundly shaped his academic direction. In 1950, he earned his doctorate *summa cum laude* in botany and physical geography. His landmark thesis tackled urban lichen distribution in relation to air pollution, but its true historical significance lay in establishing the fundamental methodology of *lichenometry*,using the growth rates of epilithic thalli to date rock surface exposures. He collaborated closely with Gams' former student Volkmar Vareschi and the lichen sociologist Oscar Klement. Beschel refined his lichenological dating techniques from 1951 to 1955 while working as a teacher at the *Institut auf dem Rosenberg* in St Gallen, Switzerland, proudly identifying himself as a *geobotanist*. In 1955, he immigrated to Canada, serving as a professor at Mount Allison University in Sackville, New Brunswick, until 1959. He then accepted a chair at Queen's University in Kingston, Ontario, where he was also appointed Director of the Fowler Herbarium. At Queen's, Beschel became a pioneer in herbarium management by early adopting computer processing systems to catalogue collection data. A Fellow of the Arctic Institute of North America, he undertook numerous grueling expeditions to Greenland, the North American Arctic, and Siberia. During a 1968 research stay in the Soviet Union, he was expelled by authorities after inadvertently wandering into a restricted military zone. He published over seventy papers on cryopedology, permafrost patterns, and glacial lichen dynamics, but his sudden suicide at the age of 42 cut short a brilliant, innovative career before his final theories could be fully realised. His herbarium is divided between IB (early European collections) and QK (later American collections). Ref.: Brassard (1971); Crowder & Hainault (1971); Gams (1971); Macpherson (1971).



Bitter, Friedrich August **Georg (1873–1927)** – Born in the city-state of Bremen (now Germany), his parents belonged to a well-established mercantile class (*Kaufmannsstand*), his father being a grain merchant. He received his secondary education in Bremen under the direction of the prominent botanist Franz Buchenau (1831–1906). From 1893, he studied biology at the universities of Jena, Leipzig, and München, before completing his doctorate at the University of Kiel in 1896 under Johannes Reinke. He subsequently spent a year conducting phycological research at the *Stazione Zoologica* in Naples before being appointed an assistant at Berlin (1898–1899) and later under Wilhelm Zopf at Münster (1901). Bitter is celebrated for his structural expertise in botanical gardens, serving as the co-founder and director of the new Bremen Botanical Garden (*Osterdeich*) from 1905, where he was awarded the title of professor in 1913, and later, from 1922, as director of the Göttingen University Botanical

Garden. During his early career assignments with Simon Schwendener in Berlin and Zopf in Münster, Bitter became deeply engaged in structural lichenology. His pioneerin gpapers from this period focus on the anatomical development and tissue differentiation of lichen thalli. His most enduring lichenological treatise is his 1901 monograph on *Parmelia* subgenus *Hypogymnia*, which fundamentally reshaped the morphological and taxonomic framework of the group. Although he withdrew from active lichen research around 1905 to focus on angiosperms, he achieved global distinction as the pre-eminent authority on the megagenus *Solanum* and the broader family *Solanaceae*, describing hundreds of new species. His primary lichen herbarium is housed at GOET, with additional historical collections and duplicates at BREM. Ref.: Kärnefelt & al. (2012); Wagenitz (1988); Weber (1928).



Blum, Oleg Borisovich **(1937–)** – Born in Zarichchya, Ruzhyn district, Soviet Union (now Ukraine), Blum studied biology at the Taras Shevchenko National University of Kyiv, where he became acquainted with the eminent specialist Alfred Oxner, who inspired his career in lichenology. He developed a strong interest in ecological physiology, particularly the water relations of thalli, which formed the basis of his 1965 candidate thesis. His advanced doctoral work, defended in 1982, expanded into the application of lichens as highly sensitive bioindicators of environmental heavy-metal pollution. As a prominent research scientist at the M.G. Kholodny Institute of Botany in Kyiv, Blum made a significant historical contribution by meticulously editing and preparing Oxner's extensive, unfinished manuscripts for the definitive *Flora of the Lichens of Ukraine*. In his later career, he focused extensively on practical environmental protection, steering regional conservation policy and co-authoring sections of the *Red Data Book of Ukraine*. He described a few taxa. The genus *Olegblumia* S. Y. Kondr. *et al.* is named after him. His herbarium is housed at KW. Ref.: Kondratyuk, *pers. comm*.; Nadieina & al. (2012).



Boberski, Władysław (1846–1891) – Born in Piszczatyńce, Kingdom of Galicia and Lodomeria, then part of the Austrian Empire (now Pyshchatyntsi, Ternopil Oblast, Ukraine). His parents belonged to a literate layer of the regional community that deeply prioritised academic advancement. His father was a schoolteacher, and he followed his professional path, training as an educator and reading natural history at the University of Lemberg (now Lviv) until his graduation in 1868. From 1872, he lived and taught at the state teachers' training seminary in Ternopil (*Tarnopol*), eventually being appointed its director in 1886. Concurrently, he served as a regional district inspector of public schools and was a driving force within the local pedagogical society, where he initiated the establishment of a specialised Pedagogic Museum. Alongside his educational duties, Boberski maintained a profound research interest in botany. He was inspired by the vibrant lichenological community in Breslau (now Wrocław, Poland), with whom he maintained an active correspondence, as well as by

Antoni Rehman (1840–1917) of Kraków, who was also collecting throughout the Podolia and Galicia regions. Boberski's first lichenological treatise appeared in 1883, and his entire subsequent output was dedicated to the cryptogamic flora of Galicia. He formally circumscribed several new regional taxa, primarily within his seminal 1886 systematic catalogue of Galician lichens. His herbarium is partly housed at LWS, partly at KRA. Ref.: Gutsal (2004).

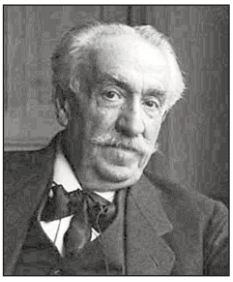


Boccone, Paolo Silvio **(1633–1704)** – Born in Palermo, Kingdom of Sicily (now Italy), into a wealthy family whose financial standing allowed him to devote his life to his primary passion, botany. As a youth, he frequently visited the Botanical Garden in Messina, which had been founded by the Roman physician Pietro Castelli (1574–1662), who became his instructor. Boccone travelled extensively across Europe collecting botanical specimens and was appointed official botanist to the Grand Dukes of Toscana in Firenze, serving first Ferdinando II (1610–1670) and later Cosimo III (1642–1723). The latter's patronage also supported Pier Antonio Micheli, who drew significant insight from the Boccone tradition of incorporating lower plants, including fungi and lichens, into systematic botany. During his travels as ducal botanist, Boccone visited Paris and London, establishing connections with prominent contemporaries such as Joseph Pitton de Tournefort and Robert Morison, the latter editing and publishing Boccone's first masterpiece, *Icones et Descriptiones Rariorum Plantarum* (1674). In 1682, Boccone entered the Cistercian Feuillant Order, taking the monastic name Silvio, and relocated to the Roman region to continue his natural history studies. He is widely recognised as one of the founding fathers of Italian botany and mentored several notable pupils, including the French botanist Charles Plumier (1648–1704). His revolutionary 1697 treatise, *Museo di Fisica e di Esperienze*, featured some of the earliest pre-Linnaean illustrations and theories on the origin and structure of fungi. His herbarium is housed at WRSL and L with specimens at FI, P, W and TL. Ref.: Lazzari (1973); Roca & Nimis (2002).

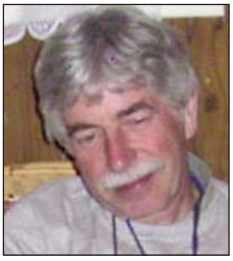
Bock, Jerome see **Tragus, Hieronymus**.

Bohler, John (1797–1872) – Born in South Wingfield, near Alfreton in Derbyshire, England, UK. Coming from modest circumstances, he originally trained as a stocking weaver, but his passion for the natural world led him to spend his leisure time collecting plants. Over time, he developed a successful livelihood supplying local doctors and pharmacists with wild medicinal herbs. Through this work, he became acquainted with the physician Richard Deakin (1809–1873), an enthusiastic lichenologist with a medical degree from the University of Pisa. Deakin encouraged Bohler to compile and issue the first commercial British lichen exsiccatae series, *Lichenes Britannici* (1835–1837), a pioneering collection of sixteen monthly fascicles for which Bohler prepared the accompanying descriptive text. In his later years, Bohler became an avid and expert collector of rare fungi. Around 1860, he was officially commissioned by the Botanical Committee of the British Association to explore and map the cryptogamic flora of Snowdon and its adjacent mountains. He also contributed extensive field data to several regional floras, notably pro-

viding the comprehensive botanical chapters for Robert White's *Worksop, "The Dukery," and Sherwood Forest*, which was posthumously published in 1875. The lichen segus *Bohleria* Trevis (now a synonym of *Placidiopsis*) was named after him. The whereabouts of his private herbarium are unknown, though some specimens are preserved in BM and some in NOT. Ref.: Britten & Boulger (1893); Hawksworth & Seaward (1977); Trimen (1872).



Bonnier, Gaston Eugène-Marie **(1853–1922)** – Born in Paris, France, into a family where his mother, a novelist and writer**,** was the daughter of a highly celebrated French jurist and law professor, while both his father and maternal grandfather were professors of law. He was educated locally and studied at the *École Normale Supérieure* (1873–76), having previously served as an artilleryman in the Franco-Prussian War of 1870. In 1878, he spent a year at the University of Uppsala as a student of Th. M. Fries, alongside C. Flahault (1852–1935). It was there that his interest in lichens developed, and he co-authored a paper with Flahault on Scandinavian cryptogams (1879), based on their travels in Sweden and Norway. On returning to France, he held several posts at his former school and became acquainted with Édouard Bornet, who further stimulated his interest in lichens, particularly in the problem of lichenisation. He earned his doctorate in 1879 with a thesis on floral nectaries and was appointed titular Professor of Botany at the *Faculté des Sciences*, Sorbonne, in 1887. In 1889, he founded the Plant Biology Laboratory at Fontainebleau, which he directed until his death. Bonnier was an early pioneer of experimental plant ecology. He included lichens in his research programme and attempted to resynthesise lichen thalli; he claimed complete success and published detailed accounts of obtaining entire thalli with reproductive structures, a milestone in the symbiosis debate at the time. He achieved greater success in studying gaseous exchange in lichen thalli, a line of research perfected by his student Henri Jumelle. He taught many students, including the American lichenologist R. Heber Howe Jr. (1875–1932). Bonnier was a versatile botanist who also contributed to several French floras, but he is perhaps best known for his studies of alpine plants, which he cultivated in opposing environments to observe their structural adaptation to higher and lower altitudes. His herbarium is housed at P. Ref.: Bonnier (1912); Jumelle (1924); Molliard (1923).



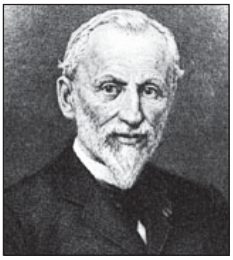
Boom, Pieter Pacificus Gerardus **van den (1945–)** – Born in Eindhoven, North Brabant, the Netherlands, he has established himself over a multidecade career as an eminent and highly prolific independent lichenologist and taxonomist. His primary importance to lichenology lies in his comprehensive floristic inventories, global fieldwork, and pioneering taxonomic monographs on crustose lichens and lichenicolous fungi. Over forty years, he conducted meticulously detailed, long-term mapping of his home region, culminating in his landmark 2026 biogeographical study *Lichens and Associated Fungi in Eindhoven – 40 Years of Change*. A tireless field researcher, van den Boom's scientific reach extends well beyond

the Low Countries; he has led or co-authored extensive baseline surveys across Macaronesia, Western Europe, South America and Central America. His monumental 2021 monograph, *Foliicolous Lichens and their Lichenicolous Fungi in Macaronesia and Atlantic Europe*, provided the first modern, comprehensive keys and ecological analyses of lichens growing on leaves and conifer needles across eleven Atlantic territories. He maintains an extensively cited private herbarium containing tens of thousands of vouchers. His collaborative research has resulted in the description of over a hundred new species, and several lichen taxa, including the genus *Vandenboomia* S.Y. Kondr., have been named in his honour. His herbarium, still partly private, will be moved to BR. Ref.: *Pers. comm.*; Hertel & al. (2017).

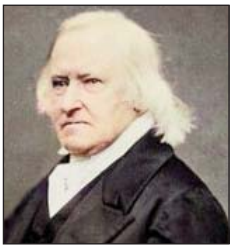


Boonpragob, Kansri (1947–) – Born in Bangkok, Thailand. Her father was a forester, and her mother, Raphai, owned an estate on the outskirts of Bangkok where Kansri grew up in close contact with nature. After completing her basic education, she studied plant pathology at Kasetsart University, Bangkok, earning a bachelor's degree in 1969 under Thira Sutabura. Following family tradition, she pursued further education abroad, studying biology at Middle Tennessee State University, Murfreesboro, where she earned a master's degree in 1972 under Kurt E. Blum (1940–). She returned to Thailand and took a teaching position in ecology in the Department of Biology at Ramkhamhaeng University, where she remained throughout her career. In 1980, she attended a course in Environmental Management and Protection at the Technical University of Dresden on a UNESCO scholarship. Foreseeing air pollution as a major future problem in Thailand, she chose lichens as bioindicators and received a scholarship for doctoral studies in 1982. She contacted Tom Nash in Arizona, USA, who accepted her as a student; under his supervision, she conducted in-depth transplant studies on *Ramalina menziesii* and its response to urban environmental conditions in the Los Angeles region, whilst also working in the laboratory of Philip Rundel (1943–) at UCLA. After earning her doctorate, she returned to Ramkhamhaeng University in 1987. Finding that little was known about Thai lichens, she recognised that pollution studies were impossible without a basic lichen flora. She received assistance from Jack Elix in Australia and successfully applied to the Research Council of Thailand for funding to study Thai lichen biodiversity. This initiated a renewal of lichenological research in Thailand, further stimulated by Pat Wolseley's project on Southeast Asian dipterocarp forest lichens and her 1991 workshop in Chiang Mai. Boonpragob has trained numerous students and is widely regarded as the *mother of Thai lichenology*. She has described numerous new species of lichens. Her herbarium is housed at RAMK. Ref.*: Pers. comm*.; Lumbsch (2024); Sodamuk & al. (2017).

Bornet, Jean-Baptiste **Édouard (1828–1911)** – Born in Guérigny, Nièvre, France, into a stable and respectable family environment. His parents possessed the necessary financial means and social standing to support an extensive higher education; his father was a cashier at an ironworks that manufactured anchors and heavy iron cables for the French Royal Navy. After completing his primary education, he attended the college in Nevers,



initially studying the classics but gradually developing an interest in the natural environment, particularly after meeting the pharmacist Alexandre Boreau (1803–1875). He continued his studies in Paris; after 1848, he studied botany under the mycologist Jean Henri Léveillé (1796–1870) and became close to Gustave Thuret (1817–1875), who steered him towards the study of cryptogams. In 1852, he moved to Cherbourg, where he studied seaweeds and published several important papers alongside Thuret. In 1855, he earned a doctorate in medicine and returned to assist the ailing Thuret. After Thuret's death in 1875, he completed his mentor's unfinished work at Villa Thuret in Antibes, later moving to Paris, where he became a familiar figure among botanists, often spotted on field excursions with a portable microscope. He was employed by the National Museum of Natural History in Paris to arrange its algal collections, and he became a member of the Academy of Sciences in 1886. In Paris, he met and befriended William Nylander, whose obituary he eventually penned, notably the only account to portray the notoriously reclusive Nylander as friendly and approachable, indicating a close bond during Nylander's final isolated years. Bornet's primary importance to lichenology rests on his detailed structural study of *Ephebe pubescens*. This research led to his landmark 1873 publication on the true nature of the algal partner in lichens, *Recherches sur les Gonidies des lichens*, which supported Schwendener's theory of lichenisation. Although he attempted to resynthesise *Xanthoria parietina* and observed fungal hyphae enveloping the photobiont, he never succeeded in fully regenerating the structural thallus in culture. His investigations into small, gelatinous, and poorly understood fruticose lichens resulted in the description of the genus *Spilonema* and several additional species in related genera. His herbarium is housed at PC. Ref.: Bonnier (1912); Guignard (1912).



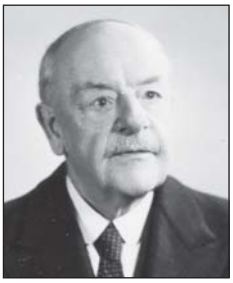
Borrer, William (1781–1862) – Born in Potwell, Henfield, Sussex, England, UK, his mother was the daughter and sole heir of Nathaniel Lindfield, the owner of the Pickwell estate in Cuckfield, West Sussex, while his father was a wealthy merchant. He worked in his father's firm, which he later inherited. Privately educated, he became acquainted with many leading British botanists, including Sir J. Banks and Sir W. J. Hooker. After marrying Elizabeth Hall, a banker's daughter, in 1810, he was financially secure enough to devote his life to botany, building a celebrated garden at his new home, Barrow Hill. He held several honorary positions locally, most notably as superintendent of the Henfield National School, which was located on his property. Described as a generous man who "promoted the welfare of those with whom he was connected", Borrer belonged to the influential circle surrounding the Linnean Society and became a fellow in 1805. He corresponded with Erik Acharius, who named the genus *Borrera* in his honour. Borrer was drawn to taxonomically difficult cryptogams, studying them with a meticulous commitment to accuracy. He examined the Linnaean lichen collection whilst visiting Sir James Edward Smith in 1806, and later studied the specimens sent by Acharius to the Linnean Society, as well as the Dillenius herbarium at Oxford in 1809. Although he was independently compiling a British lichen flora, upon discovering that

Dawson Turner had accumulated extensive material, he proposed a collaborative volume. This partnership resulted in the pioneering *Specimen of a Lichenographia Britannica*, though its convoluted publication history was plagued by mutual misunderstandings. Whilst proofs of the first 208 pages were printed by 1812, the work was only privately circulated in 1839. Turner later wrote that the volume "will remain a monument of your industry, your ability, and your profound knowledge of the Family of Lichens." Borrer was elected a Fellow of the Royal Society in 1835 and frequently contributed to *English Botany*. Rightly regarded as the father of British lichenology, he described numerous taxa. The lichen genus *Borrera* Ach. (now a synonym of *Teloschistes*) was named in his honour. His herbarium is housed at BM (ex K). Ref.: Jackson (1886); Kell (2004); Seaward (2002); Smail (1974).



Bory de Saint-Vincent, Jean-Baptiste Geneviève Marcellin **(1778–1846)** – Born in Agen, Aquitaine, France, into a noble family that embraced Enlightenment philosophy and maintained an open house for leading scientists and thinkers. From childhood, he met prominent biologists, most notably Jean-Florimond Boudon de Saint-Amans (1748–1831). He studied at the Collège d'Agen until the French Revolution, when the family sought refuge with relatives in Bordeaux whilst both his father and grandfather were imprisoned. In 1795, he entered the *École Centrale de Bordeaux*, where teachers emphasised field-based natural history instruction. This background likely inspired his first paper, which focused on algae from the Gironde coast and was intended as part of a projected *Flore de Bordeaux*. He presented it to the *Société d'Histoire Naturelle* in Bordeaux, where he was a member and keeper of collections. There, he met the botanists Jacques Draparnaud and Jean-Baptiste Lapatie, alongside the naturalist Pierre André Latreille (1762–1833), a close friend of Jean-Baptiste Lamarck. Bory's 1797 paper was remarkably advanced for his age, offering detailed commentary on Linnaean species concepts in *Byssus*, *Conferva*, and *Phytoconis*, based on microscopic study and an extensive knowledge of contemporary literature. Lamarck was so impressed that the young Bory had identified more species than Lamarck himself had included in his own French flora. Bory joined the army in 1799 and was stationed in Rennes, where he took up cartography and frequently visited the local botanical garden. Most of his career, however, was spent as a naturalist on overseas expeditions. His first was to Australia (1800), but he and several others, including André Michaux, left the ship in Mauritius, reportedly due to illness. He entered the service of the governor and spent two years exploring Réunion and nearby islands, where he met the exiled Louis-Marie Aubert du Petit-Thouars. After returning, he rejoined the army and fought in the Napoleonic Wars, notably in Spain, later publishing accounts of the Iberian Peninsula in 1823 and 1824. A staunch supporter of Napoleon, he was exiled to Belgium following the Emperor's defeat and the ascension of Louis XVIII, but was pardoned in 1819. In 1829, Bory was commissioned by King Charles X to lead a major scientific expedition to the Peloponnese, a region of significant geopolitical interest. Although the king was deposed before the mission was fully completed, Bory suffered no professional consequences and was promoted to *colonel d'état-major*. He edited the landmark six-volume scientific report of the Morea expedition, personally writing the volume

on cryptogams, which included the first modern records of lichens from that region. In 1839, he led another scientific expedition to Algiers. Although the cryptogamic section of the Algerian report was prepared in collaboration with Camille Montagne and the Tulasne brothers, Bory died before the work could be finished. His most important collections are from Réunion and the Atlantic islands; these lichens were predominantly identified by Dominique François Delise. His material is preserved in the Thuret Herbarium at PC, bound in volumes in the library. He also served as the chief editor of the monumental, 17-volume *Dictionnaire classique d'histoire naturelle* (1822–1831), for which Delise assisted with the lichen sections. Bory remains a central figure among the historical circle of military lichenologists, a phenomenon unique to France. Ref.: Ferrière (2009); Jost (1930); Lauzun (1908).



Bouly de Lesdain, Maurice (1869–1965) – Born in Dunkerque, France, into a prominent and wealthy family. The financial stability of the paternal estate allowed Maurice to pursue a long, intensive medical and scientific education without material concerns. After attending the Jesuit College in Boulogne-sur-Mer, he studied medicine in Paris, earning his doctorate in 1894, whilst simultaneously studying natural history at the Sorbonne until 1896. There, he studied under Gaston Bonnier, who was actively working on lichen synthesis. Returning to Dunkerque to practice as an ophthalmologist, he began researching local cryptogams and published a seminal flora on regional lichens. He gradually expanded the scope of his taxonomic studies from regional to national and international scales, describing numerous new species from across the globe. Over the decades, he accumulated a vast herbarium and library, both of which were tragically destroyed during a bombing raid on Dunkerque in 1940. He subsequently took refuge in Paris to continue his lichenological work, and after the war settled in Lille, where he published his final scientific paper in 1960. Bouly de Lesdain served as a vital intellectual bridge between the older generation of French lichenologists, such as François Harmand, and the post-war generation, including Georges Clauzade, ensuring the continuity of French lichenology through the mid-twentieth century. The lichen genus *Lesdainea* Harm. (now *Trimmatothele*) Was named after him. Although his main herbarium was lost, duplicates and post-war specimens survive in several herbaria, including PC. Ref.: Abbayes (1966).

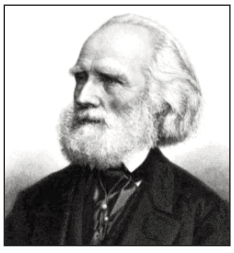


Brackel, Wolfgang von (1952–) – Born in Bamberg, Bayern, Germany, he developed a profound interest in geobotany and the natural world from an early age. In the 1970s, he matriculated at the *Friedrich-Alexander-Universität Erlangen-Nürnberg* to read biology, earning his master's degree (*Diplom*) in 1980. Exhibiting an independent career path, he co-founded the *Institut für Vegetationskunde und Landschaftsökologie* (IVL) in Hemhofen, where he practised as a freelance ecological consultant and environmental surveyor for thirty-five years. Alongside his professional consultancy, he maintained a distinguished parallel career

as a private researcher, culminating in a doctoral thesis (*Dr. rer. nat.*) at the University of Hamburg on the systematics of lichenicolous fungi. Documenting what was then an obscure niche, von Brackel emerged as one of Europe's foremost modern experts on this specialised group of organisms, focusing primarily on Bayern and the Mediterranean basin. His extensive field expeditions across southern Europe reshaped regional baselines. He initiated the first systematic, multi-year survey of Italian lichenicolous fungi, traversing all regions of Italy, a monumental project that culminated in his *Catalogue of the Lichenicolous Fungi of Italy* published in 2026. His detailed microscopic analyses have yielded hundreds of scientific discoveries, including the descriptions of numerous new species. Beyond his taxonomic monographs, he has been heavily involved in public conservation, co-authoring the official Red Lists of threatened Bavarian cryptogams and routinely publishing comprehensive regional checklists. The genus *Brackelia* Zhurb. was named in his honour. His large herbarium is private, with duplicates housed at major international collections. Ref.: *Pers. comm.*; Kärnefelt & al. (2012).



Bratt, Geoffrey ('Geoff') Charles **(1931–1977)** – Born in Hobart, Tasmania, Australia. Following his early education, he studied natural history at the University of Tasmania, majoring in applied chemistry in 1952. After three years working as a research scientist in a chemical firm, during which he secured several patents, he received a scholarship to study at the Imperial College of Science in London, completing his PhD there in 1959. It was during his time in London that he developed a serious interest in lichens and met Peter James, who enthusiastically supported his lichenological work even after Bratt returned to Tasmania. A dedicated bushwalker since his youth, Bratt was a highly prolific collector; his collection of over 15,000 specimens now forms an important foundation of the Tasmanian Herbarium. He participated in the Imperial College exploring expedition to Patagonia (1958–59), in which Peter James also took part, and later collected extensively in the Kerguelen Islands (1970–71). He was the first Tasmanian-born lichenologist and served as an honorary Research Associate in the Department of Botany at the University of Tasmania. Though he published only short, primarily floristic papers starting in 1967, his fieldwork heavily reshaped regional baselines. His herbarium is housed at HO, with Kerguelen specimens in MSC. Ref.: Filson (1978).



Braun, Alexander Heinrich **(1805–1877)** – Born in Regensburg, Fürstentum Regensburg (now Bayern, Germany). His mother was the daughter of a mathematics professor and former priest based in Berlin, while his father was a physician. In his youth, Braun developed a keen interest in the natural environment but initially chose to study medicine upon entering the University of Heidelberg in 1824, as expected by his family. However, he soon transitioned to the natural sciences and moved to the University of Tübingen, where he majored in botany and earned his doctorate in 1829 with a dissertation on the comparative morphology of flowering plants, a highly fashionable field at the time. He belonged to a distinguished circle of biol-

ogy students exploring plant morphology, which included Karl Schimper (1803–1867), Louis Agassiz (1807–1873), and Georg Engelmann (1806–1884). It was only during subsequent studies in München and Paris that he discovered lichens, finding them profoundly fascinating from both a biological and evolutionary perspective. Braun became a highly influential teacher who upheld the botanical and lichenological traditions in Berlin. Before being appointed Professor of Botany at the University of Berlin in 1851, he held academic chairs at the Polytechnic School in Karlsruhe, the University of Freiburg, and briefly the University of Marburg. His students included such illustrious botanists as Anton de Bary and Ernst Stizenberger. Notably, Braun was the sole prominent academic to support Hermann Itzigsohn in his pioneering attempts to understand cellular reproduction and algal sexuality, maintaining his encouragement even after Itzigsohn was institutionalised. He described several new taxa. He described a few taxa. What he may have had of herbarium specimens was destroyed in Berlin during the Second World War. Ref.: Caspary (1877); Mettenius (1882).

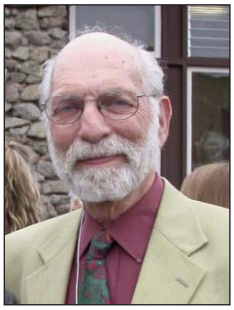


Breuss, Othmar (1955–) – Born in Wien (Vienna), Austria. Following his early education in Vienna, he studied biology and environmental science from 1974 at the University of Vienna, graduating in 1980 with a thesis on the lichen flora of Yugoslavia. Since 1981, he has worked as a high school teacher in Vienna, whilst simultaneously conducting extensive research on cryptogams, primarily as a scientific associate of the *Naturhistorisches Museum Wien*. He also lectures at the University of Vienna, where he earned a doctorate in 1991 with a definitive thesis on the genus *Catapyrenium* in Europe, prepared under the supervision of Harald Riedl (1936–). Breuss has specialised in the family *Verrucariaceae*, which he has systematically revised across multiple geographic regions. He has described numerous new taxa, including the genus *Placopyrenium*. He maintains a large private herbarium, with extensive duplicate collections deposited in the institutional herbaria at W and WU. Ref.*:* Hertel & al. (2017).



Britzelmayr, Max (1839–1909) – Born in Augsburg, Königreich Bayern (now Germany), where his father was a teacher. He followed in his father's footsteps and was educated at the teacher-training college in Lauingen, graduating in 1859. This marked the beginning of a long career as a schoolmaster in the Augsburg region, where he was highly regarded for reforming educational practices until he retired for health reasons in 1899. His greatest passion lay in fungi and lichens, which he collected prolifically, primarily across southern Bayern. He described numerous new taxa, which he frequently illustrated himself. Whilst Britzelmayr possessed an outstanding field knowledge of the regional mycota, his geographic isolation meant he often lacked the opportunity to compare his findings with other workers' concepts. Although a self-educated botanist, his lichenological work was actively supported by Ferdinand Arnold and Heinrich Rehm. He

issued comprehensive exsiccatae series of Bavarian lichens, sets of which are preserved in many international herbaria, whilst his primary personal herbarium is housed at M. Ref.: Dörfelt & Heklau (1998); Gerstlauer (1910); Kärnefelt & al. (2012).



Brodo, Irwin ('Ernie') Murray **(1935–)** – Born in New York, USA, into a Jewish family. His father was a postal clerk and his mother was a bookkeeper. In 1953, he began his studies at the College of Pharmacy at Columbia University, but transferred the following year to the City College of New York. There, he took botany courses with the phycologist/pteridologist Joseph J. Copeland (1907–1990), who introduced him to lichens during class field trips. In 1957, he moved to Cornell University, where he earned his master's degree in General Biology and Education in 1959 with an ecological study of the lichens of Central New York. Mason Hale helped him with species identifications, as his official supervisor, Thomas Eisner (1929–2011) was an entomologist specializing in chemical ecology. In 1959, he moved to Michigan State University to study under the renowned lichenologist Henry Imshaug. He received his doctorate there in 1965, following a series of comprehensive ecological and floristic studies on the lichens of Long Island, New York. During this research, his passion for taxonomy was stimulated by Imshaug, and they jointly revised the *Lecanora pallida* group (1966). After a brief period as an assistant professor of biology at Chatham College, Pittsburgh, Brodo was appointed curator of the lichen herbarium at the National Museum of Canada (now the Canadian Museum of Nature) in Ottawa in 1965. He spent the remainder of his career there, expanding the institutional collection considerably. He became one of the leading lichen taxonomists in North America, revising several taxonomically critical groups, including the genus *Bryoria* (in collaboration with D. Hawksworth), and describing numerous new taxa. Bryoria was a genus that had particularly puzzled him during extensive fieldwork on the Queen Charlotte Islands (Haida Gwaii) on the Pacific coast, where he made several major discoveries. Brodo also wrote the remarkably successful and widely acclaimed textbook, Lichens of North America (2001), featuring eminent photographs by Sylvia Duran Sharnoff and Stephen Sharnoff. Brodo was awarded the Acharius Medal by the International Association for Lichenology (IAL) in 1994, and served as its president from 2004 to 2008. He has described many species and issued an authoritative of exsiccatae series of Canadian lichens. The genus *Brodoa* Goward is named in his honour. Brodo's main herbarium is housed at CANL, with many specimens at MSC and NYS. Ref.: *Pers. comm*.; McMullin & al. 2016, Weber & al. (2015).

Bromelius, Olof (Olaus) (1639–1705) – Born in Örebro, Sweden, the son of a merchant and of Ingeborg Gudmundsdotter Krok**,** offspring from one of the most prominent and influential clerical dynasties in Sweden at the time. He studied medicine from 1657 at the University of Uppsala, where he was taught by Olof Rudbeck the Elder (1630–1702), to whom he later attributed his botanical skills. After completing his studies in 1667, he served as a physician and official "herborist" in Stockholm until 1671, whilst also working as an inspector of regional pharmacies. Bromelius earned his medical doctorate at the

University of Leiden in 1673, during a period when he was serving as the personal physician to the Swedish ambassador to the Netherlands; he later held similar diplomatic medical posts in England and Germany. Following his return to Sweden in 1675, he became a member of the *Collegium Medicum*, and in 1676, he was appointed to the royal committee tasked with investigating the trials and handling of witchcraft in the country. In 1691, he was appointed provincial physician in Göteborg (Gothenburg). His botanical interests flourished during his tenure in Göteborg, leading to the publication of *Chloris gothica* in 1694. This landmark work was the first Swedish provincial flora and included accounts of several regional lichens. The current whereabouts of his herbarium remain unknown, but records indicate it was sold alongside his extensive library following his death. Ref.: Birger (1926); Krok (1925).



Brown, Robert (1773–1858) – Born in Montrose, Angus, Scotland, UK. His father was a minister in the Scottish Episcopal Church with strong Jacobite sympathies, whilst his mother came from a Presbyterian family. As a boy, he attended school in Montrose and later studied at Marischal College, Aberdeen, leaving in his fourth year when the family moved to Edinburgh in 1790. There, he enrolled in medicine but developed a deep passion for botany, attending the lectures of John Walker (1730–1803). He also met Daniel Rutherford (1749–1819) at the Royal Botanic Garden, through whom he became acquainted with several leading regional botanists, including George Don (1764–1814). He made extensive field excursions in the Scottish Highlands, often alongside his botanical contemporaries, making several notable discoveries, including a rare grass new to science. He left his formal university studies in 1793. The following year, he enlisted in the Fifeshire Fencibles, serving as a surgeon's mate from 1795 whilst stationed in Ireland, a post which granted him ample leisure time to study plants. During this period, he developed a profound interest in cryptogams, studying them microscopically. In 1796, he met James Dickson and assisted him with his *Fasciculus plantarum cryptogamicarum Britanniae*; by his own choice, Brown's descriptions were not attributed to him, reflecting his innate modesty and generosity towards his less formally educated friend. Brown developed microscopic skills far superior to those of any contemporary, leading to major biological discoveries, including the physical phenomenon later termed *Brownian motion*, and he was the first person to identify, describe, and officially name the cell nucleus. He became a Fellow of the Linnean Society, serving as its librarian from 1805 to 1822 and later as President from 1849 to 1855. He joined the influential Banksian circle and eventually served as librarian and assistant to Sir Joseph Banks, who affectionately called him the "Jupiter of Botany". From 1801 to 1805, Brown accompanied Matthew Flinders as a naturalist on the famous *Investigator* expedition to Australia, making extensive collections and discoveries that were later published in his influential treatment of the Australian flora. Although he never completed the comprehensive volume in which he intended to treat lichens, his vast collections formed the basis of early descriptions of Australian lichen taxa (e.g. Crombie 1879). He also published new lichen species brought back from Arctic expeditions. In 1827, he was appointed the first Keeper of the Botanical Department at the

British Museum, and in 1832, he received an honorary doctorate of civil law from the University of Oxford. He was elected a Fellow of the Royal Society in 1839. A humble man throughout his life, his principal aim was the professionalisation of botany. His herbarium is housed at BM. Ref.: Bennett (1858); Britten (1886); Crombie (1880); Hooker (1890); Mabberley (1985).

Browne, Patrick (1720–1790) – Born in Woodstock, County Mayo, Ireland, the son of 'a gentleman of respectable family and handsome estate'. A gifted child, he received 'the best education the country could afford'. At sixteen, he was sent to live with relatives in Antigua in the West Indies, but returned after two years due to ill health. He subsequently studied medicine and natural history, with a particular focus on botany, at continental universities (Paris and Reims), earning his doctorate in December 1742. He then proceeded to the University of Leiden, matriculating in 1743, before returning to Britain to practise for several years at St Thomas's Hospital in London. Longing to return to the West Indies, he sailed again for the Antilles, eventually settling in Jamaica from 1746 to 1755 as a practising physician. During his years on the island, he travelled widely, observing and collecting diverse natural history specimens. His research culminated in his masterpiece, *The Civil and Natural History of Jamaica* (1756), which was lavishly illustrated by Georg Dionysius Ehret (1709–1770). In this volume, lichens are treated with surprising detail, and Browne described several new taxa, including new genera. He corresponded with Carl Linnaeus on various botanical subjects; however, his specific interest in lichens likely developed during his studies in France, where the pupils of Joseph Pitton de Tournefort had established a strong tradition in cryptogamic study. Browne retired to Ireland in 1770, though he made at least one further journey to the Caribbean. He did not publish any accounts of Irish lichens, but he left behind a significant manuscript flora of Mayo and Galway. In 1758, Linnaeus purchased Browne's extensive Jamaican herbarium, which is why his primary specimens are housed at LINN, with additional material at BM. Ref.: Nelson (2000); Praeger (1949).

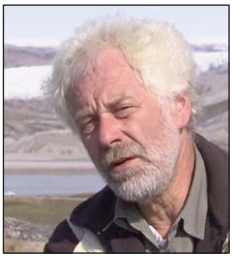
Brusse, Franklin ('Frank') Andrej **(1951–)** – Born in Den Haag (The Hague), the Netherlands, he emigrated with his parents to South Africa in 1953, where he received his formal schooling. He studied biology at the University of the Witwatersrand, completing a master's degree in 1981 on the lichen genus *Xanthoparmelia* in South Africa, parts of which he had already published the previous year. During his student years, he became acquainted with Dirk Wessels (1950–) of the University of the North, who was also researching cryptogams, and he established valuable contacts with lichenologists in Lund, Sweden. Brusse continued his intensive research into lichens throughout the 1990s whilst serving as a curator at the National Herbarium in Pretoria (PRE). He made numerous significant contributions to the taxonomy and documentation of South African lichens, notably between 1991 and 1993. However, he subsequently left his curatorial position due to health problems and eventually abandoned lichenology. His material is in PRE. Ref.: Moffett (2014); T. Oliver, *pers. comm.*

Bruttan (orig. Brutāns), Georg **Andreas (1824–1893)** – Born in Fehgen in the Ērgļi municipality, Russian Empire (now Vējava, Latvia), where his father was the leaseholder



(*arrendator*) of an estate, whilst his mother belonged to a native Latvian family. He received his higher pedagogical and specialised training first at the Dorpat (now Tartu, Estonia) Teacher-Training College (*Tartu õpetajate seminar*) and subsequently at the St Petersburg Philological Institute. Following his studies, he worked as a schoolmaster in Tartu, eventually rising to the position of school inspector and receiving the distinguished civil title of *Hofrat* (Court Councillor). Bruttan was an exceptionally active member of the Dorpat Naturalists' Society, which funded four of his regional collecting expeditions between 1862 and 1865. The extensive material gathered during these field trips formed the foundation of his pioneering 1870 publication on the cryptogamic flora of the Baltic region, which recorded 394 lichen species and was updated with a posthumous supplement in 1893. Although he evidently corresponded with Gustaw Wilhelm Körber, little else is recorded regarding the precise origins of his passion for lichenology. He donated his private collection to the Dorpat Naturalists' Society; his historical specimens are today preserved in the institutional herbaria at RIG and TU. Ref.: Lipshitz (1950); T. Randlane, *pers. comm.*

Buddle, Adam (c. 1660–1715) – Born in Deeping St James, near Peterborough, Lincolnshire, England, UK. Following his early education, he studied theology at Catharine Hall, University of Cambridge, earning his Master of Arts degree in 1685. He was eventually ordained into the Church of England and, from 1703, resided in North Fambridge, near Maldon, Essex. In the intervening years, he was exceptionally active in studying the natural environment, developing a reputation among his contemporaries as a leading authority on what were then termed "mosses" (a broad group that included lichens). Precisely how he acquired this profound botanical interest and expertise remains unrecorded. He concluded his career as Reader at Gray's Inn Chapel, London, where he died in 1715, having been unable to publish the comprehensive new English flora that he had completed before 1708. Following his death, his invaluable collections were incorporated into the historic Sir Hans Sloane collection and are now preserved at the British Museum (BM). These include his celebrated *Hortus Siccus*, which contains lichen specimens widely regarded as the oldest surviving herbarium material of English lichens. The flowering plant genus *Buddleja* was later named in his honour by Linnaeus. Ref.: Cambridge Alumni Database; Desmond (1977).



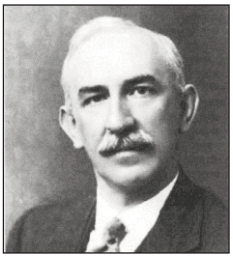
Büdel, Burkhard (1953–) – Born in Frammersbach, in the Main-Spessart region of Bayern, Germany, into a working-class family, his father being a stonemason (*Steinmetz*) and his mother a homemaker. He developed a deep passion for cryptogamic botany during his studies at the Technical University of Darmstadt and the University of Marburg, where he became a prominent member of the influential academic circle gathered around the legendary lichenologist Aino Henssen. In 1986, he earned his doctorate (*Dr. rer. nat.*) from the University of Marburg with a landmark taxonomic and biological dissertation on the cyanolichen genera *Heppia* and *Peltula* in Southern Africa. Following his PhD, he shifted his primary

focus towards plant ecophysiology at the Julius-Maximilians-University of Würzburg. Working closely with Otto Ludwig Lange, he successfully integrated microclimatic and gas-exchange field measurements with structural taxonomy, which led to his habilitation there in 1992. Büdel advanced rapidly through the academic ranks, serving as Professor of Botany responsible for lower plants at the University of Rostock from 1995 to 1997. He was subsequently appointed to the prestigious Chair of Plant Ecology and Systematics at the Technical University of Kaiserslautern, where he established a world-leading international research hub until his retirement as Professor Emeritus in 2019. His pioneering research focused heavily on the structural mechanics, ecophysiology, and macro-ecological roles of biological soil crusts and cyanobacterial lichens thriving in the extreme, arid ecosystems of the Southern Hemisphere. A pioneer in the use of micro-sensors to monitor how rapid hydration triggers carbon fixation in cryptogams, Büdel co-edited definitive botanical works, including the textbook series *Biology of Algae, Lichens and Bryophytes* and the seminal volume *Biological Soil Crusts: An Organizing Principle in Drylands*. Throughout his collaborative career, he conducted extensive field expeditions across South Africa, Australia, and South America, discovering and co-describing numerous new species. He served as a deeply dedicated mentor, training a large lineage of international taxonomists and ecophysiologists. Büdel has described many new taxa. His vast collection is at KL, with important duplicates at ASU, B, and M. Ref.: Kärnefelt & al. (2012).



Burgaz Moreno **Ana Rosa (1952–)** – Born in Madrid, Spain, into a middle-class family of five children, she inherited a profound love for plants and nature from her father, an agricultural engineer. She pursued her higher education in biological sciences at the *Universidad Complutense de Madrid* (UCM), where in 1981 she successfully defended her doctoral dissertation on the gypsophilous flora and vegetation of the Valladolid and Palencia provinces. Following her PhD, she shifted her primary research focus towards lichenised fungi. She advanced steadily through the academic ranks at UCM within the botany and plant biology sectors, ultimately becoming a Full Professor; she currently continues her academic association there as a Professor Emeritus. Her research has focused heavily on the diversity of lichens across the Iberian Peninsula and the taxonomy of the family *Cladoniaceae*. She directed the multi-volume project *Flora Liquenológica Ibérica*, authoring the *Cladoniaceae* volume, and more recently co-authored the seminal 2020 book *Mediterranean* Cladoniaceae, which combined classic microscopic anatomy and secondary chemistry with molecular genetics to resolve complex evolutionary trees. She served as President of the Spanish Lichen Society (*Sociedad Española de Liquenología*) from 2003 to 2007. Renowned as an enthusiastic educator, she has trained multiple generations of Spanish environmental scientists, taxonomists, and professional ecologists. In recognition of her lifetime of outstanding contributions to lichenology, in 2024 the *Journal of Fungi* published a Festschrift volume in her honour. Alongside her prolific scientific career, she has raised a family of four children and has fourteen grandchildren. Throughout her career, she has discovered and co-described multiple new species, and her extensive personal herbarium of more than 30,000 samples is housed at MACB. Ref.: *Pers. comm.*

Buxbaum, Johann **Christian (1693–1730)** – Born in Merseburg, Herzogtum Sachsen-Merseburg (now Germany), where his father was a physician and his mother managed the household and the early education of her children. Intending to follow his father's profession, he studied medicine at several universities, including Leipzig, Wittenberg, Jena, and finally Leiden, but he never completed his formal medical graduation. Instead, he turned his full attention to botany in Halle in 1718 under the guidance of Heinrich Bernhard Ruppius (1688-1719). This research led to his first botanical treatise in 1721, in which he notably recorded forty-nine lichen species from the Halle region. Later that same year, he was invited to St Petersburg by Tsar Peter the Great upon the recommendation of the prominent German physician Friedrich Hoffmann. Buxbaum was appointed director of the apothecary garden of the Medical Collegium (which later became the St Petersburg Botanical Garden) and professor at the newly founded Academy of Sciences, where he began a systematic study of the regional flora. Because of his medical and scientific background, he was selected in 1724 to accompany a Russian diplomatic delegation to Constantinople (Istanbul) led by Count Aleksandr Ivanovich Rumyantsev (Romanzoff), a mission that also enabled him to visit Greece. On his return journey, he travelled extensively through Asia Minor, exploring Baku, Derbent, and Astrakhan. Although officially commissioned to collect medicinal plants, he made comprehensive general collections, including cryptogams. These findings appeared in his landmark posthumous publications (1729–1740), which contained the very first records of lichens from these remote regions. Buxbaum contracted tuberculosis during these arduous travels. Having resigned his academic post in St Petersburg due to his failing health, he died prematurely in Wermsdorf, Sachsen, whilst trying to return to his home town of Merseburg. Most of his original plant specimens and personal archives were incinerated during a catastrophic fire at the Medical Chancellery in St Petersburg in 1737, though a small number of duplicate vouchers are preserved at LE. The moss genus *Buxbaumia* was named in his honour by Linnaeus. Ref.: Andreev & al. (2014); Biermann (1955), Ziegenspeck (1957).



Byl (orig. **Bijl), Paul** Andries **van der (1888–1939)** – Born on a family farm located near Stellenbosch, Cape Province, South Africa. Following his early education, he attended Victoria College, graduating in 1908, and subsequently continued his academic path at the University of South Africa, where he earned a doctorate in mycology in 1918. After holding several temporary positions, he was appointed Professor of Phytopathology at the newly established Agricultural Faculty in Stellenbosch in 1921, a department he famously built entirely from the ground up. In 1928, he became principal of the Stellenbosch–Elsenburg Agricultural College, remaining in this leadership position until his death. Although primarily celebrated as a pioneering plant pathologist, Van der Byl also maintained a deep interest in lichens, which he collected extensively throughout South Africa. Because no local lichenological expertise existed at the time, he sent his collections to European specialists for identification. From 1933 onwards, he published several surveys of selected South African lichen families to assist local botanists in recognizing regional species. Several taxa were named in his honour. His herbarium is housed at STE-VB. Ref.: Gunn & Codd (1981).



Bystrek, Jan (1934–2020) – Born in Grodzany, Lublin region, Poland. Following his early education, he studied biology at the Maria Curie-Skłodowska University in Lublin from 1953 to 1957, subsequently becoming an assistant at the botanical institute. It was there that he met Józef Motyka, who inspired him to devote his academic career to the study of lichens. In 1976, Bystrek completed his habilitation degree with a landmark monograph on the genus *Alectoria,* a complex group that he continued to study throughout his life, navigating its intricate taxonomic challenges. He also contributed extensive floristic research across Poland, with a particular focus on the lichen flora of the Tatra Mountains, and expanded his scientific reach by studying cryptogamic specimens from Central Europe, Macaronesia, Nepal, South America, and Antarctica. He was appointed Professor at the University of Białystok in 1991, where he mentored and trained numerous students. Throughout his prolific career, he described several new taxa. His herbarium is housed at LBL. Ref.: *Pers. comm*.; Hertel & al. (2017); Krzewicka (2020).

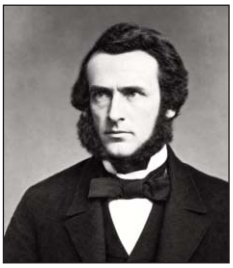


Calkins, William Wirt **(1842–1914)** – Born in Farm Ridge, La Salle County, Illinois, USA, Calkins was of early New England and Welsh descent. Though initially trained as a teacher, he left the profession in August 1862 to volunteer for the Union Army during the American Civil War, rising to the rank of First Lieutenant in the 104th Illinois Volunteer Infantry. After completing three years of military service, he established a successful lumber business while concurrently studying and practising law. Despite his professional commitments, he passionately cultivated a lifelong interest in natural history, amassing significant collections of shells, plants, fungi, and lichens. His lichenological pursuits were greatly encouraged by John W. Eckfeldt, whom he met in 1885; together, they co-authored the first catalogue of Florida lichens (1887). This pioneering work recorded 330 species and highlighted the tropical character of the Florida flora, noting many species shared with the West Indies. Although a resident of Berwyn, Illinois, Calkins travelled extensively to Florida, publishing numerous papers on his botanical discoveries there. His most substantial lichenological publication, however, was *The Lichen-Flora of Chicago and Vicinity* (1896). This monograph detailed 125 taxa and described his only new species. His collections are found in many herbaria, chiefly PH and ND. Ref.: Fink (1915); Haase (1914); Skaer (1878).



Carestia, Antonio (1825–1908) – Born in Riva Valdobbia, Piedmont, Kingdom of Sardinia (now Italy), Carestia was the son of Maria Eva (née Jachetti), who belonged to a well-regarded family line within the local ethnic Walser population, and of Giacomo Antonio Carestia (1769–1833), a surgeon who had studied botany at the University of Grenoble and actively collaborated with the renowned botanist Giovanni Biroli (1772–1825).

Inheriting his father's botanical passion, young Antonio developed an early love for the natural environment and mountaineering in the Pennine Alps. After completing his preliminary education, he entered the seminary at Novara, took holy orders, and in 1851 was appointed chaplain to his native village, where he remained for the rest of his life. Botany, however, remained his supreme interest, with a particular focus on the cryptogams and lichens of Piedmont. He maintained a close lifelong collaboration with Francesco Baglietto, who guided his lichenological studies. Carestia contributed extensively to Baglietto's cryptogamic exsiccatae and co-authored important treatises on the Valsesia region, including the seminal *Catalogo dei licheni della Valsesia* (1865–1867) and *Anacrisi dei licheni della Valsesia* (1880). An honorary member of the Italian Alpine Club, his large herbarium is housed at TO. Ref.: Nimis (1988, 1993); Piacco (1993, 1995).

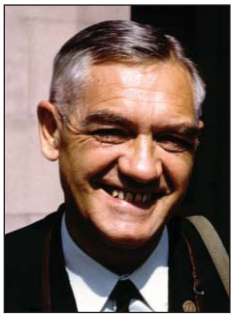


Carroll, Isaac (1828–1880) – Born in Cork, Ireland, into a Quaker merchant family, Carroll attended the Newtown School, a Society of Friends institution in County Waterford, from 1837 to 1838, likely receiving private tuition in the years that followed. In 1844, he undertook an apprenticeship at the Shackleton flour mill in Ballitore, County Kildare. Developing a keen early interest in botany, he began corresponding with Joseph D. Hooker at Kew, publishing his first paper on marine algae in 1852. His interest in lichens is first documented in 1858, initially fostered by David Moore, curator of the Glasnevin Botanic Gardens, who had previously corresponded with Thomas Taylor. Richly illustrated by Carroll himself, his earliest lichenological papers (1859) focused on several *Lecidea* species, including the newly described *L. mooreana* (now *Ainoa mooreana*), named in honour of his friend Moore. Due to commercial obligations, Carroll generally confined his fieldwork to holidays and business trips. He visited Iceland to collect lichens in 1861, and the following year met William Nylander in Paris, with whom he had already established a fruitful correspondence. In 1863, he travelled to Scandinavia with Moore to study Arctic lichens, subsequently searching for alpine taxa in Scotland in 1864 alongside Admiral Theobald Jones. While navigating the River Glomma in Norway on a timber-purchasing venture, Carroll ventured as far north as Finnmark; from these northern collections, Nylander described the notable new species *Verrucaria bryophila* (now *Frigidopyrenia bryophila*). Carroll also described several taxa independently and distributed a celebrated exsiccatae series of Irish lichens. His herbarium was purchased by BM in 1874, the year his father died and he took over the family business, though material also exists in CRK and DBN; an important subset of Carroll's type specimens is into the Nylander Herbarium housed at H. Ref.: Mitchell (1996).



Cengia-Sambo, Maria (1888–1939) – Born in Este, Veneto, Italy, Cengia-Sambo moved with her family to her mother's ancestral home, Palazzo Pisani, following her father's death in 1891. Her grandfather, an engineer, provided funds and specific instructions for her education. When she was nine, her mother remarried Professor Benvenuto Pellegrini, whose cousin, Vittore Pellegrini (1831–1927), a regional forestry inspector, introduced

her to botany during field excursions. At the University of Padua, she initially focused on mathematics, defending a geometry thesis in 1914. However, she continued studying natural history for a further four years at Vicenza and Padua, reading botany under the mycologist Domenico Saccardo (1872–1952). Her 1919 graduation thesis on the lichens of the familiar Euganean Hills permanently directed her career towards lichenology. She was employed at the Padua Botanical Garden, whilst also collaborating with Giuseppe Briosi (1846–1919) at the Cryptogamic Laboratory in Pavia. This led her to investigate lichen anatomy and physiology, specifically the nature of cephalodia, a field also being independently pursued by Eva Mameli. Alongside her research, she raised three children with her husband, the geologist Ettore Sambo. In 1921, she was appointed deputy director of the Botanical Garden of Urbino, where she continued her studies on cyanobacterial lichens. When her husband secured a teaching post in Prato, the family relocated to Florence. There, she joined a prominent circle of floristic and taxonomic botanists. Tasked with identifying expanding lichen collections from exotic expeditions to East Africa, Libya, and South America, she published several papers despite a severe lack of comparative European reference material. In the early 1930s, she became a curator at the Florence Herbarium (FI), managing foreign specimens and studying Italian alpine flora, often in collaboration with her husband. Cultivation experiments conducted from 1924 in the laboratory of Lionello Petri (1875–1946) led her to discover the role of nitrogen-fixing bacteria in lichen thalli; she subsequently coined the term *polysymbiosis* to describe these complex multi-partner associations. Deeply engaged in lichen ecology from 1926 until her death, she described numerous new taxa. Her herbarium is housed at FI. Ref.: Macellari (2017); Messeri (1941); Nimis (1988, 1993).



Černohorský, Zdeněk (1911–2001) – Born in Chroustovice, near Chrudim, Czech Republic (then part of the Austro-Hungarian Empire), Černohorský completed his secondary education in Pardubice before reading natural history at Charles University, Prague, in 1928. Concurrently, he attended lectures at the University of Agriculture and Forestry, where he came under the influence of Alfred Hilitzer. Hilitzer guided his early interest towards lichenology and introduced him to Miroslav Servít. Černohorský earned his doctorate in 1934 with a pioneering thesis on endolithic lichen communities inhabiting basaltic rocks in the Prague region. He entered the teaching profession during the Second World War. Following the cessation of hostilities, he joined the Czech Technical University in Prague to work under the prominent botanist Karel Kavina (1890–1948), shifting his focus to seed anatomy and morphology; he subsequently habilitated with a treatise on crucifer seeds in 1947. In 1949, he was appointed professor at the Faculty of Education (Pedagogic High School) in Prague, where he became an influential mentor to a new generation of Czech botanists and served as Vice-Rector from 1954 to 1958. He returned to Charles University in 1959, later holding the position of Dean of the Faculty of Science from 1961 to 1963. A forward-thinking methodologist, Černohorský revolutionised Czech lichen identification by introducing microchemical analysis and ultraviolet fluorescence techniques, while also contributing substantially to lichen biogeography and

environmental bioindication. Several species are named after him. His herbarium is housed at PRC. Ref.: Holub & Liška (1990); Liška (2002); Pišut (2001).



Cesati, Vincenzo de (1806–1883) – Born in Milano, Kingdom of Italy (now Italy) into a noble family and holding the title of Baron, Cesati was sent to Wien (Vienna) to read law. However, he abandoned legal studies to pursue his passion for natural history at the University of Wien. Returning to Milan in 1829, he initially worked in a municipal office before joining the scientific circle of Giuseppe Balsamo Crivelli (1800-1874). From 1832, he devoted himself entirely to botany, publishing his earliest papers in 1836. He later relocated to Piedmont, where he secured a position as a teacher of natural history at the *Collegio Nazionale di Vercelli*, a post that facilitated extensive regional fieldwork. In 1868, Cesati was appointed Professor of Botany and Director of the Botanical Garden at Naples, positions he held until his death. During this tenure, he collaborated with Giovanni Passerini and Giuseppe Gibelli to produce the monumental, multi-volume *Compendio della Flora Italiana* (1868–1886). A close scientific associate of Giuseppe De Notaris, Cesati's most significant contribution to lichenology was his instrumental role in collecting, preparing, and distributing cryptogamic specimens for the celebrated *Erbario Crittogamico Italiano*. His enduring botanical legacy is marked by the genus *Cesatia* Rabenh. (now synonym of *Trullula)* and *Cesatiella* Sacc., alongside the many species named in his honour. His herbarium is housed at RO. Ref.: Giacomini (1980); Penzig (1883).



Cesi, Federico Angelo **(1585–1630)** – Born in Palazzo Cesi, Rome, Papal States (now Italy), Cesi was the son of the first Duke of Acquasparta; his mother, Olimpia, belonged to the illustrious and powerful Orsini family, one of the oldest, most politically dominant princely houses in Rome and the Papal States. His wealthy and aristocratic family maintained deep ties to the papacy, and Cesi himself was created Prince of San Polo and Sant'Angelo in 1613. Educated by private tutors, he developed a precocious passion for natural science and botany, potentially inspired by the papal physician Andrea Cesalpino (1519-1603). A pivotal figure of the early Scientific Revolution, he founded the pioneering *Accademia dei Lincei* in 1603 alongside a circle of learned friends, intending to decode the natural world through systematic observation, rigorous experimentation, and induction. Utilizing simple magnifying elements, and later a compound microscope sent to the Academy by Galileo Galilei in 1624, Cesi scrutinised lower plants. This led him to produce the earliest known illustration of a *Cladonia* podetium displaying coarse soredia, though he did not comprehend their reproductive function. These illustrations were intended for *De plantis imperfectis*, a specific chapter within the botanical volume (*Syntaxis Plantaria*) of his vast, encyclopaedic compendium *Thesaurus totius naturae*. Begun in 1615, the project was left unfinished upon his untimely death. The manuscripts and accompanying drawings were acquired by the renowned collector Cassiano dal Pozzo in 1633. Removed from the Albani

Library in Rome during the French occupation of 1798, the collection was eventually purchased by the Delessert family, entering the Library of the Institut de France in 1874 through the private bequest of Baron François-Marie Delessert. No herbarium is known to survive. Ref.: Freedberg (2002); Graniti (2006); Nimis & Zucconi (2006); Pirotta (1904); Roca & Nimis (2002); Ubrizsy (1980).



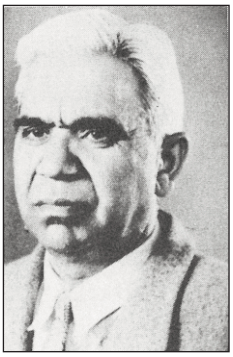
Cheel, Edwin (1872–1951) – Born in Chartham Hatch, near Canterbury, Kent, England, UK, Cheel trained as a gardener before emigrating to Australia in 1892. He initially worked as a farm labourer in the sugar cane fields of Mackay, Queensland, before moving to Sydney. In December 1897, he was appointed to the gardening staff at Centennial Park, later transferring to the Royal Botanic Gardens, Sydney. Encouraged by Joseph Maiden, he demonstrated a remarkable aptitude for botany and developed a deep interest in native flora and cryptogams, particularly lichens. From 1901, he served as the honorary custodian of lichens at the National Herbarium of New South Wales. He officially joined the herbarium staff in 1908, rising to become Principal Botanical Assistant in 1913 and ultimately serving as Chief Botanist and Curator from 1933 to 1936. Cheel collected extensively and published widely, focusing primarily on the lichens of New South Wales while also expanding botanical knowledge of other Australian regions. A meticulous bibliographer, he compiled the first comprehensive bibliography of Australian lichens in 1903. He later expanded this work in 1906 to encompass New Zealand and the South Sea Islands. Beyond his lichenological achievements, he was also a noted authority on the *Myrtaceae* family. His herbarium is housed at NSW. Ref.: Filson (1992); Smith (1979).



Chevallier, François-Fulgis (1796–1840) – Born in Paris, France, Chevallier read medicine in his native city, earning his doctorate in 1821 with a defended thesis on the toxicological and medicinal properties of *Conium maculatum*. During his university years, he became an intimate associate of Antoine Fée, who had established a pharmacy in Paris in 1815. Under Fée's influence, Chevallier passionately took up the study of cryptogams and lichens. He published the pioneering *Essai sur les hypoxylons lichénoïdes* (1822), followed by his landmark monograph on the *Graphidaceae*, *Histoire des Graphidées, accompagnée d'un tableau analytique des genres* (1824). An avid field botanist, Chevallier discovered and described numerous new crustose lichens native to the Paris basin, subsequently incorporating these findings into his contribution to the multi-volume *Flore générale des environs de Paris* (1826–1828). Known for his sharp taxonomic eye, he described several critical microlichen taxa. Following his premature death, his herbarium was partially dispersed, although the surviving collections are housed at PC. Ref.: Lamy & Ochyra (2003).

Choisy (orig. Pautre-dit-Choisy**), Maurice** Gustave Benoit **(1897–1966)** – Born in Priay, in the Ain department of eastern France, Choisy was originally registered with the

family name Pautre-dit-Choisy. He possessed a keen childhood interest in natural history and a precocious talent for drawing. Financial constraints forced him into early employment, leading him to train as a professional jewellery engraver, a craft well-suited to his meticulous artistic and observational skills. Upon establishing an independent business, he simplified his legal surname to "Choisy" for commercial brevity, a name which became his trademark, unrelated to that of the Swiss botanist Jacques D. Choisy (1799–1859). He pursued field botany as an amateur pastime, gradually narrowing his focus to the local and regional lichens of France. Choisy eventually devised an idiosyncratic and revolutionary lichen classification system. Although heavily criticised by contemporary academic lichenologists for its unconventional taxonomy, it was partially defended by Henry des Abbayes, who recognised Choisy's exceptional talent for floristics. His most enduring contribution to the field is the *Catalogue des lichens de la région lyonnaise* (1949–1954), a work that remains highly valued for its rich floristic data despite being structured around his peculiar taxonomic arrangements. A devoted member of the Linnean Society of Lyon, he presided over its botanical section from 1949 to 1950. Over his career, Choisy described numerous new taxa, including the widespread genus *Trapelia*. His herbarium is housed at LY. Ref.: Roux & al. (2025).

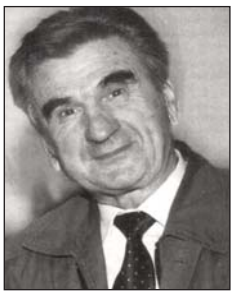


Chopra, Govardhan Lal (1903–1975) – Born in Changa Manga, Lahore, India (now Pakistan), Chopra completed his preliminary education locally before studying at Government College, Lahore, where he graduated in 1930. From 1930 to 1932, he worked as a research scholar within the Department of Botany at the University of the Panjab. Joining the scientific circle surrounding the bryologist Shiv Ram Kashyap (1883–1934), he took an active part in exploring the lichen flora of the Western and Eastern Himalayas. This research was significantly aided by the eminent British lichenologist Annie Lorrain Smith, who determined much of his collected material. This collaborative effort culminated in his seminal monograph, *Lichens of the Himalayas: Part I. Lichens of Darjeeling and Sikkim Himalayas* (1934). Detailing 60 macrolichen species, it represents the first native comprehensive lichenological study of the region. Following Kashyap's sudden demise and subsequent shifts in departmental leadership from 1935, Chopra's active publications in lichenology ceased, a transition likely influenced by A. L. Smith's concurrent retirement from active taxonomy. His collections are at LAH and BM. Ref.: *Pers. comm.*; Grummann (1974).

Christiansen, Mogens **Skytte (1918–1996)** – Born in Vindinge, near Roskilde, Denmark, Christiansen was the son of a schoolteacher who possessed a deep passion for natural history. The household maintained by his mother, Kathy (née Knudsen), was deeply structured around public education and natural history, heavily influencing Mogens' early interests in the local flora. However, tragedy struck the family when Kathy passed away in 1936 at the age of 44, when Mogens was only seventeen years old. He was educated in the København region, completing his *examen artium* at Borgerdydskolen. There, he was taught by the prominent lichenologist Olaf Galløe, who introduced him to



lichenology and with whom he maintained a lifelong scientific friendship. In 1938, Christiansen entered the University of København to read natural history, graduating with a major in botany in 1945. Following a series of temporary academic appointments, he was appointed head of the *Botanisk Centralbibliotek* in 1952, and from 1962 served as *Lektor* (Associate Professor) in plant anatomy and morphology at the university. A gifted communicator, Christiansen did much to popularise botany across Denmark, authoring the texts for several highly successful popular floras. Fostered by Galløe's mentorship, his primary research focused on lichens; he collected extensively throughout Denmark, published widely on his floristic discoveries, and systematically revised critical lichen material collected from Greenland. Furthermore, he served as the scientific executor for Galløe's estate, ensuring the posthumous completion of his monumental multi-volume series on Danish lichens. He developed a recognised expertise in lichenicolous fungi (lichen parasites), describing numerous new species. The genera *Skyttea* Sherwood, D. Hawksw. & Coppins and *Skyttella* D. Hawksw. & R. Sant. are named in his honour. His herbarium is housed at C. Ref.: Søchting & Alstrup (1997); P. Wagner, *pers. comm.*



Cieśliński, Stanisław (1935–) – Born in Makowiec, near Radom, in the Masovian Voivodeship, Poland, Cieśliński completed his early education in Radom, graduating from the local Teacher's Training College (*Liceum Pedagogiczne*) in 1953. He then read biology and forestry at the University of Łódź, qualifying as an engineering forester and biological researcher. During his university studies, he joined the academic circle surrounding Benedykt Halicz, undertaking extensive floristic and phytosociological investigations of lichen biota in the highlands of central Poland. He was awarded his doctorate in 1968 under Halicz's official supervision, though the prominent lichenologist Zygmunt Tobolewski acted as his practical mentor. He subsequently completed his habilitation at Poznań in 1981, studying under Tobolewski with a major treatise on terricolous lichen communities. Cieśliński spent the vast majority of his academic career, from 1973 onwards, at the Higher Teacher Training School in Kielce (later the Jan Kochanowski University). He served as the long-term head of the biological laboratory and was appointed Professor at the Biological Institute in 1989, ultimately holding the office of Rector from 1996 to 1999. Following Tobolewski's passing, Cieśliński emerged as a foremost authority on Polish floristic lichenology, becoming deeply involved in species conservation and national distribution-mapping initiatives. Although he did not describe any new taxa himself, his comprehensive monographs laid the groundwork for modern Polish cryptogamic protection. His herbarium is housed at LOD and POZG. Ref.: Bielczyk (2010).

Ciferri, Raffaele (1897–1964) – Born in Fermo, Marche, Italy, Ciferri graduated in Agricultural Sciences from the University of Bologna in 1919 following front-line service



in the First World War. He later added a doctorate in Biological Sciences from the same university. Between 1921 and 1925, he gained extensive experience as an assistant phytopathologist in Alba and Firenze. He then ventured abroad to the Caribbean, directing the *Estación Agronómica de Moca* and establishing an influential experimental agricultural station in Santiago de los Caballeros, Dominican Republic, where he specialised in tropical agronomy. Following subsequent research postings in Ecuador and Italian Somaliland, he returned to Italy to join the Cryptogamic Laboratory in Pavia. He was appointed Professor of Botany at the University of Firenze in 1936, subsequently relocating in 1942 to hold the same prestigious chair at the University of Pavia. Although Ciferri published predominantly on non-lichenised tropical pathogenic fungi, he secured a controversial place in lichenological history through his collaboration with Ruggero Tomaselli. The duo attempted to institute a radical, dual nomenclatural system: one name for the composite lichenised thallus, and a totally separate designation for the isolated mycobiont utilizing the suffix *—myces*. This dual-naming convention was decisively rejected at the VIII International Botanical Congress held in Paris in July 1954. The congress ruled that the name of a lichen applies strictly to its fungal component, rendering all of Ciferri and Tomaselli's parallel names taxonomically illegitimate and invalid. Many fungal genera, such as *Ciferria* Gonz. Frag. and *Ciferrina* Petr. were named after him. His herbarium is housed at PAV. Ref.: Baldacci (1965); Giacomini (1965).



Clauzade, Georges (1914–2002) – Born in Marseille, France, Clauzade was educated at the *Lycée Thiers* before reading natural sciences (botany, chemistry, and geology) at the University of Marseille under the guidance of René Molinier. He began his teaching career at the *Lycée d'Amiens* (1936–1939), successfully passing the national *Agrégation* examination in natural sciences in 1937. He subsequently taught in Marseille and Apt. Realising that available botanical keys were too difficult and inadequate to help his pupils identify lichens effectively, he resolved to study the cryptogamic flora independently. During regular visits to the *Muséum National d'Histoire Naturelle* in Paris to cross-reference his collections, he met the director Valentine Allorge in 1947. Allorge introduced him to Maurice Bouly de Lesdain, then living in Paris after the wartime destruction of Dunkerque, who encouraged Clauzade to pursue lichenology with scientific rigour under his mentorship. From 1966, Clauzade took a temporary hiatus from secondary education to devote himself entirely to research, culminating in his co-authorship with Paul Ozenda of a groundbreaking, modern French lichen flora (1970). He returned to teaching in Avignon before retiring in 1975. In his retirement, he collaborated with his former student Claude Roux to produce *Likenoj de Okcidenta Eŭropo* (1985), a monumental, complete lichen flora of Central and Western Europe written entirely in Esperanto to facilitate international academic exchange. His research vastly advanced the phytosociology of Mediterranean microlichens and lichenicolous fungi. He was awarded the Acharius Medal

by the IAL in 2000. The genera *Clauzadea* Hafellner & Bellem., *Clauzadeana* Roux and *Clauzadeomyces* Dietrich, alongside several species, are named after him. His herbarium is housed at MARS. Ref.: Llimona (2001); Roux (2002).

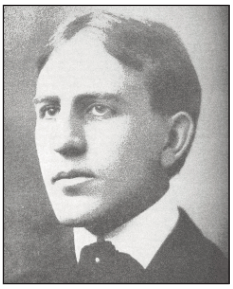


Clayden, Stephen (1955–) – Born in Toronto, Ontario, Canada, Clayden moved during his childhood to New Brunswick, where his parents' passion for camping fostered his early fascination with natural history, initially focusing on ornithology. During his adolescence, his interests shifted decidedly towards botany. While reading biology at Mount Allison University, he was introduced to lichenology by Hinrich Harries (1928–2026). Between 1977 and 1978, Clayden investigated the corticolous lichen and bryophyte communities of sugar maple (*Acer saccharum*) in a forest adjacent to the university campus. This work prompted research visits to the Canadian National Herbarium in Ottawa, where he interacted with Irwin Brodo. In 1979, he attended a specialised lichenology course taught by Brodo at the Université Laval in Quebec. Concurrently, he assisted Hal Hinds (1937–2001), curator of the University of New Brunswick herbarium, on a pioneering study mapping urban lichen distributions in Saint John to assess air quality. Clayden earned his Master's degree in plant ecology at the *Université de Montréal* in 1983 under André Bouchard (1946–2012), researching the community dynamics of lichens colonizing rocky outcrops near Lake Abitibi, Quebec. Following a period of contract work, he commenced a Ph.D. programme at the University of London in 1984 under the supervision of Allan Pentecost. In 1986, he paused his studies to accept the position of Research Curator of Botany and Mycology at the New Brunswick Museum in Saint John. He completed his doctorate in 2004 with a thesis on yellow *Rhizocarpon* species in North Wales. Throughout his distinguished thirty-year career at the museum, Clayden established himself as an authority on the lichen flora of Atlantic Canada. His extensive floristic mapping and ecological data directly facilitated the creation of several Protected Natural Areas in New Brunswick. In recognition of his contributions to regional biodiversity research, he was awarded the *Bruce Naylor Award* in 2016. Following his retirement, he was appointed Curator Emeritus of Botany and Mycology. He has described a few taxa. His herbarium is housed at NBM. Ref.*: Pers. comm.*



Clemente (y Rubio)**, Simón** de Rojas **(1777–1827)** – Born in Titaguas, near Valencia, Spain, Clemente was the son of a notar, whilst his mother managed an exceptionally large household, giving birth to a total of 15 children, of whom Simón was the fourth in the line of succession. At the age of ten, he entered the seminary of Segorbe to study humanities, later relocating to Valencia to read philosophy and ecclesiastical subjects. Although he qualified for a professorship, he felt a stronger vocation for the natural sciences, passionately collecting regional flora and fauna. During this formative period, he was deeply inspired by the landmark botanical observations of Antonio José de Cavanilles. In 1800, Clemente moved to Madrid in search of academic employment; when this failed to mate-

rialize, he formally enrolled at the university to study advanced botany. A turning point was his acquaintance with Mariano Lagasca y Segura, who shared his fascination with cryptogams. Together, they co-authored a pioneering introduction to the cryptogamic flora of Spain (1802), addressing a group that Cavanilles had previously noted as being profoundly understudied. Clemente was a highly versatile scientist and an active political liberal. He was eventually appointed Librarian of the Royal Botanical Garden in Madrid, working alongside Lagasca, who served as director. From 1802, Clemente focused heavily on lichenology, undertaking extensive collecting expeditions across southern Spain, particularly in Andalusia. Between 1802 and 1804, he also served as the official botanist on a scientific expedition to North Africa alongside the celebrated explorer Domingo Badía (Ali Bey). Clemente maintained a direct correspondence with Erik Acharius, who passed away whilst in the middle of examining a new batch of critical Spanish lichen specimens sent by Clemente. He also studied South American lichens brought back by Spanish expeditions. Beyond cryptogams, he achieved international renown as a founding pioneer of modern scientific ampelography through his definitive 1807 treatise on Andalusian grapevines. William Borrer named *Parmelia* (= *Physcia*) *clementei* in his honour. Clemente described several new taxa. His herbarium is housed at MA. Ref.: Pelayo López (2011); Piqueras (2002).



Clements, Frederic Edward **(1874–1945**) – Born in Lincoln, Nebraska, USA, Clements completed his basic education locally before reading natural sciences at the University of Nebraska. There, he came under the influence of the eminent plant pathologist Charles Bessey (1845–1915) and his influential "Botanical Seminar", which fostered his enduring interests in phytogeography, ecology, mycology, and lichenology. In 1898, he earned his doctorate with a definitive thesis on the phytogeography of Nebraska, a region he had mapped extensively alongside university colleagues whilst preparing a state flora. From this research, he formulated an influential, deterministic theory of plant succession and climax communities. This became his lifelong scientific pursuit, investigated through rigorous field studies and experimental manipulation; because of his views on organismal community adaptation, he was frequently described as a neo-Lamarckian philosopher. Clements initially joined the faculty at the University of Nebraska, rising to full professor in 1905, before relocating to the University of Minnesota in 1907. From 1917 until his retirement in 1941, he worked as a research ecologist at the Carnegie Institution of Washington, D.C. Having developed a keen interest in cryptogams under Bessey, Clements published a progressive paper in 1897 arguing for the polyphyletic origin of lichens. During his tenure in Minnesota, he published his *The Genera of Fungi* (1909), which he later expanded into a massive, heavily enlarged edition co-authored with Cornelius L. Shear in 1931. This work was highly radical for its time, as it completely dismantled traditional conventions by incorporating lichens directly into the main fungal classification system based on anatomical traits. He named the genus *Dibaeis*. His herbarium is housed at NEB, with several duplicates in NY and other herbaria. Ref.: Pool (1954); Shantz (1945).

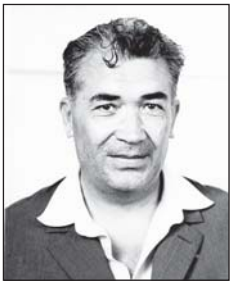


Clerc, Philippe (1955–) – Born in Lausanne, Switzerland, and educated at the *Collège Calvin* in Genève, Clerc studied natural sciences at the University of Genève from 1974 to 1979. During his second year, he read an article in the *Tribune de Genève* newspaper regarding a project that used lichens as bioindicators. Although he knew little about lichens at the time, he recognised their value to pollution studies and contacted the researchers. The mycologist Gilbert Turian (1926–2005) offered his support and advised Clerc to study these organisms, providing him with a binocular microscope and a copy of Ozenda and Clauzade's lichen flora. This encounter sparked Clerc's lifelong dedication to the field. After earning his master's degree with a thesis on lichens and air pollution, he moved to Bern, where in 1986 he completed his doctorate on the genus *Usnea* in Europe under the supervision of Klaus Ammann. He subsequently worked as a departmental assistant in Bern until he was awarded a postdoctoral fellowship at Duke University in the USA. There, he worked alongside William L. Culberson and collaborated with Daniele Armaleo on a pioneering paper regarding lichen chimeras. Upon returning to Switzerland, Clerc took the job of lichens curator at the *Conservatoire et Jardin Botaniques de la Ville de Genève*, where he spent the remainder of his formal career, being appointed head of collections in 2008 and retiring from the post in 2020. He has made extensive contributions to the Swiss lichen flora, including a detailed catalogue of the lichens and lichenicolous fungi of Switzerland, and is best known for his his work on the systematics of the difficult genus *Usnea*, greatly improving its taxonomy. He has described numerous taxa. His herbarium is housed at G. Ref.: P*ers. comm.*; Hertel & al. (2017).



Clusius (orig. **de L'Écluse), Carolus (**orig. **Charles) (1526–1609)** – Born in Arras, Flanders (now France), into a Flemish family with French noble rights, Clusius was the son of a counsellor at the provincial court, whilst his mother belonged to a wealthy, highly respectable, and well-connected patrician family from Arras, France (then part of the Habsburg Netherlands). He began his education in Ghent before moving to Leuven, where he earned a licentiate in law in 1548. He then continued his studies at Marburg and Wittenberg, studying philosophy under Philipp Melanchthon (1497–1560) and converting to Lutheranism. He shifted his focus to medicine, studying at Montpellier from 1551 to 1554 under Guillaume Rondelet (1507–1566), and later in Paris from 1561 to 1562. However, due to his sympathies for the Huguenots, he was forced to flee Paris and never completed his medical degree. Clusius never practised medicine, choosing instead to devote his life to natural history, particularly botany. He was hired by the prominent Fugger banking family as a preceptor to travel with and mentor Jakob Fugger III (1542–1598), the young son of Anton Fugger**,** during an extensive botanical expedition across Spain and Portugal between 1564 and 1565. Following his return, he stayed in Antwerp, where he met Rembert Dodoens, before returning to Flanders, where he became a key figure in the Calvinist movement and advised noble families on garden design. In 1573, Emperor Maximilian II appointed Clusius as the Prefect

of the imperial medical garden in Wien (Vienna). Following the accession of Emperor Rudolf II in 1576, Clusius found his position increasingly difficult due to religious intolerance, leaving the imperial post by 1578. He subsequently spent much of his time working on the estates of Count Boldizsár Batthyány (1542–1590) in Hungary, as well as serving Archduke Maximilian in Prague. In 1587, at the invitation of Landgrave Wilhelm IV of Hesse-Kassel (1532–1592), he moved to Frankfurt am Main, which served as an independent refuge and allowed him to collaborate with the famous publisher Johann Wechel on printing his botanical manuscripts. Clusius lived in Frankfurt until 1593, when he was awarded an honorary doctorate and appointed Professor of Botany at the University of Leiden. Despite his advanced age and failing health, he designed and established one of Europe's earliest formal botanical gardens, the *Hortus Academicus* (now the *Hortus Botanicus*), assisted by the head gardener Dirk Cluyt. While Clusius is most famous for his pioneering research into tulips, which laid the foundations for Dutch tulip breeding, his wider botanical publications were of immense scientific importance. His masterwork, *Rariorum plantarum historia* (1601), provided exceptionally accurate descriptions, high-quality woodcut illustrations, and extensive regional records of European flora. He remains a monumental figure in pre-Linnaean botany. Although his primary focus was on flowering plants, he also made significant early studies of fungi and lichens. Notably, his work *Rariorum aliquot stirpium per Hispanias observatarum historia* (1576) contains some of the earliest accurate, detailed illustrations of lichens recorded during his travels on the Iberian Peninsula. His main herbarium is housed at L. Ref.: Guglia (1972); Hunger (1927–1943); Ubrizsy (1978).



Codoreanu, Vasile (1917–1979) – Born in Sântejude, near Gherla, in the Cluj region, Austro-Hungarian Empire (now Romania), Codoreanu completed his basic education before reading biology at the University of Cluj from 1937. Following the geopolitical territorial changes of 1940, the university's Faculty of Sciences was evacuated to southwestern Romania; consequently, he completed his degree in botany and graduated in Timișoara in 1941. His subsequent scientific pursuits were interrupted by the Second World War, during which he served in the military in Timișoara. Following the war, he returned north to become a junior assistant at the re-established botanical institute of the University of Cluj in 1946. He later served as a teaching assistant at both the botanical institute and the local Pharmaceutical Institute between 1951 and 1958. In 1958, he was appointed as a researcher at the university's Botanical Garden, where he supervised numerous students. Codoreanu earned his doctorate in 1972 with a dissertation on the epilithic lichen vegetation of the limestone formations in the Apuseni Mountains, describing several lichen communities making many additions to the Romanian lichen flora. He also described a few new species. His herbarium is housed at CL. Ref.: Ștefureac (1980).

Coemans, Henri Eugène **Lucien** Gaëtan **(1825–1871)** – Born in Bruxelles, Belgium, Coemans was the son of a Ghent lawyer. Following her husband's early death, Coemans' mother remarried Charles de Troch. The deeply religious, intellectually stimulating envi-



ronment under his stepfather profoundly steered three of the brothers, including Eugène, toward the priesthood. After completing his basic education, he attended the seminaries of St Nicholas and Ghent, and was ordained a priest in 1848. During his school years, he developed a keen interest in botany while working with the Ghent horticulturist Datus Spae. He later came into contact with the prominent botanist Jean Kickx Jr (1803–1864) and his son Jean Jacques Kickx (1842–1887), both of whom directed his attention towards cryptogams. Coemans continued his higher studies at the Catholic University of Louvain from 1848 to 1851, where he studied natural sciences and botany under Pierre-Joseph van Beneden (1809–1894). Inspired by the innovative research methods of the French Tulasne brothers, he became increasingly fascinated by fungi, particularly ascomycetes. In 1853, Coemans was appointed spiritual director at the *Petit Béguinage Notre-Dame ter Hoyen* in Ghent, a post he held for ten years. He resigned in 1863 to accompany Jean Kickx Jr to Bonn, where he attended several advanced botany courses, including one led by the renowned plant physiologist Julius Sachs (1832–1897). While in Bonn, Coemans also turned his attention to fossil plants. In collaboration with Kickx, he produced a definitive monograph on European *Sphenophyllales* in 1864, a work that earned him an honorary doctorate. Consequently, in 1866, he was appointed the first Professor of Palaeontology at the University of Louvain. Alongside his palaeobotanical duties, Coemans continued his research into extant fungi and lichens. He travelled to Uppsala to visit Elias Fries, where he meticulously studied the historical Acharian herbarium, paying special attention to *Cladonia* specimens. Influenced by Heinrich Gustav Flörke, Coemans critically re-examined Erik Acharius's species concepts within the genus *Cladonia*. Between 1863 and 1866, he also published a well-regarded exsiccatae series of Belgian *Cladoniae*. His herbarium is housed at BR. Ref.: De Wildeman (1957); Kickx (1871).

Cogt (from a Russian transcription), **Ulziyn,** see **Ulziyn** which actually is the family name (= son of Ulzi).



Colonna (Columna), Fabio (1567–1640) – Born in Napoli, Kingdom of Napoli, (now Italy), the son of Girolamo Colonna, an eminent humanist scholar and antiquarian, and of Artemisia Frangipane, an offspring of a noble family. He received a meticulous Renaissance education spanning the humanities, music, mathematics, and painting. He studied law at the University of Napoli, graduating with a doctorate *utroque iure* (in both canon and civil law) in 1589. However, a severe and persistent battle with epilepsy prevented him from pursuing a traditional legal career. Driven to find a cure for his condition, he turned to the study of classical medical texts, particularly the works of Dioscorides. This search sparked a deep, self-taught passion for natural history and botany, further nurtured by his close association with the Neapolitan apothecary Ferrante Imperato. His botanical and scientific interests flourished over the subsequent decades, culminating in his landmark publication *Phytobasanos* in

1592. This highly influential work was the first botanical text to systematically cross-reference contemporary flora with the classical descriptions of Dioscorides and Theophrastus. His profound contributions to the field earned him widespread renown, leading to his induction in 1612 as one of the earliest and most active members of the prestigious *Accademia dei Lincei* in Napoli. Beyond his extensive botanical and fossil studies, he was a true universal man of the era, famously inventing a multi-stringed microtonal musical instrument known as the *sambuca lincea*. In a paper titled *Minus cognitorum stirpium… pars altera*, published in 1611, Colonna described and illustrated six species of lichens; his drawings were the first images of lichens to utilise the copperplate technique (calcography), which allowed a much higher level of detail than the usual xylographic technique, to the point that his drawings can be identified at species level. Ref.: De Ferrari (1982); Roca & al. (1998).



Coppins, Brian John **(1949–)** – Born in Pembury, Kent, England, UK, he was the son of a fencing contractor. Even as a schoolboy, he developed a lifelong fascination with lichens. He studied botany at the University of Hull and subsequently relocated to King's College London, where he became a postgraduate student of Francis Rose and began researching the relationship between lichens and atmospheric pollution. He soon developed a profound interest in pure taxonomy, greatly stimulated by his interactions with Peter W. James at the Natural History Museum (BM). In 1981, Coppins earned his doctorate with a groundbreaking monograph on the genus *Micarea* in Europe. This study demonstrated his exceptional skill as a microscopist and his ability to observe minute, easily overlooked structures; it remains a definitive model of how rigorous microscopic work can resolve complex taxonomic problems. From 1974 onwards, Coppins was employed as an ascomycete taxonomist at the Royal Botanic Garden Edinburgh, where he continues to serve as an Honorary Research Associate. He has discovered numerous new lichen species and lichenicolous fungi, particularly within the British Isles, and has described many new taxa, including the genus *Wadeana*. He has also participated in major international expeditions to regions such as Borneo and Chile, contributing significantly to global knowledge of small crustose lichens. Together with his wife, Alexandra (Sandy), he produced numerous reports and publications concerning species and habitat conservation within the UK and Ireland. He was awarded the Acharius Medal by the IAL in 2010 and the Linnean Medal (Botany) by the Linnean Society of London in 2011. The genera *Briancoppinsia* Diederich *et al.*, *Coppinsia* Lumbsch & Heibel, *Coppinsiella* S.Y. Kondr. & Lőkös, *Coppinsidea* S.Y. Kondr. *et al.*, *Snippocia* Ertz *et al.*, and *Brianaria* S. Ekman & M. Svenss. are named in his honour. His herbarium is housed at E. Ref.: *Pers. comm.*; Crittenden (2011).

Cordus, Valerius (1515–1544) – Born in Simtshausen, Landgrafschaft Hessen (now Germany), Cordus was the son of the poet, physician, and naturalist Euricius Cordus (1486–1535) and of Kunigunde (née Ralla), who belonged to an influential and wealthy bourgeois family of apothecaries based in Hessen and Leipzig. His father, inspired by the birth of his



son, resumed his botanical studies and produced the highly influential textbook *Botanologicon* (1534) specifically to aid the boy's education. Valerius received an outstanding classical upbringing and graduated with a bachelor's degree from the University of Marburg in 1531. Immediately thereafter, he began an intensive study of the works of Pedanius Dioscorides, later delivering highly popular lectures on the ancient authority's text at the University of Wittenberg. Cordus passionately enjoyed fieldwork, exploring extensive regions of Central Europe and discovering numerous new plant species during his journeys. His promising scientific career was cut short when he contracted a fatal fever during an ambitious botanical expedition to Italy, dying prematurely in Rome at the age of twenty-nine. The detailed field notes and observations he compiled in the forests of Bohemia and Sachsen were edited by Conrad Gessner (1516–1565) and published posthumously in 1561 within the foundational work *Historiae stirpium*. It is in this text that the first scientific description of the Iceland moss lichen, *Cetraria islandica*, appears. His legacy in the history of lichenology rests entirely upon this pioneering record. His herbarium is unknown. Ref.: Greene (1983); Ziegenspeck (1957b).



Crespí-Jaume, Luis (1889–1963) – Born in Madrid, Spain, Crespí-Jaume was the son of Francisca (née Nadal), who belonged to a well-established and deeply rooted family from Mallorca, and of Antonio, a professor of pharmacy whose botanical interests profoundly influenced his son. Consequently, he chose to read natural history, initiating his higher education at the University of Santiago de Compostela. He later transferred to the *Universidad Central de Madrid*, where he completed his formal degree in Natural Sciences. During this formative period, he developed a deep, lasting fascination with Galician culture and regional natural history. Crespí-Jaume initially pursued a primary career in agronomy, studying at the University of Toulouse between 1917 and 1918. Upon returning to Spain, he won a competitive examination to secure the chair of agriculture at the Secondary Education Institute (*Instituto de Segunda Enseñanza*) in Lugo, later joining the faculty of the prestigious and progressive *Instituto-Escuela* in Madrid. In 1924 he visited Portugal on a formal research grant awarded by the *Junta para Ampliación de Estudios* to conduct specialised lichenological fieldwork alongside Gonçalo Sampaio. This collaboration marked his official entry into lichenology and resulted in several papers on Iberian cryptogams, published both independently and jointly with Sampaio. Following this highly productive period, Crespí-Jaume published very little further on lichen taxonomy. He focused instead on his educational responsibilities and dedicated his time to establishing a specialised laboratory for physiological and ecological agricultural studies. His herbarium is housed at MA, MNCN, and partly at PO. Ref.: Crespí & González Bueno (1990); Marin Eced (2012).

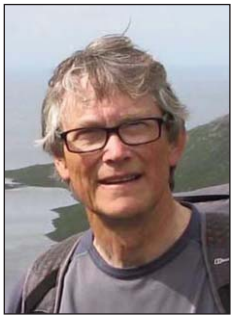
Crespo de las Casas, Ana María **(1948–)** – Born in Santa Cruz, Tenerife, Canary Islands, Spain, Crespo de las Casas completed her basic education in Tenerife before beginning her biological studies at the *Universidad Complutense de Madrid*. It was there,



in 1973, that she defended her doctoral thesis on the epiphytic lichen vegetation of the Sierra de Guadarrama. Although she served briefly as an assistant professor at the Universidad del País Vasco from 1970, she returned to Madrid in 1971, where she was subsequently appointed Professor of Botany in 1983. While initially focused on floristics and strongly influenced by the plant sociologist Salvador Rivas Martínez (1935–2020), she gradually shifted her research focus towards lichen phylogeny and taxonomy. She played a monumental role in the revival of Spanish lichenology, pioneering the integration of molecular methods following a research stay with David Hawksworth at Egham between 1995 and 1996. Alongside her academic pursuits, she has been deeply involved in science policy, serving as the General Director of Spanish Universities from 1987 to 1993. Her primary taxonomic contributions concern the family *Parmeliaceae.* She was awarded the Acharius Medal by the IAL in 2012. In June 2024, she achieved a historic milestone by becoming the first woman ever elected President of the prestigious *Real Academia de Ciencias Exactas, Físicas y Naturales de España* since its foundation in 1847. The genera *Crespoa* (D. Hawksw.) Lendemer & B. P. Hodk., *Cresponea* Egea & Torrente and *Cresporhaphis* M. B. Aguirre are named after her. Her herbarium is housed at MACB. Ref.: Divakar & al. (2018); Hertel (2012).



Cretzoiu, Paul (1909–1946) – Born in Bucureşti, Romania, where his father was an engineer and his mother raised a large, closely-knit household, giving birth to six children. He received his basic education there and developed an interest in botany during his high school years. For economic reasons he was forced in 1926 to begin work as a trainee at a pharmaceutical factory in Vienna, where he worked with pesticides used to prevent plant infections. In 1930 he obtained a position as preparator at the Forestry Institute in Bucureşti, and in this capacity took part in several expeditions to the Orient; on one occasion he was caught without a passport and returned by the Turks to Bulgaria, where he spent time working with Nikolai A. Stojanoff (1883–1958)**,** assisting in arranging the cryptogamic herbarium in Sofia (1934–1935). On returning to Bucureşti he resumed work at the ICEF (Institute of Experimental Forestry) associated with the Polytechnical High School, where in 1945 he was appointed curator of the herbarium. His career was cut short by a fatal accident (an explosion and fire). When he began working on lichens in the 1930s (first paper 1929), he initially contacted Oscar Klement, who supported his floristic studies of the lichens of the Transylvanian Mountains. He also corresponded with Vilmos Gyelnik**,** Miroslav Servít**,** and Josef Nádvorník, who also worked in the region, as well as with colleagues elsewhere: Christian Erichsen (Germany), Bouly de Lesdain (France), Veli Räsänen (Finland), and Annie L. Smith (London). He issued the only existing exsiccatae series of Romanian lichens and must be regarded as the founder of Romanian lichenology. He described several taxa. His herbarium is housed at BUCF, with several duplicates at BUCA. Ref.: Borza (1946); Morariu (1946).



Crittenden, Peter (1949–) – Born in London, England, UK, Crittenden was raised in Manchester, where he completed his basic education. He first became interested in botany while hiking with school friends. His fascination with lichens began during a formative trip to the Lake District, recommended by a geography teacher, where he was captivated by their symbiotic nature and their acute sensitivity to air pollution, a trait that explained their scarcity in heavily industrialised Manchester. Around this time, he read the Pelican book *The Growth of Plants* authored by Gordon E. Fogg (1919–2005) of Westfield College, which impressed him so deeply that he contacted the author directly. As an undergraduate at Westfield College, University of London, from 1969 to 1971, Crittenden undertook a final-year research project on lichens. This brought him into contact with Peter W. James at the Natural History Museum (BM), who provided immense encouragement. Crittenden subsequently worked as a summer student at the BM in 1970 and 1972. Westfield was a recognised centre of excellence for research into cyanobacteria and nitrogen fixation, which inspired his early investigations into lichen nitrogen dynamics. His doctoral thesis was on air pollution effects on grasses at the University of Sheffield (1975) under the supervision of Sir David Read, a leading authority on mycorrhizas, specifically nitrogen and phosphorus nutrition. During this period his interest in lichens grew, benefitting from getting to know the lichenologist Oliver Gilbert. From 1975 to 1977, Crittenden was a postdoctoral fellow at McMaster University in Ontario, Canada, collaborating with Ken Kershaw (1930–2019) on nitrogen fixation and the ecological role of lichens in boreal forests. This research initiated a long-term collaboration with projects at the Kevo Subarctic Research Station in Finland, beginning when he returned to Sheffield as a research fellow (1977–1981). Appointed as a lecturer at the University of Nottingham in 1981, where he remains Professor Emeritus following his retirement, he expanded his fieldwork to Arctic Russia, Antarctica, Namibia, and Spain. He also established advanced laboratory protocols, including the axenic culture of lichen-forming fungi, and later applied molecular genetic techniques to study their sexual variation. Crittenden held several important national and international positions, including the presidency of the IAL (2008–2012). As long-time editor of *The Lichenologist*, he developed it into a leading international journal. He received the Acharius Medal from the IAL in 2014. The genera *Crittendenia* Diederich *et al.* and *Crutarndina* Parnmen *et al.,* alongside several species, were named in his honour. His herbarium is private. Ref.: Kantvilas & al. (2021); *pers. comm.*

Crombie, James Mascall Morrison **(1830–1906)** – Born in Aberdeen, Scotland, UK, Crombie was the son of a shipmaster. After completing his basic education, he entered Marischal College in 1845, where William MacGillivray (1797–1852) taught him natural history and encouraged his botanical interests, later famously describing Crombie as his finest pupil in the subject. Crombie graduated from Marischal College with an M.A. in 1853, subsequently moving to the University of Edinburgh to study divinity. Licensed by the Church of Scotland, he was appointed Royal Bounty Missionary to the rugged Braemar region in 1860, serving there for roughly a year. During this field assignment, he came to

the aid of Admiral Theobald Jones (1790–1868), an enthusiastic Irish lichenologist who had suffered a severe ankle injury while collecting on the rocky terrain. In gratitude, Jones presented Crombie with a copy of William Mudd's newly published *Manual of British Lichens* (1861), an encounter that sparked Crombie's lifelong scientific obsession. Following brief ministries in neighbouring Scottish parishes, such as North Leith, Crombie permanently relocated to England in 1868 upon his appointment as minister of the Swallow Street Presbyterian Church in London. He lived and worked continuously within the London area for the remainder of his active career, also serving as a chaplain to the military forces at Aldershot. In 1879, he was appointed lecturer in natural history and botany at St Mary's Hospital Medical School, a post which afforded him structured time to focus heavily on his scientific pursuits. Throughout his long ecclesiastical career, Crombie devoted all his spare time to lichenology, collecting extensively across the British Isles. From 1869 onwards, he published numerous papers and issued an important exsiccatae series. He formed a deep alliance with William Nylander in Paris, acting as his primary British correspondent and funneling thousands of specimens to him for chemical and microscopic determination, actively promoting Nylander's chemical reagent tests in Britain. With the support of William Carruthers (1830–1922), a Presbyterian layman and keeper at the British Museum (Natural History), Crombie published the foundational *Monograph of Lichens Found in Britain*, with the first volume appearing in 1894. Due to a severe kidney illness, he was unable to complete the second volume, which was eventually finished and published by Annie Lorrain Smith. Crombie's extensive output laid the foundations for the development of modern lichenology in the British Isles. He described numerous taxa. His herbarium is housed at BM. Ref.: Desmond (1977); Jackson (1906); Mitchell (2003).

Crozals, André de (1861–1932) – Born in Béziers, Hérault, France, into a noble family traditionally destined for military service, Crozals completed his basic training before joining the French Navy in 1878. He subsequently attended the *École Navale* in Brest, graduating in 1880, and went on to take part in naval operations in Tunis (1883) and Tonkin (1886). Following his retirement from active military service, he settled in Toulon as a wine merchant, which allowed him the freedom to devote his time to his greatest passion: botany. Crozals developed a particular interest in cryptogamic botany, specialising in mosses, fungi, and lichens. He initially focused his field campaigns on his native Hérault region, but during the 1920s he extensively explored the Var department. There, he systematically analysed the lichen flora of the limestone ridges north of Toulon and the Hyères islands. He also undertook significant collecting expeditions to Corsica, culminating in his publication *Florule lichénique des environs de Vizzavona* (1923). Furthermore, Crozals explored the Mont Blanc massif, publishing crucial alpine floristic observations and describing several new taxa. Several species are named after him. The fungal genus *Crozalsiella* Maire (now *Ustilago*) was named in his honour. His private herbarium was sold to the USA; the lichens are housed at US, with some material at TLON. Ref.: Jahandiez & Nardi (1933).

Culberson, Chicita Frances (née Foreman) **(1931–2023)** – Born in Philadelphia, USA, Culberson studied chemistry at the University of Cincinnati, where she met her future hus-



band and lifelong collaborator, William L. Culberson. She accompanied him to the University of Wisconsin, earning a master's degree in chemistry in 1954. Their partnership proved momentous for the field of lichenology, as they together pioneered major advancements in lichen chemotaxonomy. Following their relocation to Duke University in Durham, North Carolina, in 1955, she began her doctoral studies, earning a PhD in organic chemistry in 1959. In 1969, she published her highly influential *Chemical and Botanical Guide to Lichen Products*, which she later updated with two comprehensive supplements. At Duke, she developed and standardised the widely adopted three-solvent thin-layer chromatography (TLC) method for identifying lichen secondary metabolites. This user-friendly technique revolutionised the discipline and remains a standard protocol globally despite the advent of modern analytical methods. At Duke, she initially served as a research associate in chemistry from 1959 to 1961. For the majority of her subsequent 50-year career, she worked as an unsalaried Senior Research Associate within the Department of Botany, eventually retiring as a senior research scientist in 2010. Together with her husband she received the Acharius Medal from the IAL in 1992. The genus *Culbersonia* Essl. is named after them. Her herbarium is housed at DUKE. Ref.: Brodo (2003); Esslinger (1993); LaGreca (2023).



Culberson, William ('Bill') Louis **(1929–2003)** – Born in Indianapolis, USA, Culberson was raised in Cincinnati, where he read botany at the University of Cincinnati, earning his bachelor's degree in 1951. That same year, he initiated the monumental, long-running bibliographic serial *Recent Literature on Lichens*, which he compiled and edited until 1978. His early interests in the discipline were heavily fostered by his teachers, the hepaticologist Margaret Fulford (1904–1999) and the ecologist E. Lucy Braun (1889–1971), culminating in his first published study on Kentucky lichens in 1951. Later that year, he traveled to Paris on a Fulbright scholarship to study under Maurice Chadefaud (1900–1984) and Henri des Abbayes, earning a *Diplôme d'Études Supérieures* in 1952 for his research on *Enterographa crassa*. Upon returning to the USA, Culberson undertook a PhD focusing on the lichen communities of Wisconsin forests under the joint supervision of John W. Thomson and John T. Curtis (1913–1961) at the University of Wisconsin. He completed his doctorate in 1954 and subsequently moved to Harvard University as a postdoctoral fellow working with Ivan Mackenzie Lamb. While in Madison, he had met Mason Hale, establishing a lifelong friendship that proved pivotal to American lichenology; together, they compiled the first definitive checklist of North American lichens (1956). His most profound scientific partnership, however, was with his wife Chicita, a chemist. Together, they explored chemical variation across a vast array of taxa, most notably within the family *Parmeliaceae,* and addressed its profound taxonomic, ecological, and evolutionary significance. They also co-authored major systematic monographs on parmelioid genera. Following his postdoctoral year at Harvard, Culberson joined the faculty of Duke University in 1955, where he was

eventually appointed to the prestigious Hugo L. Blomquist Professorship of Botany. He also served as the Director of the Sarah P. Duke Gardens from 1978 to 1998; an arboretum of Asiatic trees there now bears his name, reflecting his passion for Japanese gardening and the disjunct floras of Eastern North America and East Asia. He remained active until shortly before his death from cancer. He also played a major role in modernising lichenological publishing during his years (1962–1970) as editor of *The Bryologist*. He described many taxa, including several genera (often with his wife), such as *Asahinea* and *Cetrelia*. He was the great renewer of American lichenology and received the Acharius Medal (with Chicita) in 1992. The genus *Culbersonia* Essl., and several species, are named after them. His herbarium is housed at DUKE. Ref.: Brodo (2003); Elix & Nash (2003); Esslinger (1993).



Cummings, Clara Eaton **(1855–1906)** – Born in Plymouth, New Hampshire, USA, Cummings developed a keen interest in cryptogamic botany from her primary school days. In 1876, she began her higher education at Wellesley College, a pioneering institution for women, where she was appointed curator of the herbarium in 1878, even before earning her degree the following year. She subsequently joined the faculty as an associate professor of cryptogamic botany. Between 1886 and 1887, she travelled to Europe to study advanced botany at the University of Zürich, also visiting major scientific hubs in Genève, Paris, and Brussels. Her early research focused primarily on bryophytes, leading to her publication of a comprehensive catalogue of North American liverworts and mosses (1885). She turned her attention to lichenology relatively late in her career, following her European period, during which her interactions with Jean Müller Argoviensis solidified her expertise, establishing her as the first prominent female American lichenologist. Her most monumental work, *Lichens of Alaska* (1904), was published as part of the *Harriman Alaska Expedition Series* and was based largely on the collections gathered during that expedition, supplemented by additional regional material. Within this text, she described several new taxa. Much of her scientific output involved the painstaking identification and revision of collections for fellow botanists; she was widely regarded as a conservative taxonomist who adhered closely to the systematic principles of Edward Tuckerman. She was an inspiring teacher and active member of the Sullivant Botanical Club, where Carolyn W. Harris later became a leading figure. Cummings collected widely, including in Europe, and contributed to several exsiccatae series, including her own *Decades of North American Lichens* (360 numbers, 1892–1903). Her herbarium, originally housed at WELC, is now at NY, with further material at MAINE. Ref.: Fink (1907).

Dahl, Eilif (1916–1993) – Born in Kristiania (now Oslo), Norway. His father was an engineer, whilst his mother, a professional dentist (*tannlege*), was a highly educated woman who fostered young Eilif's keen interest in botany, including lichenology. In the spring of 1936, whilst a university student, he visited Professor Bernt Arne Lynge to request help identifying an unknown lichen he had collected. Lynge, who was looking for a young researcher to join an upcoming expedition to Spitsbergen, immediately offered Dahl a place on the *Heimland* expedition, which Dahl enthusiastically accepted. From then



on, he followed in his mentor's footsteps, dedicating himself to Arctic research. His most substantial contribution to Arctic lichenology was a major paper detailing the lichens collected during a subsequent expedition to Greenland, though its publication was delayed by the Second World War. During the war, Dahl served as a secret agent within the clandestine intelligence organisation XU, eventually fleeing to Sweden in 1942 before being stationed in London. After the war, he shifted his focus heavily towards developing ecology as a distinct branch of botany. He earned his doctorate in 1957 with a seminal study on the vegetation of Rondane, and in 1965 he was appointed professor at the Agricultural University of Norway (NLH). In the post-war era, he worked predominantly on ecological issues and exerted considerable political influence within the Labour Party to promote environmental perspectives. Dahl collected lichens wherever he travelled, contributing broadly to the global field. During a sabbatical in Australia, he conducted a influential lichen course attended by Jack Elix. His extensive fieldwork in the Southern Hemisphere is commemorated by the genus *Eilifdahlia* S. Y. Kondr. *et al.*, alongside several species named in his honour. His herbarium is housed at O. Ref.: Jørgensen (1994, 2007b); Krog (1994).

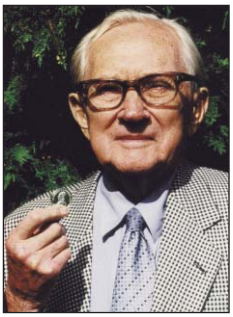


Darbishire, Otto Vernon **(1870–1934)** – Born in Conwy, Caernarvonshire, Wales, UK, he was the son of a wealthy English slate-quarry owner and philanthropist and his Austrian wife. Much of his early schooling took place abroad in Dresden and Florence. He appears to have first developed an interest in lichens during adolescent holidays in Switzerland, judging by an early specimen preserved in his herbarium. After returning to Britain, he spent a short period at university college in Bangor before moving to the University of Oxford, where he studied under Sydney H. Vines and graduated with a BA in botany. Darbishire then moved to Germany to study under Johannes Reinke at the University of Kiel, earning his doctorate in 1895 with a thesis on the red algal genus *Phyllophora*. Although he maintained a lifelong interest in marine algae, lichens soon became his primary field of research. Whilst serving as Reinke's assistant, he published his first lichenological papers (written in German), which included his groundbreaking work on a new genus within the *Roccellaceae*, the family in which he would later become a world authority. He returned to England to serve as a Lecturer in Botany at the University of Manchester (1898–1909), followed by a brief tenure at Armstrong College, Newcastle upon Tyne. During this period, he published his first notable paper on Arctic lichens. In 1911, he was appointed Lecturer in Botany at the University of Bristol, and in 1919, he became the institution's first Melville Wills Professor of Botany. In this role, he established a modern botanical laboratory and worked tirelessly to promote botany among both professionals and amateurs. Although he wrote very little concerning British lichens, he produced several important papers based on materials brought back from Antarctic and Arctic expeditions. He is best known for his work on the *Roccellaceae*, in which he described several genera,

including *Dendrographa*, *Ingaderia* and *Reinkella*. The genus *Darbishirella* Zahlbr. was named in his honour. His herbarium, originally left to BRIST, is now housed at NMW. Ref.: Skene (1935); Weiss (1936).



De Candolle, Augustin Pyrame(-us**) (1778–1841)** – Born in Genève, Switzerland, into an old French family. Following a childhood marked by poor health, he began his scientific studies in 1794 at the *Collège Calvin*. Although he initially studied law, he was inspired to pursue botanical interests by Jean-Pierre Vaucher (1763–1841). In 1796, he moved to Paris at the invitation of a family friend, Dieudonné Dolomieu (1750–1801), who introduced him to the city's leading naturalists. There, he befriended René Louiche Desfontaines (1750–1833), who subsequently introduced him to Charles Louis L'Héritier de Brutelle (1746–1800), in whose herbarium De Candolle worked from 1798. His early publications attracted the attention of Jean-Baptiste Lamarck, who entrusted him with the revision of the third edition of *Flore française* (1805). The second volume, which covered the cryptogams, was entirely rewritten. It integrated Christiaan Hendrik Persoon's fungal taxonomy and Erik Acharius's lichen system, introducing numerous lichens. Notably, the genera *Pertusaria* and *Rhizocarpon* were first validly described in this volume. Later in his career, he concentrated on broader systematic problems, developing a new natural system of plant classification in direct opposition to Linnaeus. In 1804, he received his medical doctorate in Paris. He was appointed Professor of Botany at the University of Montpellier in 1807, officially assuming the post and the directorship of the botanical garden in 1808. In 1816, he returned to Genève to take up a newly created chair in natural history. The fungal genus *Candolleomyces* D. Wächt. & A. Melzer was named in his honour. His vast herbarium is housed at G. Ref.: Chisholm (1911); De Candolle (1862); La Rive (1851).



Degelius (orig. Nilsson)**, Gunnar** Bror Fritiof **(1903–1993)** – Born in Uppsala, Sweden. His mother Anna Hedvig (née Degerholm), was born into the illustrious von Platen family, an ancient and historically powerful noble house of Pomeranian origin, and he based his new family name on the first part of her name; his father was a pharmacist who actively encouraged his early interest in botany. The family soon relocated to Göteborg, where he grew up surrounded by enthusiastic amateur botanists and became acquainted with Carl Skottsberg (1880–1963), who greatly influenced his academic path. Degelius returned to Uppsala in 1925 to study botany at the *Växtbiologiska Institutionen* under the guidance of G. Einar Du Rietz. He earned his doctorate in 1935 with a pioneering study on the distribution of oceanic lichens in Scandinavia. This research involved numerous field excursions to western Norway, a region he deeply loved and continued to write about throughout his life. Following his years in Uppsala, he returned to Göteborg, serving as the curator of the Botanical Garden from 1955 and later as a lecturer

at the University of Göteborg. He was awarded a personal professorship in 1965. A brilliant field botanist, he made important discoveries wherever he travelled, including North America, Fiji, New Zealand, India, Angola, and South Africa, making him one of the most widely travelled lichenologists of his era. His most significant work is the monumental monograph of *Collema* (1954, 1974). He also described numerous taxa in other genera. The genera *Degelia* Arv. & Galloway, *Gudelia* Henssen, and *Degeliella* P. M. Jørg. (now *Psoromaria*) are named after him. He received the Acharius Medal from the IAL in 1992. His herbarium, photo archive and library are housed at UPS. Ref.: Arvidsson (1994); Arvidsson & Jørgensen (1983); Galloway (1993); Kärnefelt (1993).



Deichmann Branth, Jacob Severin **(1831–1917)** – Born in Nykøbing Mors, Jylland, Denmark, he was the son of a customs officer. Following his mother's death in 1833, he was raised in Ferslev in the household of his uncle, the Reverend Rasmus Severin Deichmann (1798–1879). Although he developed an early passion for botany, he entered the ministry, studying theology from 1850 and earning his *cand. theol.* degree in 1857. During his university years, he also studied botany under Johan Lange (1818–1898) and travelled widely through Germany, Italy, and Switzerland. After passing his examinations, he taught at several schools until he was dismissed for political reasons. From 1866, he pursued a clerical career, serving parishes in Skælskør, Elling-Tolne, and Ovsted-Tåning in Jylland, before retiring to Kolding in 1906. His botanical interests turned early towards lichenology, and his first general paper on the subject appeared in 1860. His most important contribution to science was the first comprehensive Danish lichen flora (1866). This milestone publication expanded upon a university prize essay to which Frederik E. Rostrup (1831–1897) had also contributed, resulting in a highly successful, pioneering collaboration between the two men. Deichmann Branth maintained an active scientific correspondence with prominent figures like W. Nylander and Th. Fries. He continued publishing on lichens throughout his life, describing material collected from the Faroe Islands (1901, 1905), Greenland (co-authored with Grønlund in 1875), Iceland, Jan Mayen, and Novaya Zemlya. He described a small number of new species and was known for his broad species concept. The genus *Deichmannia* Alstrup & D. Hawksw. is named after him. His herbarium is housed at C. Ref.: Alstrup (1992), Christensen (1926); Kolderup Rosenvinge (2018).



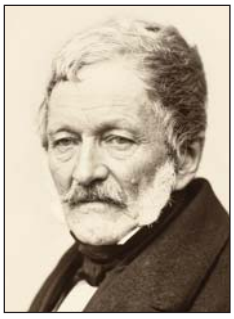
Delise, Dominique François **(1780–1841)** – Born in Laignelet, near Fougères, Bretagne, France, he was the son of a military officer who later took over the family business. Delise received a military education but was largely self-taught in botany. He received early botanical guidance from Bory de Saint-Vincent (from 1799) and was later assisted by his brother-in-law, René Lenormand (1796–1871), a lawyer and naturalist, after settling in Vire in 1817. Delise had a distinguished military career and fought in numerous campaigns. Captured by the English at Quiberon in 1795, he was imprisoned at Tavistock until he was pardoned in

1796. He later served under Jean-Baptiste Bernadotte (1763–1844), the future King of Sweden, who promoted him to lieutenant. Following further campaigns in Italy and Spain, he retired from active service and became the commander of the National Guard (*Bataillon de Vire*) in 1817, famously hosting the fleeing King Charles X for a single night in 1830. In Vire, he married Zélie Lenormand (1798–1882) and devoted his leisure time to cryptogamic botany, particularly lichenology. He collected extensively across Normandie, often accompanied by Lenormand, with a particular focus on the *Forêt de Briquebec* (which has since been destroyed). In 1817, Lenormand presented him with a copy of Erik Acharius's *Synopsis* and Olof Swartz's illustrated work on American lichens. Delise's monograph on the genus *Sticta* (1825), beautifully illustrated by his wife and dedicated to Bory de Saint-Vincent, is regarded as an early masterpiece of lichen literature. He assisted many contemporary French botanists with the identification of specimens and supported Bory de Saint-Vincent in preparing the lichen section of the *Dictionnaire classique d'histoire naturelle* (1828), where the genus *Pannaria* was first described. The fungal genus *Delisea* Fée (now *Plectocarpon*) was named in his honour. His herbarium, formerly part of the Lenormand collection, was partly destroyed during the Second World War; surviving material is now at PC. He also issued the exsiccatae series *Lichens de France* (1828), found in several herbaria (e.g. FH, L, UPS). Ref.: Chapuis (2000).



De Notaris, Giuseppe (1805–1877) – Born into a noble family in Milano, Kingdom of Italy, De Notaris studied medicine at the University of Pavia, graduating in 1830 with a thesis on the genus *Chenopodium*, which demonstrated his early inclination for botany. This interest was further nurtured by his interactions with the professor of botany there, Giuseppe Moretti (1782–1853). Finding the medical profession unrewarding, he swiftly abandoned his medical career, and in 1832 took a position as a substitute teacher of natural history at the *Liceo di S. Alessandro* in Milano under the supervision of Professor Giuseppe Balsamo Crivelli (1800–1878). Crivelli directed his attention towards cryptogams, which they both considered poorly understood in Italy; together, they published several papers on cryptogamic plants, focusing primarily on bryophytes. In 1836, at the invitation of Professor Giuseppe Giacinto Moris (1796–1869), he moved to Torino to become an assistant at the botanical garden (located in Valentino), where Moris served as director. In 1839, he was appointed professor of botany at the University of Genova, succeeding the famous mycologist Domenico Viviani (1772–1840). He spent the majority of his career in Genova as a professional botanist until 1872, when he was named chair of botany at the University of Rome. De Notaris was among the first to recognise the immense value of the advanced, achromatic microscopes introduced by Giovanni Battista Amici (1786–1863). In papers published between 1846 and 1847, he strongly advocated for the use of spore characters in the generic taxonomy of lichens, a concept originally put forward by A. L. A. Fée. By doing so, he pioneered the methodology of defining "spore genera", an approach that was further expanded by his Italian contemporaries A. Massalongo and V. Trevisan. He launched a collaborative contribution to lichenology with the celebrated cryptogamic exsiccatae series, the *Erbario Crittogamico Italiano*, which he

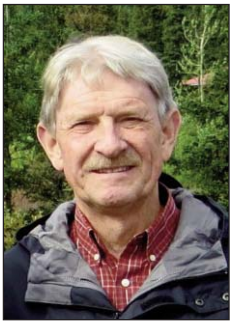
began issuing in 1858 alongside F. Baglietto and V. Cesati. To ensure the continuity of this botanical endeavour, his collaborators established the *Società Crittogamologica Italiana* in 1878. He described several long-standing genera, including *Bacidia*, *Biatorella*, and *Buellia*. The fungal genus *Notarisiella* Speg. (now a synonym of *Nectriella*), alongside several species, was named in his honour. His herbarium is housed at RO. Ref.: Cesati (1879); Nimis & Bartoli (1991); Nimis (1993, 2016); Piccone (1882).



Desmazières, Jean-Baptiste Henri-Joseph **(1786–1862)** – Born in Lille, France, where he trained and practiced as a pharmacist. He later settled in his native region, where he established a notable botanical garden and devoted much of his life to the study of cryptogams. He was an active member of the *Société des Sciences de Lille* and befriended many prominent contemporary lichenologists, including Christiaan Hendrik Persoon and Camille Montagne. In dedicating the lichen genus *Desmazieria* Mont. to him, Montagne affectionately referred to Desmazières as "my learned friend", highly praising his meticulous, consistent work in publishing exsiccatae series. This distribution of reference specimens remains his most important contribution to science; his renowned exsiccatae series, *Plantes cryptogames du Nord de la France* (1825–1851) and *Plantes cryptogames de France* (1853–1861), contain numerous unique lichen specimens. The genera *Desmazierella* Lib. and *Desmazieria* Mont. (now included in *Ramalina*) were named in his honour. His main herbarium is housed at PC, with duplicates in BR. Ref.: Coemans (1862); Delbrück & Schroe (1904); Roussel (1862).



Dey, Jonathan ('Jon'**)** Paul **(1943–2012)** – Born in Ashton, Idaho, USA, but raised in Oregon, where his father was a minister and his mother managed an active, closely-knit parsonage household, raising a total of five children. Following his local basic education, he attended Oregon State University in Corvallis, graduating with a BSc in 1965. He then spent two years serving with the Peace Corps in Nigeria. Upon his return to the United States, he commenced graduate studies at Duke University, earning a master's degree in botany, after which he worked at the Walter Reed Army Institute of Research near Washington, D.C. In 1971, he returned to Duke University to undertake a major study on macrolichen diversity at high altitudes in the southern Appalachians under the supervision of William Culberson. He carried out numerous demanding field trips and earned his doctorate in 1975. This pioneering research remains fundamental to the understanding of Appalachian lichen floristics, and it sparked his lifelong interest in the biogeography of North American lichens. In 1975, he joined the faculty at Illinois Wesleyan University in Bloomington, where he remained for the rest of his career, eventually serving as a professor. Throughout his tenure, he continued extensive fieldwork across the Pacific Northwest, Kentucky, West Virginia, and Tennessee. He was an influential member of both the *National Forest Health Team* and the *All Taxa Biodiversity Inventory* in the Great Smoky Mountains. He described a few taxa. His herbarium was donated to NY. Ref.: Lendemer & Bollivar (2013).



Dibben, Martyn James **(1943–)** – Born in Gosport, Hampshire, England, UK, he was the son of an engineer. He developed an early interest in plants in his grandfather's garden and during family holidays in Wales, where he learned about ferns and mosses. Following his local basic education, he attended high school in Portsmouth and won a scholarship to the University of London, graduating with a BSc in bioscience in 1964 and an MEd in 1966. He taught for four years in the London area, during which time he discovered lichenology by using *The Observer's Book of Lichens* (Alvin & Kershaw). During a lichen course, he came into contact with the newly formed lichen research group at the Natural History Museum (BM) led by Peter W. James. He subsequently received a scholarship to Duke University, where he taught botany (1972–1974) and earned his doctorate in 1974 with a thesis on the genus *Pertusaria* in North America. In 1975, he served as a research fellow at the Farlow Herbarium, Harvard, before being appointed Head of the Botany Department at the Milwaukee Public Museum, where he spent the majority of his career. From 1976, he also served as an adjunct professor at the University of Wisconsin. Although he did not focus heavily on taxonomy thereafter, his monumental doctoral research was published in 1980 as *The Chemosystematics of the Lichen Genus Pertusaria in North America North of Mexico*, a work that fundamentally overhauled the taxonomy of the genus. He later shifted his attention to broader biological questions, such as environmental pollution [co-authoring with James P. Bennett (1952–)] and habitat conservation. In this capacity, he served as the Executive Director of the Schlitz Audubon Nature Center (1995–2000). He operated Cedar Creek Enterprises in Wisconsin (2000–2005), and since 2005 has worked as the principal environmental consultant for his firm, Pebble Ridge Enterprises, in Minnesota. His herbarium is housed at DUKE. Ref.: Hertel & al. (2017); *pers. comm.*



Dickson, James (1738–1822) – Born at Kirkhouse, Traquair, Peeblesshire, Scotland, UK, he belonged to a family of nurserymen and gardeners. As a boy, he began his formal training as an apprentice in the gardens of the Earl of Traquair, a profession he thoroughly enjoyed. He later moved south to continue his gardening career at Jeffrey's famous nursery in Brompton, London. In 1772, he opened his own highly successful herb and seed shop in Covent Garden. This venture enabled him to forge influential connections with the King's gardener at Kew and secured his entry into the elite scientific circle surrounding Sir Joseph Banks. He subsequently became a key institutional figure, helping to co-found the Linnean Society in 1788 and the Royal Horticultural Society in 1804. Dickson developed a deep, specialised interest in cryptogamic plants. Between 1785 and 1801, he published his monumental, four-volume *Fasciculus plantarum cryptogamicarum Britanniae*, which described numerous new cryptogams, including several lichens. Because Dickson possessed little classical education and had limited command of scientific Latin, many of the technical descriptions were actually penned by John Ziers, a brilliant Polish apothecary living in London, or by

Robert Brown himself, with whom Dickson befriended in 1796 and frequently botanised alongside in Scotland. The fungal genus *Dicksonomyces* Thirum., P.N. Rao & M. A. Salam was named in his honour. His herbarium is housed at BM and E. Ref.: McConnell (2004).



Diederich, Paul (1959–) – Born in Luxembourg, he was the son of a railway employee. During his schooling, he developed a keen interest in botany under the guidance of his teacher, André Mach. In his youth, he met the prominent Belgian botanist André Lawalrée (1921–2005), who invited him to join botanical field courses in the Alps between 1775 and 1776, sparking a deeper fascination with plants. Diederich initially studied mathematics and computer science at the universities of Brussels (1979–1983) and Liège (1986–1987). After completing his first degree in 1983, he became a mathematics teacher at the *École de Commerce et de Gestion* in Luxembourg. Alongside his teaching career, his botanical interests turned firmly towards lichenology. In 1989, he earned his doctorate at the University of Louvain with a thesis on the lichens and lichenicolous fungi of Luxembourg, supervised by Jacques R. de Sloover (1932–). That same year, he was appointed a research associate at the National Museum of Natural History in Luxembourg. Diederich has specialised extensively in lichen parasites, particularly basidiomycetous species, and has described a vast number of new taxa. In 2000, he published a definitive checklist of the lichens and lichenicolous fungi of Belgium, Luxembourg, and northern France. He is a two-time recipient of the prestigious Tuckerman Award, winning in both 2004 and 2019. The lichenicolous fungal genus *Diederichia* D. Hawksw. was named in his honour. His herbarium is housed at LUX. Ref.: *Pers. comm.*; Hertel & al. (2017).



Dillenius (Dillen), Johann (John) **Jacob** (James) **(1684–1747)** – Born in Darmstadt, Landgrafschaft Hessen-Darmstadt (now Germany), Dillenius studied medicine at the University of Giessen. He initially practised as a physician in Grünberg in Oberhessen before becoming the *poliater* (town doctor) in Giessen, where he produced a comprehensive catalogue of native plants in 1719. In 1721, at the invitation of William Sherard (1659–1728), himself a former pupil of Joseph Pitton de Tournefort, Dillenius moved permanently to England. His initial task was to assist Sherard in revising Caspar Bauhin's *Pinax*, which was the most important general plant compendium prior to Linnaeus' *Species Plantarum*. In 1724, Dillenius published a new edition of John Ray's *Synopsis*, basing his new lichen section on the detailed field notes of Samuel Doody. He subsequently became the prefect of James Sherard's notable botanical garden at Eltham, publishing a celebrated book on its collections in 1732. In accordance with William Sherard's will, Dillenius was appointed the first Sherardian Professor of Botany at the University of Oxford in 1735. This bequest also transferred Sherard's extensive library and herbarium collections to the university. From this point onward, Dillenius worked primarily with cryptogams. In 1741, he compiled his magnum opus, *Historia muscorum* (published 1742), which contained numerous lichens classi-

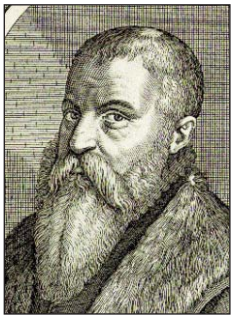
fied under *Algae* and featured his own detailed illustrations. Carl Linnaeus relied heavily on the text and illustrations of *Historia muscorum* when preparing his own *Species Plantarum*. Although Linnaeus visited Oxford in 1736 and met Dillenius, Dillenius remained deeply sceptical of the young Swedish botanist's new sexual classification system. Because Linnaeus never personally examined the physical specimens within the Dillenian herbarium, all of his early lichen citations derive strictly from the printed plates in *Historia muscorum*. This historical detail remains vital for modern botanical typification (Jørgensen & al. 1994). The Dillenian herbarium and original illustrations are housed at the Sherardian Herbarium in OXF. Ref.: Druce & Vines (1907); Woodward (1971).

Dioskorides, Pedanios (c. 40–90 A.D.) – Born in Anazarbus Cilicia, Asia Minor (near modern-day Adana, Turkey). Little is known of his early life, though he likely trained in medicine and pharmacology at the nearby school in Tarsus. He practised as a physician during the reign of Nero. While tradition holds that he travelled extensively as a military surgeon under Claudius and Nero, his writings suggest his journeys were focused primarily across the Greek-speaking Eastern Mediterranean, where he studied the medicinal properties of local flora. His monumental five-volume herbal, *De materia medica* (written c. 60–78 A.D.), organised substances by their therapeutic efficacy rather than alphabetically. It remained the absolute standard pharmacopoeia in Europe and the Near East for over 1,500 years. The text was widely recopied and heavily illustrated, most famously in the *Vienna Dioscurides (Codex Aniciae Julianae)*, a Byzantine manuscript dating to c. 512 A.D. In his text, Dioscorides mentions "lichens" (*leichen*), defining them as scaling crusts found on damp rocks. In the context of modern botany, these specific descriptions are considered to refer to liverworts (such as *Marchantia*) rather than true lichens. However, he also detailed true macrolichens used in ancient pharmacology, describing the coastal dye-lichen (*Roccella*) under the ancient Greek name *Phykos thalassion*, and the pendulous tree-lichen (*Usnea*) under the name *Bryon*, categorizing them respectively among marine growths and tree mosses following the traditions of Theophrastus. Ref.: Keyser (2013); Riddle (1985).



Dodge, Carroll William **(1895–1988)** – Born in Danby, Vermont, USA, on a family farm dating back to the early colonial settlers. He attended school in Manchester, Vermont, and entered Middlebury College in 1912, where he studied classics and developed a lifelong interest in languages. During this time, he came under the influence of Edward Angus Burt (1859–1939), a prominent basidiomycete specialist. When Burt relocated to St Louis, Dodge followed in 1915 to study botany at Washington University, earning his doctorate in 1919 on biochemical processes in fungi under the supervision of Benjamin Duggar (1872–1956). He also collaborated with Sanford Zeller (1885–1948) on the study of hypogeous fungi. In 1923, he joined Harvard University, where he served as an assistant professor and curator of the Farlow Herbarium. He joined an expedition to the Gaspé Peninsula in 1923, which resulted in his first lichenological paper in 1926. He later spent six months in Costa Rica (1929–1930) studying human mycoses, while also producing a pioneering paper on the foliose and fruticose lichens of that lichen-rich region. His

most famous textbook, *Medical Mycology* (1935), established him as a leading international figure in the field, and he lectured widely across South America. In 1931, Dodge returned to St Louis as Professor of Botany at Washington University and mycologist at the Missouri Botanical Garden, remaining in these roles until his retirement in 1963. He then returned to his home state as a research professor at the University of Vermont in Burlington. Dodge's primary botanical interest lay in the lichens of Latin America, and he travelled widely throughout the region whilst also studying African material. A teaching spell in Chile brought him into contact with Antarctic floras. He subsequently wrote the first comprehensive Antarctic lichen flora (1973) and revised subantarctic New Zealand material, though apart from a brief visit to the region in 1973, he never personally collected specimens on the Antarctic continent. Industrious, modest, and friendly, Dodge nevertheless faced significant criticism from contemporary taxonomists. He was often faulted for applying an overly narrow species concept and frequently describing "new" taxa based on subtle chemical or morphological variants without examining original type material. He described hundreds of species and several genera that were later synonymised. The fungal genera *Dodgea* Malençon (now *Truncocolumella*) and *Dodgella* Zebrowski were named after him. His herbarium is housed at FH, with additional material at US. Ref.: Castello & Nimis (1997); Rudolph (1990).



Dodonaeus (Dodoens, orig. van Joeckenma)**, Rembertus (1517–1585)** – Born in Mechelen, Spanish Netherlands (now Belgium), the son of Denis van Joenckema, a Frisian-origin physician, whilst his mother, Ursula Roelants, came from an established, respectable family. A child prodigy, he studied medicine at the Catholic University of Louvain, graduating in 1535. He then travelled widely in Europe (Austria, France, Germany, Italy, Switzerland) and held various medical posts before becoming personal physician to the Austrian Emperor in 1574, and in 1582 Professor of Medicine at Leiden and Director of its botanical garden. He is best known for his extensive herbal, published in many editions and translations; the Latin edition of 1583 contains a groundbreaking chapter on fungi. He included only a few lichens, mostly those already treated in major herbals, and showed little interest in them. However, in *Stirpium historiae pemptades sex sive libri XXX* he recorded several species from Belgium, the earliest known from that region. While his main personal loose collections are lost, a valuable bound herbarium directly linked to his work is housed at the *Bibliothèque Inguimbertine* (Carpentras), with related historical vouchers in the Clusius Herbarium housed at L. Ref.: De Cock (1890); Meerbeeck (1841); Walle & Kasaya (2001).

Döbbeler, Peter (1946–) – Born in Dolpe, Nordrhein-Westfalen, Germany. He began his career as a trainee in a commercial nursery in 1963, whilst attending evening classes to qualify for university admission. In 1965, he commenced his biology studies at the *Freie Universität Berlin*, where he met Josef Poelt, who steered his academic focus toward the heavily neglected bryophilous fungi and lichens. When Poelt moved to the University of Graz, Döbbeler followed him, completing his *Diplom* and later, in 1977, his doctorate on



bryophilous micro-ascomycetes. This pioneering doctoral work revealed numerous highly remarkable, overlooked "primitive" lichens and fungi, including the description of the new genus *Epibryon*. Döbbeler spent the greater part of his subsequent career in Germany, serving as a long-time researcher and lecturer (*Privatdozent*) at the *Ludwig-Maximilians-Universität München*. His herbarium is housed at M, with several samples at GZU. Ref.: Hertel & al. (2017).



Doidge, Ethel Mary **(1887–1965)** – Born in Nottingham, England, UK, the daughter of an analytical chemist, she emigrated with her parents to South Africa in 1897. Shortly after their relocation, her father, Henry, passed away unexpectedly while their children were still very young. As a widowed immigrant, her mother, Elizabeth, managed the household and ensured her children received an excellent education. Ethel received her basic education in Pietermaritzburg, Natal. After matriculating in 1903, she studied botany at Huguenot College, Wellington, specialising in mycology. Upon earning her M.A. in 1907, she joined the Transvaal Department of Agriculture in 1908 as an assistant to Illtyd B. Pole Evans (1879–1968). In 1909, Doidge won the prestigious Cornwall and York Prize for her pioneering research on bacterial plant diseases. She registered her doctoral research through the University of the Cape of Good Hope, working extensively across botany and mycology. When she earned her D.Sc. in 1914, she became the first woman to receive a doctorate from a South African university, as well as the first woman to earn a doctorate in any scientific discipline within the country. Later, she served on the inaugural council of the University of South Africa and co-founded the South African Biological Society. Doidge was appointed Assistant Chief of the Division of Botany and Plant Pathology in 1919, and became Principal Plant Pathologist at the Division of Plant Industry in 1929. Although her primary research focused on pathogenic fungi and agricultural crop diseases, she worked broadly across the wider mycota of South Africa, including lichens. Her magnum opus is the monumental *South African Fungi and Lichens to the End of 1945* (published in 1950 as a 1,094-page catalogue), which she completed following her retirement in 1942. Her choice to comprehensively include lichens alongside fungi was heavily influenced by Frederic Clements and Charles Shear's *The Genera of Fungi* (1930), which advocated for their shared classification. She built an important reference collection; her herbarium is housed at PREM. Ref.: Gunn (1967); Jacobs (2016).

Dombrovskaya, Anna Vladimirovna **(1926–2004)** – Born in Bryansk, Soviet Union (now Russia). After completing his local education she studied at the Geobotanical Institute of Moscow University, graduating in 1954. From 1954 to 1959 she worked at the Moscow Peat Institute, contributing to an atlas of plant remains in peat, covering pollen, spores and bryophyte fragments. In 1960 she joined the Polar-Alpine Botanical Garden and Institute in Murmansk, working closely with bryologist Roman N. Schljakov (1912–1999). With Schljakov she issued a handbook on lichens and bryophytes of the northern



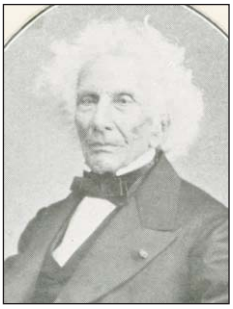
European USSR (1967). She founded a lichen herbarium now containing c. 20,000 specimens. She undertook detailed studies of the lichens of the Murmansk region, earning her doctorate in 1964 at Leningrad under Savicz. In 1970 she published two foundational books: *Lichens of the Khibiny Mountains*, and the comprehensive *Conspectus of the Lichen Flora of the Murmansk Region and Northeast Finland*. Her later monograph on *Stereocaulon* (1996) is another major contribution. She illustrated her own works and was employed as a botanical illustrator for several floras. She described a few taxa. Her herbarium is housed at PBGI. Ref.: Makarova *pers. comm.;* Konstantinova (2006).

Doody, Samuel (1656–1706) – Born in Staffordshire, England, UK, where his father was an apothecary and his mother was a housewife native of Eccleshall, a historic market town. The family later moved to London to establish a shop in the Strand, where Doody worked in the business from an early age. Although no formal higher education is recorded, he became a leading authority on medicinal plants. This expertise is evident from his appointment in 1693 as Keeper of the Apothecaries' Garden at Chelsea (now the Chelsea Physic Garden), where he commanded a prestigious annual salary of £100. He published very little under his own name, but John Ray warmly acknowledged him in the preface to the second volume of *Historia Plantarum* (1688) for contributions to cryptogams, of which he was a leading specialist. Doody's meticulous handwritten observations in his personal copy of the second edition of Ray's *Synopsis* (1696) formed the backbone of the vastly improved lichen treatment in the third edition (1724). Johann Jacob Dillenius later relied heavily on this data when compiling his landmark *Historia Muscorum* (1741). Doody was elected a Fellow of the Royal Society in 1695. His importance has only recently been recognised, and his name was largely forgotten in the lichenological literature. His herbarium is housed at BM (Sloane Herbarium). Ref.: Jackson (1888); Pulteney (1790).

Dorsten (Dorstenius, orig. Gluntius)**, Theodor** (Theodoricus) **(1492–1552)** – Born in Dorsten, Kurfürstentum Köln (now Nordrhein-Westfalen, Germany). He studied medicine at the University of Erfurt, completing his degree in 1531, and later became a *magister* in Marburg, where records show him serving as a professor of medicine in 1540. From 1548 onwards, he practised as a physician in Kassel. While little is known of his independent botanical field work, Dorsten heavily edited, translated, and expanded the herbal materials left behind by Eucharius Rösslin Jr., whose German-language *Kreutterbuch* had been issued by the Frankfurt printer Christian Egenolff in 1533. Dorsten converted and enriched this material into a comprehensive Latin volume, published by Egenolff as the *Botanicon* (1540). Enhanced with fine woodcuts, this influential Renaissance work holds a significant place in the history of lichenology, as it features the first high-quality printed illustration and accurate morphological description of the lung lichen, *Lobaria pulmonaria*. His herbarium is unknown. Ref.: Roth (1902).

Duby (de Steiger)**, Jean-Étienne (1798–1885)** – Born in Genève, Switzerland, Duby studied at the Academy of Genève, obtaining a degree in theology in 1816 and a doctorate

in 1824. He embarked on a clerical career in 1828, initially serving as a vicar in Chancy. Following a botanical expedition to Italy and Sicily between 1829 and 1830 to study the region's flora, he returned to Switzerland to serve as a pastor in Genève (specifically *Les Eaux-Vives*) from 1831 onwards. Deeply interested in cryptogamic botany, Duby became a specialist in bryophytes and befriended prominent botanists Jean-Baptiste Mougeot and Christian Nestler. At the behest of his mentor, Augustin Pyrame de Candolle, Duby compiled and edited the monumental *Botanicon Gallicum* (1828–1830), a comprehensive survey of the French flora based on de Candolle's original framework and herbaria. Duby's work on the second volume (1830), which detailed cellular plants, served as an authoritative reference for early 19th-century European lichenology and bryology. His primary, authoritative cryptogamic herbarium and types are preserved at G (within the Candolle and Delessert collections), with significant duplicates and exsiccatae at BERN and STR. Ref.: Bescherelle (1886); Briquet (1940).



Dufour, Jean-Marie **Léon (1780–186**5**)** – Born in Saint-Sever, Landes, France, into a dynasty of physicians. He began his education under Benedictine monks before continuing at the *École Centrale*, which featured a small botanical garden established by the influential naturalist Basquiat de Mugriet (1757–14844). During this formative period, Dufour made botanical excursions to the Pyrenees alongside Louis Ramond de Carbonnières. He went on to study medicine in Paris (1799–1806), where he befriended Jean-Baptiste Bory de Saint-Vincent, graduating with a medical doctorate in 1806. Dufour served as an army physician during the Peninsular War (1808–1814), actively collecting regional lichens alongside Bory. This fieldwork is documented in his surviving correspondence with Erik Acharius. While stationed in Madrid, he established connections with leading Spanish botanists. Following the fall of Napoleon, he returned permanently to his birthplace in 1814 to practise medicine while dedicating his leisure time to natural history. Although insects and arachnids ultimately became his primary scientific passions, he maintained a lifelong contribution to lichenology. Acharius highly esteemed his work, famously styling him *lichenologus praestantissimus* in his letters. Dufour also corresponded extensively with Christian Hendrik Persoon, Bory, and Dominique Delise. The genus *Dufourea* Ach. is named after him. His herbarium is housed at BORD, with duplicates at PC. Ref.: Boone (2003); Dayrat (2003); Laboulbène (1866).



Duncan, Ursula Katherine **(1910–1984)** – Born in Kensington, London, England, UK, she was the daughter of Commander John Alexander Duncan (1872–1948), who was stationed at the War Office at the time. Her mother, Beatrice Dorothy (née Weston), was also the daughter of a naval officer. When Ursula was nine, the family left London for Parkhill, a large family estate near Arbroath in Angus, Scotland. She spent most of her remaining years there, taking charge of the estate after the Second World War. From an early age, she became actively invol-

ved in managing estate activities and accompanied her father on excursions with the Wild Flower Society. However, her interests soon shifted towards cryptogams, particularly mosses. In the 1940s, she was introduced to lichens by W. Watson, the leading expert of the era. Recognizing the urgent need for accessible information on the subject, she prepared and published an identification guide in 1959, which she continually expanded, revised, and illustrated over the years. By 1970, this work culminated in a vital new flora of the British Isles, co-authored with her protégé, the young student Peter James. James held her in high regard, praising her enthusiastic and generous approach to sharing knowledge. Through this collaboration, she became a driving force behind the post-1970 renaissance in British lichenology. Although she was instrumental in the founding of the British Lichen Society, she characteristically declined any formal roles there or elsewhere. Beyond botany, she dedicated time to academic pursuits, earning degrees in classical languages. In 1969, she was awarded an honorary doctorate in botany by the University of Dundee, a title she typically chose never to use. She did not describe any new taxa. Her herbarium and personal notes are housed at E. Ref.: James (1986).



Durieu de Maisonneuve, Michel **Charles (1796–1878)** – Born in Saint-Eutrope-de-Born, Lot-et-Garonne, France. Following the tradition of many young noblemen, he pursued a military career, entering the military academy at Saint-Cyr in 1812 and graduating as a sub-lieutenant in 1815. He participated in the final phase of the Napoleonic Wars (the Hundred Days) and later in the French expedition to Spain, fighting at the Battle of Trocadero in Cádiz (1823). He remained in active military service until the late 1840s, notably participating in the historic capture of the Smala of Abdelkader in Algeria (1843). Upon returning to Paris in 1827, he befriended Jean-Baptiste Bory de Saint-Vincent, which led to his joining the scientific expedition to the Morea (Peloponnese, 1829) and, later, the landmark exploration of Algeria (1840–1844), where he served as both a military commander and a principal botanical collector. Following his transition from military life, he moved to southwestern France to become the Director of the Botanical Garden of Bordeaux (*Jardin botanique de Bordeaux*), holding the post for over twenty years. In lichenology, he is best known for his extensive collections and exsiccatae series of Iberian plants. These were gathered primarily during a highly demanding 1835 solo expedition through Asturias and the Cantabrian Mountains, a campaign heavily backed by Bory de Saint-Vincent and taxonomically catalogued by Jacques Gay. While major official expedition vouchers are at PC, his primary personal research herbarium and types are housed at BORD. Ref.: Dumoulin (1878); Roumeguère (1878).

Du Rietz, Gustav Einar **(1895–1967**) – Born in Sandvik, Bromma (now Stockholm), Sweden. His mother, Sofia Matilda (née Kullman) came from a stable, upper-middle-class professional and bourgeois family, whilst his botanically inclined father Hjalmar, of Walloon descent, managed a bone-meal factory. He developed an early interest in plants and studied natural sciences at Uppsala University, joining the research circle surrounding Rutger Sernander, whose daughter Greta he later married, becoming Sernander's son-in-law. He graduated in 1921 and earned his doctorate in 1922. He served as curator of the



Uppsala Herbarium (1924–1927) and in 1934 succeeded Sernander as professor of plant ecology. Du Rietz founded the Uppsala school of plant sociology (1921), an ecological framework in which cryptogams, including lichens, played a primary role in vegetation classification, structurally contrasting with the Central European systems. He pioneered the formal naming of lichen communities in his early major papers on saxicolous associations and coastal rock ecology (1932), and later introduced the fundamental ecological distinction between "poor bark" and "rich bark" corticolous communities in a landmark paper (1945). He also undertook extensive taxonomic studies, revising several genera and species groups, particularly early in his career. His most significant contribution to the field remains the vast, rich lichen collections made alongside his first wife, Greta Sernander (1897–1981), during their extensive botanical expedition to New Zealand and Australia (1926–1927). This fieldwork yielded thousands of critical specimens, including a New Zealand lichen later described as *Placopsis durietziorum* D.J. Galloway. The remarkable species *Degelia durietzii* Arv. & D.J. Galloway was also named in his honour. Du Rietz published relatively little of this Australasian material himself, with the notable exception of his influential work on the distribution of bipolar species. The genus *Durietzia* Gyeln. (now *Ionaspis*) was named after him. His herbarium is housed at UPS. Ref.: Galloway (2004); Jørgensen & Lindblom (2006); Sjörs (2002); Tibell (1999).



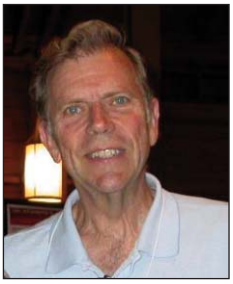
Duvigneaud, Paul Auguste **(1913–1991)** – Born in Marche-en-Famenne, south of Bruxelles in the Ardennes region of Wallonia, Belgium, he was the son of Joseph Jean Marie, a geological engineer, whilst his mother, Laure Pauline (née Namur), belonged to an established, respectable family from the French-speaking Walloon region of Belgium. He received his classical education locally at the *Athénée*, whilst pursuing natural history as a passionate childhood hobby. He completed his higher education at the *Université Libre de Bruxelles* (ULB), graduating in chemistry in 1935 and botany in 1937, before earning his doctorate there in 1940. Duvigneaud's focus turned to lichens during his student years. In 1938, he co-published a updated catalogue of Belgian lichens, a project initiated by his close friend, the zoologist Lucien Giltay (1903–1937), who passed away before its completion. Fascinated by the family *Cladoniaceae*, Duvigneaud advanced the historical work of Henri Coemans by adopting Yasuhiko Asahina's microchemical crystallization techniques to untangle difficult species complexes, an analytical methodology that strongly appealed to his background as a chemist. This expertise culminated in 1947 when he co-described the significant reindeer lichen *Cladonia mediterranea* alongside the French lichenologist Henri Des Abbayes, with whom he collaborated closely on the genus. Although the Second World War disrupted his career and postponed a planned academic appointment in the Congo, he served as an assistant at the ULB. In 1952, he succeeded his former mentor, Lucien Hauman (1880–1964), as professor of plant ecology. Hauman had originally inspired Duvigneaud's lifelong interest in tropical African flora. In 1942, Duvigneaud described the new macrolichen genus

Hendrickxia (now synonymised with *Everniopsis* Nyl.) from the Kivu province, naming it after Fred Hendrickx, a Belgian agronomist who supported his research. Beginning in 1948, Duvigneaud led five scientific expeditions to the Congo, expanding contemporary knowledge of Central African lichens, notably through his 1956 systematic revision of the genus *Stereocaulon* in Kivu. Influenced early on by Josias Braun-Blanquet (1884–1980), Duvigneaud eventually shifted his focus towards broader ecosystem ecology, becoming an internationally eminent pioneer of urban ecology and forest productivity. In recognition of his ecological work, he was awarded an honorary doctorate by the University of Paris, where he later served as a guest professor between 1977 and 1983. He described several taxa. His primary herbarium and African types are housed at BRLU, with extensive material at BR. Ref.: Meerts (2013); Tanghe (1992).



Eckfeldt, John Wiegand **(1851–1933)** – Born in Haverford, near Philadelphia, Pennsylvania, USA. His mother, Emily, belonged to the prominent, historic Levering family of Roxborough, who were among the foundational settlers of that region of Philadelphia, while his father, Jacob Reese Eckfeldt, who was of German extraction, served as the chief Assayer of the US Mint. The son was soon drawn to the natural environment, developing an early passion for flowers and insects. Following his preliminary education, he studied medicine at the University of Pennsylvania, graduating with his medical degree in 1872, and immediately established a practice as a physician in the Philadelphia region. Alongside his medical career, Eckfeldt was an active botanist affiliated with the Academy of Natural Sciences in Philadelphia, dedicating his leisure time to regional plant-collecting excursions. He deeply resented the rapid urbanisation of Pennsylvania, which dismantled the pristine natural habitats he valued, viewing this industrial expansion as detrimental to society and human well-being. Precisely when and how he pivoted towards lichenology remains undocumented, though it was likely during the 1880s. He corresponded and exchanged specimens with leading global lichenologists, adopting their contemporary species concepts into his own research. Over time, collectors sent him unidentified materials from diverse localities, predominantly South America, which he revised and published, though with limited taxonomic success due to a lack of specialised European literature and comparative reference specimens. Nevertheless, he described several new taxa, including specimens from Arthur Waghorne's historic collections in Newfoundland and Labrador. He published extensively on lichens across the continent, also producing a systematic catalogue of the lichens of California and parts of Mexico. In 1898 he donated his personal lichen herbarium (4,000 specimens) to PH, where it remains. Ref.: Harshberger (1899); Lendemer *pers. comm*.; Stone (1934).

Egan, Robert ('Bob') Shaw **(1945–)** – Born in Buffalo, New York, USA, where his father was a physician. Following his local education, he spent a year living with his family in Asunción, Paraguay, and later commenced pre-medical studies at the University of Colorado Boulder, where his academic interests swiftly pivoted towards botany. He was introduced to lichenology by Sam Shushan, his professor of non-vascular plants, who sub-



sequently served as his doctoral supervisor. In 1971, Egan earned his doctorate with a dissertation focusing on the alpine lichens of the Rocky Mountains (spanning Colorado and New Mexico). Throughout his career, he consistently pursued field research across various North American mountainous and ecological regions, including Texas and Nebraska. He was initially appointed as an assistant professor at Castleton University, Vermont, before moving in 1975 to serve at Texas A&M University at Galveston. In 1979, he joined the faculty at the University of Nebraska Omaha (UNO), where he was promoted to full professor in 1985. In addition to his substantial floristic studies, Egan specialised in the systematics of the family *Parmeliaceae* and contributed major treatments to the important *Lichen Flora of the Sonoran Desert Region*. He is perhaps most widely recognised for compiling *A Fifth Checklist of the Lichen-forming, Lichenicolous and Allied Fungi of the Continental United States and Canada* (1987), an indispensable reference that laid the groundwork for modern North American taxonomic databases. He has described several taxa. His herbarium is housed at OMA and F. Ref.*: Pers. comm.*; Buck (2002).



Egea, Fernández **José** María **(1956–)** – Born in Bullas, Murcia, Spain. He initially studied biology at the University of Barcelona before moving in 1978 to the University of Murcia (UMU), where he completed his higher education and earned a doctorate in 1980. His doctoral thesis comprised a comprehensive ecological and taxonomic study of the hyper-arid, saxicolous lichen flora of Almería. Under the guidance of prominent Spanish botanist Xavier Llimona, Egea published a seminal systematic revision of several genera within the family *Lichinaceae*. He worked extensively on these taxonomically challenging cyanolichen groups, which are highly abundant across the Iberian Peninsula, developing a keen research interest in lichenicolous communities and their associated vegetation types. He went on to publish numerous floristic papers across Spain, including critical updates to difficult crustose groups such as *Opegrapha* and *Bactrospora*. In 1990, he was appointed Professor of Botany at the University of Murcia, where he spent his entire active academic career, holding several high-level administrative posts, including Dean of the Faculty of Biology. As a central figure within a highly prolific Spanish lichenological research group, he supervised many doctoral students and described dozens of new lichen taxa. In 2000, Egea made a complete deliberate transition away from lichenology to focus his research on agroecology, specifically investigating agricultural sustainability, food sovereignty, and the preservation of traditional Mediterranean crop varieties. He currently holds the title of Professor Emeritus at UMU. His herbarium is housed at MUR. Ref.: Hertel & al. (2017).

Ehrenberg, Christian Gottfried **(1795–1876)** – Born in Delitzsch near Leipzig, Kurfürstentum Sachsen (now Germany), where his father was a municipal judge. When Christian Gottfried was just thirteen years old, his mother, Christiane Dorothea, died during an epidemic. Following his preliminary education, he initially read theology at the



University of Leipzig but quickly transferred to medicine, moving in 1817 to Berlin, where he developed a sweeping interest in natural history. He earned his doctorate with a thesis investigating the fungi of the Berlin forests under the supervision of Johann Heinrich Friedrich Link. From 1820 to 1826, Ehrenberg travelled extensively through the Middle East and the Red Sea region, gathering pioneering lichen collections in Egypt, the Sinai Peninsula, the Red Sea coastlines, Syria, and Sudan. These significant historical specimens were later critically reviewed and published by William Nylander (1878) and Jean Müller Argoviensis (1880). Early in his career, in 1820, Ehrenberg described the well-known, filament-forming tropical lichen genus *Coenogonium*. In 1827, he was appointed extraordinary professor of medicine in Berlin but focused his subsequent research on microscopic organisms, both living and fossilised. He named and described thousands of microalgae and protists, effectively founding the field of micropaleontology and contributing fundamentally to the understanding of zygomycete reproduction. In 1829, he accompanied Alexander von Humboldt on a major scientific expedition across Russia to the Chinese frontier. In 1831, Ehrenberg published several lichenological papers, describing five new taxa, including one lichenicolous parasite. While his historic micro-slide collections survived the Second World War at the *Museum für Naturkunde*, his macrolichen and botanical vouchers, which had been transferred to B, were entirely destroyed during a catastrophic Allied air raid in March 1943. Ref.: Dobell (1923); Laue (1895).



Ehrhart, Jakob **Friedrich (1742–1795)** – Born in Holderbank, Aargau, Switzerland, he developed a passionate interest in the natural sciences during his youth. He worked as an assistant in pharmacies across Nürnberg (1763–1765), Erlangen, and Hannover. In 1771, he relocated to Sweden, working in Stockholm where he met the influential physician and botanist Peter Jonas Bergius (1730–1790). On Bergius' advice, Ehrhart moved to Uppsala (1774–1776), where he experienced the final years of Carl Linnaeus' academic dominance, studying under both Linnaeus the Elder and Linnaeus *filius*, though he never took a formal degree. In Uppsala, he met the young Erik Acharius, whose early lichen studies left a lasting impression, prompting a lifelong scientific correspondence. Upon returning to Germany, Ehrhart became an assistant to the chemist and pharmacist Johann Gerhard Reinhard Andreae (1724–1783) in Hannover, curating his extensive natural history collections. There, Ehrhart pioneered the publication of exsiccatae series, producing nine sets in total. Two of these featured lichen specimens: *Phytophylacium ehrhartianum* and *Plantae Cryptogamae Linnaeae*. Several species he collected in Sweden deviated from Linnaean definitions, primarily because Linnaeus had never personally examined them. Ehrhart held a highly progressive taxonomic philosophy; he was the first botanist to use the rank of subspecies consistently, publishing numerous subspecific taxa that were later elevated to full species. In 1780, he was appointed *Königlich Grossbritannischer und Churfürstlich Braunschweigisch Lüneburgerischer Botaniker* (Royal British and Electoral

Brunswick-Lüneburg Botaniker) at the Herrenhausen Gardens, enabling him to undertake extensive excursions to document Hannover's natural resources. His massive herbarium was purchased by Georg Franz Hoffmann, who carried it to Russia, narrowly saving it from the catastrophic 1812 Great Fire of Moscow during Napoleon's invasion by fleeing with it to Kostroma. It is safely housed today at MW. Ref.: Alpers (1905); Dörfler (1906–1907).



Ekman, Stefan (1965–) – Born in Malmö, Sweden, he was the son of an insurance agent and a secretary. During his school years, he developed a keen interest in native vascular plants. He studied biology at Lund University, where he came into contact with the influential lichenological research group surrounding Ingvar Kärnefelt, an encounter that decisively shaped his career. In 1996, Ekman earned his doctorate with a systematic dissertation focusing on the genera *Bacidia* and *Bacidina* in North America, supervised by Ingvar Kärnefelt. He has continued to work extensively on these genera and related groups, publishing numerous seminal papers, whilst also investigating the molecular phylogeny of several other complex lineages, including *Lepraria* and the family *Pannariaceae*. He was subsequently employed at the University of Bergen, where he was promoted to professor in 2005. During his tenure in Bergen, he pioneered the introduction of modern molecular DNA methods to Norwegian lichenology. In 2007, he returned to Sweden upon his appointment as Senior Curator of the globally important lichen herbarium at the Museum of Evolution, Uppsala University. He has described several taxa. His herbarium is housed at BG, LD and UPS. Ref.: *Pers. comm.*



Elenkin, Alexander Alexandrovich **(1873–1942)** – Born in Warsaw, Poland, he was the son of a Russian nobleman, whilst his mother was a homemaker from an educated background, being the daughter of a schoolteacher**.** Following his early local education, Elenkin studied botanical anatomy and physiology at the University of Warsaw under Ivan Belyaev (1855–1911), whilst simultaneously collaborating with Alexander Alexandrovich Fischer von Waldheim (1832–1920), a distinguished former student of Anton de Bary. Elenkin's early research produced a detailed *Flora of the Ojców Valley* (which included its cryptogams), earning him a prestigious university Gold Medal. He graduated in 1897. In 1898, he was appointed as an assistant in morphological and systematic botany at Warsaw University. However, when Fischer von Waldheim relocated to St Petersburg to direct the Imperial Botanical Garden in 1899, Elenkin followed him, securing a corresponding conservation post at the garden's museum. He immediately dedicated himself to the study of cryptogams, which had long been neglected there, a research direction likely solidified by his early scientific expedition to the lichen-rich Caucasus. In 1905, he became a principal curator at the Imperial Botanical Garden, and in 1913 he was appointed head curator of the

newly independent cryptogamic herbarium. Elenkin made a foundational contribution to Russian lichenology, revitalising a discipline that had languished for decades. Working alongside a dedicated cohort of students, he embarked on a comprehensive systematic overview of the lichens of the Russian Empire, coordinating expansive collecting expeditions across its territories. This culminated in his production of the first true Russian lichen flora (1906–1907), followed by his landmark flora of central Russia (1909–1911). Beyond taxonomy, Elenkin was deeply interested in the physiological, biological, and biogeographical dimensions of lichen symbiosis, executing pioneering structural investigations into lichenisation and the identity of the algal partners, focusing on the cyanobacteria of the Russian steppes. His monograph on cyanobacteria was completed posthumously in 1949. During the Second World War, he was successfully evacuated from besieged Leningrad alongside the core scientific staff of the Komarov Botanical Institute to Kazan in southwest Russia. He temporarily lived and worked there until his death in 1942. Widely revered as the "father of Russian lichenology", Elenkin described numerous new taxa, including the genus *Placynthiella*, and distributed an influential series of exsiccatae of Russian lichens between 1901 and 1910. The genus *Elenkiniana* S.Y. Kondr. *et al.* was named after him. His herbarium is housed at LE. Ref.: Andreev & Potemkin (2023); Titov (2008).

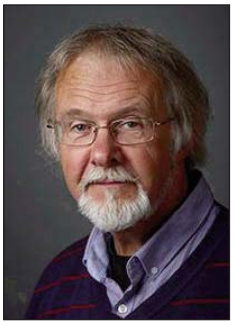


Elfving, Fredrik Emil Wolmar **(1854–1942)** – Born in Tammisaari (Ekenäs), Nyland (Uusimaa), Finland. His mother, Wendla (née Suksdorf) (1818-1901), who gave birth to nine children, belonged to a well-established, prominent bourgeois merchant family**;** her merchant-class background provided a stark contrast to her husband, Johan Fredrik **(**1801**–**1891), who was born the son of a humble blacksmith before ascending the social ladder to become a respected district doctor and professor. Elving's early interest in cryptogams was encouraged by his father, who gave him a microscope for his fifteenth birthday. After completing his primary education in Turku (Åbo), he began studying medicine at the University of Helsinki in 1870 while simultaneously taking botanical courses; in 1878, he switched entirely to botany. Inspired by Matthias J. Schleiden's textbook, he moved to Germany to study cytology under Eduard Strasburger (1844–1912) in Jena, and later under Julius Sachs (1832–1897) in Würzburg, earning a doctorate in 1880 with a thesis on geotropism. He was appointed professor at Helsinki in 1892, though his appointment was mired in controversy; his qualifications had been pitted against those of the eminent lichenologist Edvard A. Vainio, who was ultimately rejected following fierce opposition from William Nylander. Unlike Vainio, Elfving was extroverted, witty, and despite his own Swedish-speaking background, became a strong proponent of integrating the Finnish language into academia. As a plant physiologist, the first professor of the discipline in Finland, he modernised botanical teaching at Helsinki and became a major reformer of Finnish botany. His legacy in lichenology rests primarily on his alternative theory of lichenization, which opposed Schwendener's symbiosis model. Based on detailed microscopic studies, Elfving claimed that "gonidia" (algal cells) originated directly from fungal hyphae. First published in 1913 and expanded in 1931, this incorrect theory was

largely ignored by the wider scientific community, though it generated contemporary debate. His herbarium is housed at H. Ref.: Collander (1965); Väre (2024).



Elix, John Alan **('Jack') (1941–)** – Born in Mount Pleasant, near Adelaide, Australia, he was the son of a dairyman of German descent. Both of his parents were keen naturalists who frequently took their children into the bush, fostering Jack's lifelong fascination with the natural environment. Following his local basic education, he attended high school in Adelaide and read organic chemistry at the University of Adelaide, where he graduated with a BSc in 1962 and completed his PhD in 1965. He subsequently held a CSIRO postdoctoral fellowship at the University of Cambridge (1965–1967), where his friend and colleague, Mel Sargent (1940–), first encouraged him to investigate the complex chemistry of lichen compounds. During this formative period, he analysed anthraquinones across several groups, alongside depsides, depsidones, and naphthazarins in *Xanthoparmelia* species. Upon returning to Australia in 1967, Elix was appointed Lecturer in Chemistry at the Australian National University (ANU) in Canberra, where he eventually rose to become a full Professor. His research focus shifted permanently after he attended a semester-long course on lichens delivered at ANU by the eminent Norwegian lichenologist Eilif Dahl during Dahl's Australian sabbatical in 1969–70. Elix accompanied Dahl into the field, sparking an intensive, nationwide collecting campaign that ultimately established the bedrock of the lichen collection at the Australian National Herbarium (CANB). Though initially drawn to the group as a natural products chemist, Elix gradually mastered lichen taxonomy, specialising in the family *Parmeliaceae*. He published landmark treatments on *Hypogymnia* in Australasia (1979) and undertook a comprehensive revision of the vast, intricate genus *Xanthoparmelia* across the Southern Hemisphere. He was instrumental in ensuring that lichens were thoroughly represented in the multi-volume *Flora of Australia* project. He received the Acharius Medal from the IAL in 2004. He described numerous taxa, including genera such as *Canoparmelia* Elix & Hale, *Paraparmelia* Elix & J. Johnst. and *Relicinopsis* Elix & Verdon, and issued an exsiccatae series of Australian lichens. The genera *Elixia* Lumbsch, *Jackelixia* S.Y. Kondr. *et al.*, *Melanelixia* Essl., and *Elixjohnia* S.Y. Kondr. & Hur are named after him. His herbarium is housed at CANB. Ref.: *Pers. comm.*; Kantvilas (2005, 2015); McCarthy & al. (2001); Nash (2004).



Elvebakk, Arve (1951–) – Born in Lødingen in the Lofoten archipelago, Nordland, Norway, he was the son of a shopkeeper in the small fishing village of Rinøyvåg, and later in Steigen. As a boy, he was fascinated by the diverse biology of the region's rich seashore communities, initially focusing on littoral invertebrates. When he entered the University of Trondheim, he chose to study biology and gradually specialised in botany. His *cand.real.* thesis (1979), supervised by Olaf I. Rønning (1924–2018), investigated the vegetation of Brøggerhalvøya on Svalbard. He then moved to the University of Tromsø, where he became increasing-

ly involved in polar research, earning his doctorate (*dr.scient.*) in 1989 with a dissertation entitled *The biological zones of Svalbard based on botanical data*. Over time, Elvebakk redirected his research towards lichenology. He collaborated with Hannes Hertel to produce a definitive checklist of Svalbard lichens (1996), and later co-authored a comprehensive flora of the archipelago's macrolichens with Tor Tønsberg and Alan Øvstedal (2007). In 2006, he was appointed director of the Tromsø Arctic-Alpine Botanic Garden, though he consistently maintained his lichenological research. He later turned his attention to the Southern Hemisphere, conducting extensive taxonomic work on the family *Pannariaceae* in southernmost South America and New Zealand. Now a Professor Emeritus at the Arctic University Museum of Norway, he has described numerous new lichen taxa. His herbarium is housed at TROM. Ref.: *Pers. comm.*



Erichsen, Christian Friedo Eckhard **(1867–1945)** – Born in Knifzig (now Knivsig) in the Tønder district of Schleswig, then part of the Kingdom of Prussia, now within Denmark. His mother belonged to the von der Hellen family, a wealthy land-owning and historic patrician family from the Elbe-Weser region, while his father was a land-owning farmer. Erichsen trained as a teacher in Hamburg between 1884 and 1890, spending the remainder of his professional career working as a primary school teacher (*Volksschule*) in the city. From an early age, his primary interest lay in botany, initially focusing on flowering plants, and he regularly attended botanical lectures during his residency in Hamburg. His fascination with lichens was sparked around the turn of the century, following an intensive period spent studying the complex taxonomy of brambles (*Rubus*). He established contact with Heinrich Sandstede and subsequently collaborated with most of the leading German lichenologists of his era, most notably Alexander Zahlbruckner, whom he visited in Wien (Vienna). Erichsen also travelled extensively abroad to collect specimens and examine European herbaria. He was particularly drawn to Scandinavia, making several excursions to the region and forging a close friendship with A. Hugo Magnusson in Göteborg. Despite these travels, his principal research focused on the lichen flora of North-west Germany, which he charted in meticulous detail. Although the outbreak of the Second World War disrupted his plans to complete a comprehensive flora of the region, the work was eventually published posthumously in 1957. It remains celebrated as an outstanding exemplar of a critical local flora, reflecting Erichsen's thorough methodologies and his willingness to consult leading foreign experts. Erichsen was also a world authority on the *Pertusariaceae*, a notoriously difficult family. At Zahlbruckner's personal invitation, he authored the definitive treatment of this family for the *Rabenhorst's Kryptogamen-Flora*. His herbarium is housed at HBG. Ref.: Almborn (1951); Kärnefelt & al. (2012); Mattick (1954).

Eriksson, Ove Erik **(1935–2025)** – Born in Stockholm, Sweden, he developed a keen interest in botany during his school years after a teacher gave him a flora for his thirteenth birthday, which he used avidly. Four years later, he read a paper on vascular plant pyrenomycetes by the Uppsala mycologist Lennart Holm (1921–2012), which inspired him to



hunt for "black dots" on leaves and identify them. When he entered Uppsala University in 1955, he specialised in botany and met Holm, who subsequently supervised his doctoral thesis, *Studies in graminicolous pyrenomycetes from Fennoscandia*, defended in 1967. Shortly thereafter, he was appointed Lecturer in Botany at Umeå University, where he spent his entire academic career, rising to the rank of Professor in 1995. Many of the taxa Eriksson investigated belonged to the bitunicate fungi, a group whose flawed taxonomy prompted him to undertake a sweeping, broader revision of all related groups, including lichenised fungi. This culminated in his landmark paper, *The families of bitunicate ascomycetes* (1981), in which he recognised 195 families and introduced new morphological terminology, including the term *hamathecium,* now universally adopted to describe the support hyphae or tissues located between asci. Despite these advances, many taxonomic anomalies remained unresolved, such as the enigmatic *Psoroglaena cubensis*, the type species of the *Psoroglaenaceae*. Eriksson successfully traced this species in Cuba and, on the very same tree, discovered a remarkable new foliicolous lichen that he later described as *Flakea papillata* (1992). Around this period, he also spearheaded a collaborative project sequencing and analysing the DNA of Swedish ascomycetes, a pioneering avenue of research in which his student Sara Landvik (1963–) earned her doctorate. This work directly laid the foundation for a restructured, higher-level fungal taxonomy comprising four subphyla and thirteen classes. Throughout his career, Eriksson focused resolutely on the classification of higher taxa. To support this objective, he founded the journal *Systema Ascomycetum* in 1982, editing it until 1997 (jointly with David Hawksworth from 1985 onwards). From 1997 until it ceased publication in 2006, the journal ran as *Myconet*, evolving into an indispensable global authority on the taxonomy of lichen genera and families, a brilliant, modern alternative that ultimately superseded Zahlbruckner's historic classification system. He has described several taxa, including the genus *Flakea*. His herbarium is housed at UME and UPS. Ref.*: Pers. comm.*



Ertz, Damien (1977–) – Born in Liège, Belgium, he was the son of a drafting technician. During his school years, he developed a deep fascination with the natural environment, particularly butterflies. When he began his undergraduate studies at the University of Liège in 1995, he chose to read biology. His initial interest in entomology progressively guided him towards botany, where he first turned his attention to bryophytes, a group that was poorly documented in Belgium at the time. His introduction to lichenology occurred during his university years when he studied the biodiversity of calcareous rock substrates under the guidance of Emmanuël Sérusiaux. In 2007, he earned his doctorate, co-supervised by Sérusiaux and Paul Diederich, focusing on the taxonomy of several genera within the *Roccellaceae*. Following his graduation, Ertz worked in various biological laboratories at the University of Liège until 2012, when he was appointed as a researcher at the National Botanic Garden of Belgium (rebranded in 2014 as the Meise Botanic Garden). Although he maintains a particular research focus on

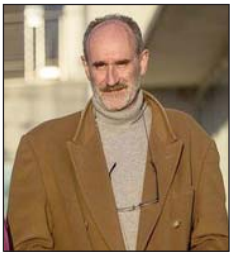
the *Arthoniales*, he has worked extensively on diverse fungal groups worldwide, integrating an array of analytical methodologies with a strong emphasis on molecular phylogenetic evidence. He has described numerous taxa, including several genera such as *Austroroccella*, *Crocellina*, *Dimidiographa*, *Fulvophyton*, *Gyrographa*, *Henssenia*, *Iselonactis*, *Oevstedalia*, *Psoronactis*, *Sparria* and *Vigeronia*. The genus *Ertzia* B.P. Hodk. & Lücking is named after him. His herbarium is housed at BR. Ref.*: Pers. comm.*

Eschweiler, Franz Gerhard (1796–1831) – Born in Köln, at that time part of France (now Nordrhein-Westfalen, Germany), where his father served as a judge. After completing his secondary education at the *Gymnasium*, he studied law in Bonn before shifting his focus to mathematics. He subsequently moved to the University of Landshut, where he graduated with a medical doctorate in 1824. During his university years, he developed a profound interest and formidable skill in the natural sciences, particularly botany. Through these activities, he forged a close friendship with Carl F. P. von Martius, who was a central figure in the Regensburg Botanical Society. In 1827, Eschweiler moved to Regensburg to lecture in natural history at the Lyceum, regularly deputising for the institution's frequently absent director, David Heinrich Hoppe (1760–1846). Eschweiler harboured a deep research interest in fungi, lichens, and mosses. He was especially fascinated by their reproductive structures, using spore morphology to construct a radically new classification scheme in his treatise *Systema Lichenum* (1824), which developed entirely independently of contemporaneous attempts by Antoine Laurent Apollinaire Fée. His system received little attention at the time, primarily because mainstream lichenology remained firmly anchored in the macromorphological traditions of Erik Acharius, long before the microscopic breakthroughs of the Italian-Silesian school in the 1850s. Eschweiler also authored the lichenological portion of Martius's monumental multi-volume project, *Flora Brasiliensis*. Despite a short life severely disrupted by chronic ill health, he described numerous new tropical and European taxa. His herbarium is housed at M. Ref.: Hertel (1984); Pongratz (1963).

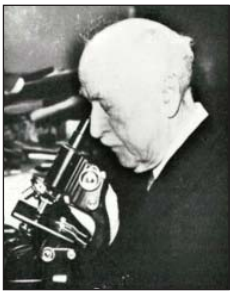


Esslinger, Theodore Lee (1944–) – Born in Spokane, Washington, USA, he began studying biology at Eastern Washington University before transferring to the University of Idaho, where he completed his MSc degree in 1969. Following his graduate studies, he was awarded a scholarship to Duke University to work under the prominent lichenologists Chicita F. and William L. Culberson. In 1974, he earned his PhD with a dissertation on the chemotaxonomy of the brown parmelioid lichens. This research laid the critical scientific and taxonomic groundwork that allowed him to formally establish the genus *Melanelia* in 1978. Upon graduating, Esslinger accepted a postdoctoral research position at the Smithsonian Institution, collaborating closely with Mason Hale until 1976. During this period, in 1975, he joined the faculty of North Dakota State University in Fargo, where he would spend the remainder of his academic career, later becoming Professor Emeritus. Esslinger has published an extensive array of new taxa, focusing predominantly on the families *Parmeliaceae* and *Physciaceae*.

He is also highly regarded for creating long-running digital compendia for lichen taxonomy, such as the cumulative *Recent Literature on Lichens* index. The genus *Esslingeriana* Hale & M. J. Lai is named after him. His herbarium is housed at NDA. Ref.: Hertel & al. (2017).

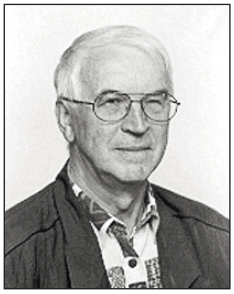


Etayo Salazar **Javier** Angel **(1959–) –** Born in Pamplona, Navarra, Spain, he completed his university training in the biological sciences, focusing his early academic research on botany and cryptogamic plant communities. He began extensive fieldwork surveying the epiphytic microflora of northern Spain, earning his PhD in 1989 from the University of Navarre with a doctoral thesis on the epiphytic lichens of northern Navarre. Throughout the late 1980s and 1990s, Etayo expanded both his geographical and taxonomic scope, publishing numerous floristic surveys and ecological papers documenting the corticolous, saxicolous, and foliicolous lichen communities of the Pyrenees, Galicia, the arid zones of mainland Spain, and the Canary Islands. Increasingly captivated by specialised, highly overlooked lichenicolous fungi, he progressively shifted his research agenda to become a leading authority on their taxonomy. He worked in close and frequent collaboration with other eminent European mycologists, most notably Paul Diederich, with whom he co-authored extensive revisions and described dozens of new taxa. His taxonomic investigations eventually expanded into the Neotropics, resulting in seminal checklists, catalogues, and extensive monographs detailing the rich, uncharted lichenicolous mycobiota of South and Central America, including Ecuador, Colombia, Bolivia, and Guatemala. Professionally, Etayo worked for many years as a high school biology teacher in Pamplona while simultaneously serving as a senior researcher at the Aranzadi Science Society (*Sociedad de Ciencias Aranzadi*) in San Sebastián, where he curated collections, promoted amateur cryptogamic involvement, and deposited important reference materials. Following his retirement from official duties at Aranzadi, he remains active in documenting global fungal diversity. Over his multi-decade career, Etayo authored or co-authored more than 200 scientific publications, and described well over 140 fungal and lichen species new to science. He established several new fungal lineages, such as the genus *Lichenotubeufia*. The genus *Etayoa* Diederich & Ertz, alongside several species, have been named after him. His large private herbarium stands as one of the most significant private cryptogamic repositories in Europe. Ref.: Nimis, *pers. comm.*



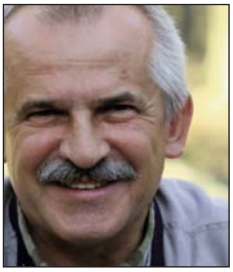
Evans, Alexander William **(1868–1959)** – Born in Buffalo, New York, USA, he moved with his family to New Haven, Connecticut, following his father's death in 1880, remaining a resident of the city for the rest of his life. After high school, he entered Yale University, where he graduated with a PhB in 1890 and obtained a medical degree (MD) in 1892. Although he completed a two-year clinical internship at the New Haven City Hospital, he never entered medical practice, choosing instead to pursue advanced botanical research at the University of Berlin.

Throughout his undergraduate years, he had harboured a deep fascination for plants and published three influential papers on liverworts, rapidly earning recognition as an expert in hepaticology. He returned to Yale as an Instructor in Botany (1895–1901), completed his PhD in botany in 1899, and was appointed Assistant Professor in 1901 before serving as the Daniel Cady Eaton Professor of Botany from 1906 until his retirement in 1936. Though universally acknowledged as a pre-eminent global authority on hepatics, Evans also maintained a lifelong interest in lichenised fungi. In 1926, he published his first lichenological paper, a comprehensive catalogue documenting the lichen flora of Connecticut. Shortly before his academic retirement, he made the unusual decision to abandon bryophytes entirely to dedicate his remaining years to lichenology. This late-career shift yielded a continuous stream of publications focused almost exclusively on the notoriously difficult genus *Cladonia*, a group in which he became a leading international authority. Evans was the pioneer who introduced Yasuhiko Asahina's microcrystallisation methods to North America, becoming the first on the continent to apply systematic microchemical crystal data to resolve species boundaries. Despite this innovation, he employed chemical data with meticulous caution, relying heavily on acute field observations and strictly confining his writing to species from geographical regions he had personally surveyed. Beyond his research, Evans served as the editor of the *Bulletin of the Torrey Botanical Club* for a decade and later as an associate editor of *The Bryologist*. He described several new *Cladonia* species, all of which remain taxonomically valid today. His herbarium is housed at YU. Ref.: Hale (1960); Reeder & Reeder (1960); Schuster (1960).



Fabiszewski, Jerzy (1936–2024) – Born in Tosie in the Siedlce region of Poland. After completing high school in Wolsztyn, he began his studies in natural sciences at the University of Wrocław in 1954. He subsequently earned his doctorate there with a thesis focusing on the lichen communities of the Śnieżnik and Bialskie Mountains in the Sudetes, supervised by the ecologist Stanisław Tołpa (1901–1996). Maintaining his focus on the ecological role of lichens in vegetation, he was awarded his habilitation degree in 1975 for his research on their significance in Canadian peat bogs. From 1982, he served as a professor of botany at the Agricultural University of Wrocław (attaining the rank of ordinary professor in 1988). Fabiszewski was deeply interested in the role of lichens and other plants as bioindicators. He became the most internationally active Polish botanist of his generation, forging strong professional links with Canada and the USA. He was also a highly regarded educator who supervised generations of students. As a leading expert on the flora of the Sudeten Mountains, he published a popular atlas on the region's plants which saw several editions. Furthermore, he participated in two polar expeditions to Spitsbergen and Antarctica, where he studied plant succession in front of retreating glaciers. He did not describe any new taxa. His herbarium is housed at BRSL. Ref.: Polish Wikipedia.

Fałtynowicz, Wiesław (1952–) – Born in Suwałki in the Podlaskie region of Poland. Following his early education locally and high school in Gdańsk, he began studying biol-



ogy in 1971 at the newly established University of Gdańsk. Although the resident lichenologist Tadeusz Sulma was a professor of general botany there, Sulma was no longer active in lichenology at the time. Fałtynowicz was therefore primarily guided by Zygmunt Tobolewski. In 1976, he earned his master's degree with a thesis on the undergrowth vegetation of the *Cladonio-Pinetum* association, supervised by the ecologist Hanna Piotrowska (1925–2014). Piotrowska also supervised his Ph.D. (1980), which investigated the ecological role of lichens in the development of this plant association. Following his doctorate, he was promoted to *adiunkt* (assistant professor). His research shifted more definitively into pure lichenology with his habilitation dissertation, which provided an ecological and biogeographical study of the lichens of West Pomerania. During the 1980s, he worked closely with Sulma, who had returned to lichenological research, and together they published several floristic and phytogeographical papers. During this decade, Fałtynowicz held various administrative roles at the University of Gdańsk, heading both the Laboratory of Taxonomy and Plant Geography and the Laboratory of Ecology and Nature Conservation. In 1983, he published his highly regarded bibliography of Polish lichenology. He was appointed professor at the University of Wrocław in 1999, where he continued his research into biodiversity and nature conservation, frequently co-authoring works on the distribution of Polish lichens with Jerzy Fabiszewski. His herbarium is housed at UGDA. Ref.: Polish Wikipedia; *pers. comm.*



Farkas, Edit (1959–) – Born in Budapest, Hungary. After completing her local basic education, she studied biology at Eötvös Loránd University in Budapest. Between 1979 and 1985, she studied lichens under the supervision of Klára Verseghy at the Hungarian Natural History Museum, producing a thesis on lichens and air pollution in the Budapest region. She defended her doctoral thesis on the lichens of this area in 1991. Farkas has also worked extensively on tropical lichens. From 1984, she collaborated with Antonín Vězda on foliicolous lichens and participated in expeditions to East Africa, contributing significantly to the study of foliicolous lichens there and in South Africa. She was initially employed by the Hungarian Academy of Sciences, and later joined the HUN-REN Centre for Ecological Research at the Institute of Ecology and Botany in Vácrátót. At the institute, she serves as a Scientific Advisor and acts as the curator of its herbarium. Throughout her career, she has described several new taxa and issued a distributed set of exsiccatae, consisting mainly of foliicolous lichens, in memory of Vězda. The genus *Farkasiella* S.Y. Kondr. & Lőkös is named after her. Her herbarium is housed at BP and VBI. Ref.: *Pers. comm.*; Hertel & al. (2017).

Farlow, William Gilson **(1844–1919)** – Born in Boston, Massachusetts, USA, and educated primarily at Harvard University, where he graduated with a medical degree in 1870. He harboured a keen interest in plants from childhood, a pursuit encouraged by his father,



John Smith Farlow (1817-1890), a wealthy businessman. At Harvard, Farlow came into contact with Asa Gray (1810–1888), who recognised his botanical talent and employed him as an assistant following his medical examinations; Farlow maintained this post for two years. In 1872, he travelled to Europe to specialise in cryptogamic botany. Before settling in Strassburg (now Strasbourg) to study under Anton de Bary from 1873 to 1875, he toured northern Europe to consult other cryptogamists. These included the eminent phycologist Jacob D. Agardh (1813–1901) in Lund and John E. Areschoug (1811–1887) in Uppsala, both of whom he had previously corresponded with regarding algae (a subject on which Farlow had published in 1871). During his time in Uppsala, where he was later awarded an honorary doctorate, he also met the distinguished lichenologists Elias and Thore M. Fries, having been introduced to them by Edward Tuckerman. Although Farlow was principally a plant pathologist and never a narrow specialist in lichenology, he maintained a lifelong interest in lichens and encouraged numerous American scholars, including Bruce Fink, to pursue the discipline. Upon returning to the United States, Farlow was appointed professor of botany at the Bussey Institution in Jamaica Plain, near Boston, before becoming professor of cryptogamic botany at Harvard in 1879, the first chair of its kind in the United States. He founded and directed the cryptogamic herbarium (now the Farlow Herbarium, FH) and established a dedicated laboratory for cryptogamic research. He amassed a comprehensive cryptogamic collection, notably securing vital historical repositories such as Tuckerman's lichen herbarium. Farlow described only a limited number of taxa, possessing a known distaste for "species-making". The fungal genus *Farlowiella* Sacc. is named after him. His herbarium is housed at FH. Ref.: Riddle (1920); Setchell (1927); Thaxter (1920).



Faurie, Urbain Jean (1847–1915) – Born in Monistrol-d'Allier, France, and educated for the priesthood at the Paris Foreign Missions Society, where he was ordained in 1873. He harboured a keen interest in natural history from his youth, a pursuit he seamlessly integrated with his evangelical assignments upon his departure for Japan in 1873. Arriving in Tokyo the following year, Faurie came into contact with a rapidly modernising nation, where local authorities and foreign researchers recognised his botanical talent as he travelled through poorly mapped areas. He maintained various missionary posts across Japan for decades, notably serving in Niigata and Hakodate (Hokkaido), using these stations as bases for relentless field exploration. In the early 20th century, he expanded his travels to wider East Asia to specialise in regional flora. Before settling permanently in Formosa (now Taiwan) from 1913 until his death, he toured the Korean Peninsula to consult and collect, making three extensive botanical surveys in 1901, 1906, and 1907. These included pioneering excursions to the remote island of Quelpaert (now Jeju Island), where he collaborated with and inspired fellow missionary-botanist Émile Joseph Taquet (1873–1952). During his final years in Taihoku (Taipei), where he worked despite failing health,

he also met the distinguished Japanese botanist Bunzo Hayata (1874–1934), who heavily consulted Faurie's comprehensive gatherings for his monumental *Icones Plantarum Formosanarum*. Although Faurie was principally an active missionary priest and never a narrow academic specialist, he maintained a lifelong passion for field botany and encouraged numerous contemporary scholars to study the complex biogeography of East Asia. He amassed a comprehensive collection numbering hundreds of thousands of specimens, successfully securing vital botanical data from high-altitude peaks like Mount Morrison (Yushan). Faurie described only a limited number of taxa himself, preferring instead to distribute his duplicates globally to leading institutions. The fungal genus *Fauriella* Sacc. (as well as hundreds of vascular species) is named after him. His primary herbarium and historical repositories are housed at P, while his substantial lichenological legacy, comprising thousands of historical specimen, is at KYO and TNS, with duplicates distributed to major international herbaria. Ref.: Hayata (1916); Kakuta (1992); Chang & al. (2021).



Fée, Antoine Laurent Apollinaire **(1789–1874)** – Born in Saint-Vincent-d'Ardennes (now Ardentes), Indre, France. He served in the military medical corps as a sub-assistant pharmacist during the Peninsular War, later studying pharmacy at Strasbourg, where he qualified in 1815. He subsequently established himself as a pharmacist in Paris; it was here that he met Christiaan Hendrik Persoon (1755–1837), who steered his interests towards lichenology. In 1825, Fée took up a teaching post at the *Hôpital d'Instruction* in Lille, before returning to Strasbourg, where he graduated with a medical doctorate in 1832. In 1833, he was appointed professor of botany and director of the Strasbourg botanical gardens. Following the French defeat in the Franco-Prussian War and the subsequent German annexation of Alsace-Lorraine, he refused to remain in Strasbourg and relocated to Genève, Switzerland. He died in Paris whilst on a temporary visit to see family and undergo medical treatment. Like Persoon, Fée was deeply intrigued by the internal morphology of lichen fruiting bodies. In his seminal work, *Essai sur les cryptogames des écorces exotiques officinales* (1824–1825), he championed the groundbreaking principle that spore characteristics provided the most reliable foundation for generic delimitation. This insight effectively initiated a modern taxonomical framework for lichen genera. He described several genera that remain widely accepted today, including *Erioderma* and *Enterographa*. Fée focused heavily on exotic lichens, many of which he gathered directly from the imported medicinal barks utilised in his pharmaceutical practice. His herbarium was reportedly stored in the cellar of the Royal Palace in Petrópolis. After his death it was purchased by the Rio de Janeiro Botanical Garden Herbarium (RB). Müller Argoviensis also took duplicates before the herbarium was shipped to Brazil; these are now in G, with some additional duplicates in PC. Ref.: Berman (1971); Bureau (1874); Minks (1878).

Feige, Guido **Benno (1937–2007)** – Born in Salzwedel, Sachsen-Anhalt, Germany. He commenced his university education studying chemistry at the University of Jena in 1956, but fled the German Democratic Republic for West Germany in 1958. He resumed his



studies in natural history at the University of Würzburg, where he met Otto Ludwig Lange, who steered him towards lichen physiology. Feige earned his doctorate at Würzburg in 1967 with a pioneering thesis investigating the carbon and phosphate metabolism of symbiotic partners; his methodology famously utilised radioactive isotopes to map the metabolic relationships between mycobionts and photobionts. From 1970 to 1980 he was assistant at the University of Köln, and thereafter professor of botany at the University of Essen until 2004. There he worked mainly on lichen floristics and chemotaxonomy, especially of the *Roccellaceae*. In 1998 he published a valuable account of the etymology of generic lichen names. He issued two exsiccatae series: one of the *Umbilicariaceae* (114 numbers) and one of "Lecanoroid lichens" (125 numbers), partly with T. Lumbsch. The genus *Feigeana* Mies, Lumbsch & Tehler is named after him. His herbarium is housed at ESS. Ref.: Jensen (2007); Kärnefelt & al. (2012).



Felippone, Florentino (1852–1939) – Born in Paysandú, Uruguay, into a middle class family; his father, Lázaro, was an Italian merchant who settled in South America, and his mother, Cruz Bentos, was Uruguayan. Following the death of his father, his childhood was severely disrupted by the Siege of Paysandú (1864–1865). His widowed mother fled with her children across the Argentine border to Concepción del Uruguay, where General Justo José de Urquiza permitted the displaced family to seek refuge at his estate, the Palacio San José. Felippone completed his schooling in Buenos Aires before returning to Uruguay in 1872 to pursue medical studies at the university in Montevideo. He served as a demonstrator in anatomy during his studies and graduated with his medical doctorate in 1883 after defending a thesis on public hygiene. In 1885, he travelled to Paris to study the natural sciences and chemistry. Upon his return, he was appointed professor of chemistry at the University of Montevideo and served as a physician for the *Sanidad Marítima* (Marine Sanitary Board). Felippone harboured a passionate interest in natural history, eventually serving as the subdirector of the National Museum of Natural History in Montevideo. He published the region's earliest papers on cryptogams and actively collected lichens and mosses, which formed the reference material for numerous South American lichenological and bryological treatments. The moss genus *Felipponea* Broth. is named after him. His herbarium is housed at LIVU. Ref.: Schulkin (1958).

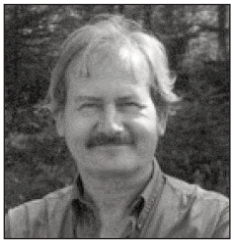


Fellman, Nils **Isak (1841–1919)** – Born in Lappajärvi, Finland, he was the son of Helena Augustina (née Tawaststjerna) (1804–1884), who came from a prominent and historic Finnish-Swedish noble lineage, and of Jacob Fellman (1795–1875), a renowned clergyman and Lapland scholar whose deep interests in natural history, linguistics, and Sami culture profoundly influenced his son. Following his local education, Fellman entered the University of Helsinki in 1859, graduating with a *philosophiae*

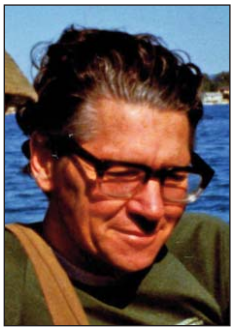
candidatus (*fil.kand.*) degree in 1862. His botanical education there was overseen by William Nylander, who served as a major source of academic inspiration. In 1863, Fellman embarked on a notable botanical expedition to eastern Lapland alongside fellow naturalists Theodor Simming (1834–1870) and Henrik August Kullhem (1839–1877). The extensive lichen collections amassed during this trek were later evaluated and published by Nylander in 1866. Based on this material, Fellman issued his own milestone exsiccatae series in 1864, *Lichenes arctici collecti aestate 1863 in Lapponia Orientali* (comprising 224 numbers), which stands as his finest contribution to lichenology. Following Nylander's permanent relocation to Paris in 1863, the local infrastructure for advanced lichenology dwindled, and Fellman gradually abandoned botany in favour of a career in jurisprudence. He qualified with a *candidatus juris* (*cand.jur.*) degree in 1871. Professionally, he rose through the legal ranks to serve as a Court Councillor (*hovioikeudenneuvos*) in Vaasa and later as a senator. Despite his legal obligations, he never lost his passion for the far north; he meticulously edited and published his father's historical and scientific manuscripts regarding Finnish Lapland into a monumental four-volume treatise (1910–1915). Fellman passed away in Helsinki. His herbarium is housed at H. Ref.: Sennikov & Kozhin (2018); Tyynilä (2003).



Ferraro, Lidia Itatí (1951–) – Born in Corrientes, Argentina, she pursued her advanced academic training at the National University of the Northeast (UNNE), qualifying as a Professor in Biology and earning her Licentiate degree in Botany in 1975. Based primarily at the Institute of Botany of the Northeast (IBONE-CONICET), she advanced through the academic ranks to become a principal researcher. She was awarded her doctorate in biology by the National University of Comahue, defending a systematic and biological thesis on foliicolous *Gomphillaceae* under the guidance of Gernot Vobis. She later stepped into major institutional leadership roles, notably serving as the Dean of the Faculty of Exact and Natural Sciences at UNNE from 2010 to 2018. Ferraro focused her life's work on the taxonomy, biodiversity, and distribution of lichens across southern South America, emerging as a leading authority on the neotropical lichen flora. Between 1975 and 2000 she authored or co-authored many papers on the lichen biota of Argentina and neighbouring regions. Her extensive fieldwork in northeastern Argentina and neighbouring areas of Paraguay and Brazil culminated in numerous foundational works, including a monograph on foliicolous lichens of Argentina and Paraguay. Throughout her career, she established highly productive, long-term international collaborations with prominent lichenologists, including Teuvo Ahti, Robert Lücking, John A. Elix, André Aptroot, and David J. Galloway. A prominent highlight of these partnerships was her primary authorship of a groundbreaking global monograph on the genus *Gyalectidium* published in 2001 with Robert Lücking and Emmanuël Sérusiaux. This landmark international treatise comprehensively surveyed the global taxonomy and ecogeography of the genus, introducing seventeen species new to science and radically re-evaluating the morpho-anatomical diversity of their unique asexual conidiomata (hyphophores). Throughout her career, Ferraro described many new taxa. The genus *Ferraroa* Lücking, Sérusiaux & Vězda was named in her honour. Her extensive, meticulously documented collections are primarily housed at CTES. Ref.: Nimis *pers. comm*.

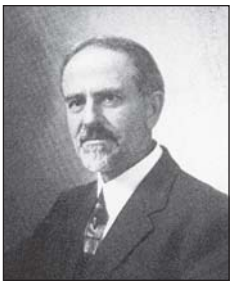


Feuerer, Tassilo (1949–) – Born in München, Bayern, Germany. He discovered his fascination with lichens whilst studying biology at the University of München, where Hannes Hertel supervised his postgraduate work on the non-yellow species of the genus *Rhizocarpon*. Following his academic training, he dedicated his career to systematic mycology and lichenology, moving to northern Germany upon his appointment in 1984 as Curator of Lichens at the Hamburg Herbarium (HBG), based within the *Biozentrum Klein Flottbek* at the University of Hamburg. Feuerer's primary importance to lichenology lies in his extensive research into the chemical systematics, phylogeny, and biodiversity mapping of the genus *Rhizocarpon* and various terricolous lichen communities. As a pioneer in biodiversity informatics, he also significantly advanced the field by compiling a monumental global taxonomic checklist of lichens and managing comprehensive digital databases to track macro-distribution patterns. Beyond Germany, Feuerer led major international field expeditions to South America, notably co-authoring vital inventories on the lichenised fungi of Bolivia. Following his retirement, a dedicated *Festschrift* was published in 2015 in the journal *Graphis Scripta* by his international peers to honour his lifelong curatorial and scientific legacy. The genus *Tassiloa* S.Y. Kondr. *et al.* is named after him. His herbarium is housed at HBG. Ref.: Kärnefelt & al. (2012).



Filson, Rex Bertram **(1930–)** – Born in Sydney, Australia. Following his basic education, he trained as a carpenter whilst maintaining a keen interest in natural history. He worked in the carpentry trade across various parts of Australia until 1961, when he was recruited by the Antarctic Division of the Department of External Affairs. Serving as a station carpenter at Mawson Base during the 1962 expedition, he developed a fascination with the vegetation of the frozen continent, which was dominated by cryptogams, particularly lichens. Upon his return, Filson collaborated with the National Herbarium of Victoria (MEL), publishing on Antarctic lichens and mosses. He joined the herbarium staff permanently in 1965, continuing his extensive lichen collection field trips across the Australian continent. In 1971, he was awarded a prestigious Winston Churchill Fellowship, which facilitated international travel to examine vital type specimens at major European herbaria, including those in Kew, London, and Uppsala. This fellowship also enabled him to commence formal university studies. Under the supervision of George Scott (1933–1998), Filson graduated with an M.Sc. from Monash University in 1979, focusing his thesis on the lichen genus *Cladia* in Australia. He was subsequently appointed senior botanist within the Department of Crown Lands and Survey in Melbourne, where he systematically reorganised the state's lichen collections and produced fundamental reference catalogues. These included Australia's first comprehensive lichen checklist (1983) and an index of type specimens (1986). Monash University later awarded him a Doctor of Science (D.Sc.) degree in 1988 in recognition of his monumental research output. He contributed substantially to the early lichen fascicles of the *Flora of*

Australia project and described numerous new taxa. The genus *Filsoniana* S.Y. Kondr. & al. is named after him. His herbarium is housed at MEL. Ref.: Filson (1992).



Fink, Bruce (1861–1927) – Born in Blackberry, Illinois, USA. He earned his primary Bachelor of Science degree in 1887 from the University of Illinois, where he returned to complete an M.Sc. in 1894 under the influence of Thomas Burrill (1839–1916) and Stephen Alfred Forbes (1844–1930), both of whom steered him towards natural history. He continued his advanced studies at Harvard University, where he worked alongside William Gilson Farlow, the leading American cryptogamist, and graduated with an M.A. in 1896. His additional studies in zoology and geology proved invaluable during his tenure as a high school principal in Mount Vernon, South Dakota, where he amassed extensive local plant collections. In 1899, Fink completed a doctorate at the University of Minnesota with a thesis focused on the life history of the genus *Rumex*, a project aligned with the state flora initiative established by Conway MacMillan (1867–1929). Professionally, he served as professor of biology at Upper Iowa University in Fayette from 1892 to 1903, before accepting the chair of botany at Grinnell College (then Iowa College), where he taught until 1906. He was subsequently appointed professor of botany at Miami University in Oxford, Ohio, a position he retained until his sudden death. Fink was the first major American lichenologist to abandon the traditional view of lichens as an autonomous plant group, treating them explicitly as lichenised fungi within his *Lichens of Minnesota* (1910). He was a pioneer in the typification of generic names, though he adhered to the "first species rule", a nomenclatural method subsequently rejected by international botanical codes. His monumental volume, *The Lichen Flora of the United States*, the first comprehensive manual of its kind for the country, was completed posthumously and published in 1935 by his dedicated research assistant, Joyce Hedrick. Throughout his career, he described numerous new taxa, primarily at the species level. The genus *Finkia* Vain. is named after him, based on his Puerto Rican collections. His herbarium is housed at MICH. Ref.: Braun & Shull (1928); Hendrickson (1927); Pammel (1928).

Flagey, Camille (1837–1898) – Born in Besançon, Doubs, France. Following his local education, he studied industrial engineering at the prestigious *École Centrale des Arts et Manufactures* in Paris. He subsequently established himself in Montferrand-le-Château as both a prominent industrialist and the co-owner of a major regional glassworks facility. In 1859, he revolutionised local production by designing and patenting a highly efficient coal-gas furnace system. His interest in botany developed later in life, and from 1878 onwards, he dedicated himself to the study of cryptogams under the tutelage of the Besançon pharmacist and botanist Justin Paillot (1828–1891). In 1885, Flagey relocated to Algeria to oversee engineering projects, a move that simultaneously enabled him to pioneer scientific lichen research across North Africa. In addition to his extensive floristic and taxonomic publications, he authored a theoretical paper staunchly defending the autonomy of lichens, vigorously contesting Simon Schwendener's newly proposed theory of algal-fungal symbiosis. His most enduring contributions to the discipline are two meticulously

prepared exsiccatae series: one documenting the lichen flora of Franche-Comté and the other dedicated to the lichens of Algeria. His herbarium is housed at AL and PC. Ref.: Magnin (1919); Renauld (1898).



Fletcher, Anthony ('Tony') (1944–) – Born in London, England, UK, but moved to Bradford, West Yorkshire, where he grew up. His parents were not academics and separated when he was ten, worsening the family's finances. Nevertheless he was determined to pursue university studies. After basic schooling he worked as a junior technician in the Chemistry Department at Queen Mary College, London, while taking evening classes to obtain A-levels. In 1962 he won a scholarship to the Mid-Essex Technical College, earning a bachelor's degree in botany and chemistry in 1966. He then worked as a research chemist in private industry but remained drawn to botanical research, having collected his first lichen at age nine. In 1967 he began studying marine biology at the University of North Wales, Bangor, and came into contact with Peter James, who became his lichenological mentor. In 1972 he earned a doctorate on the ecology of marine lichens under the phycologist William Eifion Jones (1927–2004). Fletcher became a leading authority on marine lichens, producing important identification keys. He then joined a project on seasonal population changes of seashore plants. In 1975 and 1978 he taught lichen courses in Brazil, meeting Marcelo P. Marcelli in São Paulo and assisting him in beginning studies of mangrove lichens. In 1978 Fletcher was appointed assistant keeper of botany at Leicester Museum, later becoming keeper of documentation and information retrieval. From 1986 to 1989 he worked as research associate with Mason Hale at the Smithsonian Institution, mainly on *Parmelia* taxonomy. In 1989 he returned to Leicester Museum and eventually became county ecologist for Leicestershire and Rutland, heavily involved in conservation. When he retired in 2009 he was Keeper of Natural History. He was active in the British Lichen Society in many roles, including conservation officer (1980–2002) and President (2000–2001). He has described a few taxa, including the genus *Rimelia* (with Hale). His herbarium is housed at LSR, with duplicates at BM, E, NMW and US. Ref.*: Pers. comm*.; Coppins & Giavarini (2003).



Flörke, Heinrich Gustav **(1764–1835)** – Born in Alt-Kalen, Herzogtum Mecklenburg-Schwerin (now Germany), the son of a Lutheran Pietist vicar and of a pastor's daughter. He studied theology and mathematics at the University of Bützow, Mecklenburg Vorpommern, for three years (1782–1785), thereafter serving as a private teacher in several families. At one point he accompanied one of his private pupils to Göttingen, where he made the acquaintance of Georg F. Hoffmann (whom he disliked) and Christiaan Persoon (who became a friend). He also acted as vicar in Kittendorf (1794–1797), a situation he found uncomfortable. He then turned to medical studies in Jena, and is known to have made extensive excursions in the Alps during this period. He subsequently spent sixteen years as editor of the *Oekonomische Encyklopädie* (= Economic Encyclopaedia). During this Berlin period he

was active in the *Gesellschaft naturforschender Freunde zu Berlin*, where, despite difficult circumstances, he became inspired to study lichens, probably by Carl Willdenow (1765–1812), a dominant figure at the time though not especially interested in lichens. Flörke maintained contact with several contemporary lichenologists in Germany, particularly Friedrich Weber (1781–1823) of Kiel, and also with foreign lichenologists including Erik Acharius, Jean-Baptiste Bory de Saint-Vincent, Christian Sommerfelt, and Göran Wahlenberg. During this period he published several lichenological papers. He was particularly interested in Cladonia (one species, Cladonia floerkeana, is named after him) and made important field studies to understand their variation. He was among the first to comment on ecological aspects of their distribution. He sharply criticised Acharius's new lichen system in 1810. In 1816 he became professor of natural history in Rostock, where he became known as a strict, conscientious andacher, also serving at times as dean and chancellor (1827–1829). He remained in Rostock until his death. During his time there he issued two exsiccatae series: the first on German lichens, begun in his Berlin period, and the second devoted solely to *Cladonia*. In financial hardship during his Berlin years he sold his herbarium to the *Gesellschaft*, but it was later destroyed in the bombing of the Berlin herbarium during the Second World War. Some duplicates and later collections survive in scattered herbaria, e.g. GOET and ROST. Ref.: Coëmans (1864); Kärnefelt & al. (2012); Müllerott (1961).



Flotow, Julius Christian Gottlieb Ulrich Gustav Georg Adam Ernst Friedrich von **(1788–1856)** – Born in Pitzerwitz, Neumark, Kingdom of Prussia (now Pstrowice in Poland), into a German noble family destined for a military career. He entered the military school in Landsberg (Gorzów), where he met Reverend Neuschild, who had a strong interest in botany and inspired von Flotow's own interest in the natural environment. He advanced to the rank of major but was badly wounded in the right shoulder at the battle of Grossgörschen in 1813 during the Napoleonic wars. He never fully recovered and retired from active Prussian cavalry field duty due to his progressive paralysis in 1824, moving to Hirschberg (now Jelenia Góra, Poland), where he resumed his earlier botanical interests. He became particularly interested in lichens, an interest further developed after he acquired a Schick microscope in 1838 (as noted in a letter to Elias Fries). He had first been introduced to lichenology by Kurt Sprengel and the *Medizinalrat* Johann Günther (1770–1852) while hospitalised in Teplitz (now Teplice in the Czech Republic), and had begun to appreciate lichens during a campaign in the Ardennes. In 1856, just one week before his death, he was awarded an honorary doctorate by the University of Breslau, where his research was supported by Christian Nees von Esenbeck. Parts of his private herbarium are now in WRSL. He worked mainly floristically but also described several new taxa, including genera such as *Catapyrenium*, *Catolechia*, *Diplotomma*, *Neuropogon*, and *Sarcogyne*. He played an important role in central European lichenology as friend and mentor to several influential lichenologists, including Körber, Meyen, Stein and Zwach. He issued two exsiccatae series: one on German lichens and a larger one devoted to lichens of the Riesengebirge and adjacent regions. Flotow's primary herbarium was originally sold by his

widow - for 6,000 Thaler - to B, where a large portion tragically burned during an air raid in World War II; fortunately, his major regional Silesian collections, types, and duplicate sets had been deposited at WRSL. Ref.: Bail (1889); Kärnefelt & al. (2012); Körber (1856); Nees von Esenbeck (1856).



Follmann, Gerhard (1930–2019) – Born in Kassel, Germany, the son of a high school teacher with strong interests in natural history, particularly geology. He studied natural history at the University of Marburg (1949–1952), with a short period in Innsbruck (1951). In 1955 he moved with his supervisor Hans-Joachim Bogen (1912–2002) to the Technical University in Braunschweig, where he completed a doctorate on the physiology of diatoms (1957). He was then employed as assistant at the same institution. In 1959 he unexpectedly obtained a research contract as an academic assistant and lecturer in botany at the *Universidad de Chile* in Santiago, where he became professor in 1964. The Chilean vegetation profoundly changed his botanical interests, leading him to lichens, which were abundant wherever he travelled. He became particularly interested in the *Roccellaceae*, the subject of most of his many publications. For chemical studies he collaborated closely with Siegfried Huneck. In 1962–63 he took part in an expedition to South Shetland and the Antarctic Peninsula, resulting in a paper on nitrophilous saxicolous communities, particularly those dominated by *Ramalina terebrata*. After the retirement of Fritz Mattick in Berlin, he was offered the curatorship there in 1966, a position he later left to become director of the Natural History Museum in Kassel (1970). He ended his career as professor of ecology and plant systematics in Köln, appointed in 1982. He travelled widely, especially to subtropical islands, and made important collections worldwide. He issued exsiccatae from the herbaria where he worked (Berlin, Kassel, Köln). The genera *Follmannia* C.W. Dodge and *Follmanniella* Peine & B. Werner, alongside many species, are named after him. His large private herbarium is housed at B and KOEL. Ref.: Kärnefelt & al. (2012); Werner & al. (1995).



Fóriss, Ferenc ('Franz') (1892–1977) – Born in Heves, Austro-Hungarian Empire (now Hungary), the son of a forester. During his youth, he spent considerable time immersed in the natural environment, systematically collecting plants for his personal herbarium. He turned his attention to collecting lichens during the winter months when flowering plants were unavailable. Recognising his dedication, his secondary school teacher arranged an introduction to György Timkó, the curator of the botanical collection at the Hungarian Natural History Museum in Budapest. At the age of 18, Fóriss began working at the museum as a volunteer. He maintained this free-time engagement even whilst pursuing his formal studies at the High School of Pedagogy in Budapest from 1911 to 1914. During this formative period, he befriended both Timkó and Ödön Szatala, both of whom strongly supported his lichenological studies. Fóriss sus-

tained his scientific research after relocating to northern Hungary to work as a high school teacher in Miskolc. Taxonomically, he published a notable revision of the *Diploschistes scruposus* complex, but his research interests remained primarily floristic. He focused intensely on the cryptogams of northern Hungary, particularly the Bükk Mountains, where he made numerous significant botanical discoveries. To document this unique regional flora, he distributed a highly regarded exsiccatae series titled *Lichenes Bükkenses exsiccati*. His herbarium is housed at BP, JPU and HOM. Ref.: Verseghy (1963).



Forssell, Karl Bror Jakob **(1856–1898)** – Born in Skara, Västergötland, Sweden. His mother, Maria Johanna (née Torin) (1828-1866), was the daughter of a manor owner, and came from a well-respected provincial class family deeply rooted in the agricultural and intellectual landscape of western Sweden; his father, Nils Edvard (1830-1883), was a veterinary surgeon with a keen interest in botany, and profoundly influenced his son's academic trajectory, guiding him towards natural history studies at Uppsala University. At Uppsala, Forssell became a standout pupil of Thore Magnus Fries, who assigned him the task of investigating the anatomical structure and ontogeny of cephalodia, a research topic explicitly designed to gain deeper empirical insights into the mechanism of lichenisation and Simon Schwendener's controversial theory of the dual nature of lichens. Forssell successfully defended his doctoral thesis in 1883, delivering a meticulously detailed and highly accurate cellular study that strongly validated Schwendener's symbiotic framework. Though his findings were initially met with widespread contemporary scepticism, Fries himself was gradually won over by the rigour of his student's work. In 1885, Forssell published a foundational treatise on the "Gloeolichenes", focusing on the challenging taxonomy of small, black, cyanophilous lichen genera; a pioneering work which was also largely underappreciated by his peers. After serving for a single year as a docent at Uppsala, he left academia in 1884 and relocated to Karlstad. There, he took up the directorship of the Karlstad Elementary School Teachers' Seminary and later worked as a master at the prestigious *Högre allmänna läroverket* (secondary school). For the remainder of his life, he published only minor regional floristic notes and educational textbooks. The genus *Forssellia* Zahlbr. is named after him. His private master herbarium and his extensive youth collections of algae and lichens were purchased and divided, being now hosted at UPS, S and GB. Ref.: Arvidsson (1999); Skårman (1898).



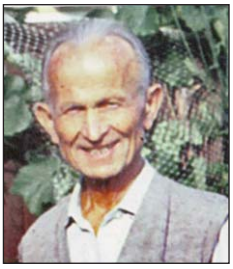
Forster, Johann **Georg(e)** Adam **(1754–1794)** – Born in Nassenhuben near Danzig, Kingdom of Prussia (now Mokry Dwór, Poland), he was the son of Johann Reinhold Forster (1729–1798), a Reformed pastor with a profound passion for natural history, and of Justina Elisabeth (née Nicolai**)** (1726–1804), who gave birth to eight children, seven of whom survived infancy. Georg accompanied his father on botanical excursions from a young age, including a 1765 commission by Empress Catherine the Great to survey the lower Volga region, where they discovered

numerous undescribed plants on the Kalmyk Steppe. By the age of ten, Georg had mastered basic scientific methodologies and acquired fluency in Russian. Following disputes over their expedition report, the family relocated to England in 1766, where Reinhold secured a teaching post at the Dissenters' Academy in Warrington. Georg quickly mastered English and, at thirteen, published a translation of a Russian historical text. Reinhold rapidly advanced within British scientific circles, earning election to the Royal Society in 1772. Shortly thereafter, both father and son were invited to join James Cook's second Pacific expedition (1772–1775), with Georg serving as the official natural history draughtsman. During this voyage, he amassed some of the earliest lichen specimens ever collected in the Southern Hemisphere. These were subsequently described by other authorities, such as *Lichen* (= *Sticta*) *filix* from New Zealand, published by Olof Swartz in 1781. Forster himself formally described only a single lichen species, *Lichen* (= *Pseudocyphellaria*) *berberinus*, from Tierra del Fuego (1789), cementing his legacy as a pioneer of austral lichenology. Though lichens remained a peripheral interest, he achieved international acclaim for his celebrated 1777 travelogue, *A Voyage Round the World*, which secured his election to the Royal Society at the age of 22. He subsequently held academic chairs at the universities of Kassel (1778), Vilnius (1784), and Mainz (1788). Whilst serving as the Chair of Natural History at Vilnius, he travelled back to Germany in 1785 to submit and defend his thesis on the esculent plants of the Pacific at the University of Halle, which officially awarded him his doctorate in medicine. His botanical dissertation (*De plantis esculentis insularum oceani Australis*) was subsequently published there in 1786. His intellectual pursuits were exceptionally broad, spanning pioneering ethnological studies of Pacific cultures, the recording of local lore, and the acquisition of Polynesian languages. Politically radical, Forster enthusiastically supported the French Revolution and played a pivotal role in establishing the short-lived Mainz Republic (1792–1793). He relocated to Paris as a representative of the republic, where he died of rheumatic fever amidst the turmoil of the Revolution. Whilst historically condemned as a traitor in a fragmented Germany for his pro-French actions, his scientific and literary achievements have long been highly esteemed in Britain, and his democratic legacy has been thoroughly rehabilitated in modern Germany. His herbarium is scattered across several institutions; material from the Cook expedition is housed at BM (via the Banks herbarium). Ref.: Galloway (1985b); Nicolson & Fosberg (2004); Saine (1972).



Foucard, **Tony (1936–2008)** – Born in Älvkarleö, Uppland, Sweden, where his father worked as a provincial medical officer (*provisialläkare)*, he bore a non-Swedish surname that reflected a distinct family history: a Frenchman who had fled the Revolution to England, married a local woman, and whose later descendant eventually settled in Sweden. After completing his primary education locally, he followed in his father's footsteps to study medicine at Uppsala University, later specialising in paediatrics. From 1968, he was employed at Uppsala University Hospital (*Akademiska Sjukhuset*), ultimately serving as an assistant professor. He also became an authority of international repute on allergies, earning his doctorate in the field in 1978. Alongside his medical career, Foucard

maintained a keen interest in the natural world from childhood, though the exact catalyst for his passion for lichenology remains unclear. In the 1980s, he approached the Uppsala herbarium offering his assistance and became a regular visitor to the collections until health issues intervened. Recognising the difficulties in identifying crustose taxa, he saw the necessity for a flora complete with identification keys for Swedish species. Working methodically through both institutional and personal collections, he published a practical, meticulously researched flora of these taxa in 1990. This volume proved invaluable, significantly advancing lichenology across Sweden and its neighbouring regions. Although he described no new taxa himself, his personal herbarium is housed at UPS. Ref.: Moberg *pers comm*.



Frey Stauffer**, Eduard (1888–1974)** – Born in Meiringen in the Bernese Oberland, Switzerland. He spent his youth in the Oberhaslital and received his early training at the Hofwil Teacher-Training College. He commenced his educational career as a primary school master in Hasliberg in 1909, remaining a dedicated schoolteacher for the entirety of his working life. Whilst teaching at a secondary school in Bern, he concurrently pursued his advanced botanical education at the University of Bern. Under the supervision of Walther Rytz (1882–1966), he completed his doctorate in 1922 with a seminal phytosociological thesis investigating the vegetation dynamics of the Grimsel region (*Die Vegetationsverhältnisse der Grimselgegend*) ahead of the construction of local artificial reservoirs. Frey authored important monographs on the cryptogams of Swiss national parks, serving with distinction on their central scientific commissions. His research provided highly precise, pioneering insights into alpine lichen assemblages, most notably in his milestone 1933 treaties on alpine community dynamics and the broader structural role of lichen groupings within classic plant sociology. His doctoral work is celebrated as a cornerstone of alpine sigmatist ecology. He achieved international prominence as a leading monographic expert on the family *Umbilicariaceae*, contributing the authoritative treatment of the group for the landmark new edition of Rabenhorst's *Kryptogamen-Flora* (1933). From 1939 until his retirement in 1956, Frey taught hygiene and biology at the Kindergarten Teacher Training Seminary in the Marzili district of Bern. In 1972, the University of Bern awarded him the prestigious Haller Medal in recognition of his enduring scientific output. He described several taxa, including genera such as *Lecanephebe* and *Toniniopsis*. His herbarium is housed at BERN. Ref.: Poelt (1969); Welten (1969); Welten & Ammann (1976).

Fries, Elias Magnus **(1794–1878)** – Born in Femsjö, Småland, Sweden, the son of Thore Fries (1762–1839), the local Lutheran vicar, and of Sara Elisabeth (née Wermelin), the daughter of an evangelical Lutheran pastor. As a young boy, he became deeply fascinated by the extraordinarily rich fungal and cryptogamic flora surrounding his isolated home. In 1811, he entered Lund University to study botany under Anders Jahan Retzius (1742–121) and the celebrated phycologist Carl Adolph Agardh (1785–1859). Agardh, who was intensely focused on establishing a more natural taxonomic system, profoundly influenced the young Fries and entrusted him with the task of reorganising his private



lichen herbarium. This formative project catalysed Fries's lifelong interest in the group, prompting him to initiate an active correspondence with the leading authorities of the day, including Olof Swartz and Erik Acharius. Fries graduated with his Master of Arts degree (then the highest doctorate in the philosophical faculty) in 1814, achieving the rare feat of writing and defending his botanical thesis entirely independently; the work focused on the flora of Femsjö and included the description of *Psoroma femsjonense*. His earliest dedicated lichenological paper was published in 1817. He was appointed *botanices adjunkt* at Lund in 1819, and was awarded a personal professorship in 1824. In 1834, Fries relocated to Uppsala University upon his appointment to the prestigious Borgströmian Chair of Practical Economy, a multi-disciplinary professorship that explicitly included botany and carried with it the directorship of the University Botanic Garden and Museum. He became a central figure in Swedish academic life, twice serving as Rector of Uppsala University. Globally, Fries is revered as the undisputed *Linnaeus of Mycology* and the founder of modern mycological taxonomy through his monumental three-volume *Systema mycologicum* (1821–1832), which serves as a sanctioned starting point for fungal nomenclature. His contribution to lichenology was scarcely less significant; his landmark *Lichenographia Europaea reformata* (1831) presented a thorough, philosophically driven revision of the Acharian system. Though widely praised, it was concurrently criticised by some contemporaries for its exceptionally broad generic and specific boundaries. Although his taxonomic system was eventually superseded by the advent of microscopic anatomy, it represented a transitional milestone for the discipline. Fries authored hundreds of valid lichen taxa, establishing resilient genera such as *Biatora*, *Cliostomum*, *Dirina*, *Micarea*, *Petractis*, *Siphula*, and *Xylographa*. Whilst at Lund, he initiated the celebrated exsiccatae series *Lichenes exsiccati Suecici*, personally editing the first fascicles before the project was continued by Christian Stenhammar and his own son, Thore Magnus Fries. His herbarium is housed at UPS. Ref.: Arrhenius (1881); Elfström & al. (1994); Eriksson (1962, 1975).

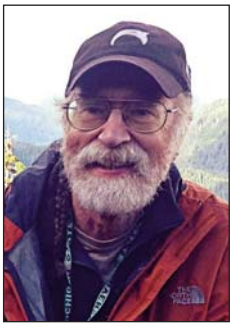


Fries, Theodor **('Thore') Magnus (1832–1913)** – Born in Femsjö, Småland, Sweden, the son of Elias Fries. He spent his early years in the vicarage with his grandparents. He studied at Uppsala University from 1851 and became *amanuensis* in 1853. His first lichen paper (on Swedish lichens) appeared in 1856. He graduated in 1857, and his doctoral thesis treated the genera *Pilophorus* and *Stereocaulon*. William Nylander criticised the work, believing it too favourably received. From 1862 Fries was *adjunkt* in practical economy, and in 1877 he was promoted to the professorship formerly held by his father. Like his father, he served as Rector of Uppsala University (1890–1899). Upon retirement he requested a "final" collecting trip to Finnmark, Norway (1901), where he had previously collected (1858, 1864), especially at Mårtensnes; this was granted as a farewell gift. He also participated in expeditions to Spitsbergen (1868) and Greenland (1871), producing important

contributions to Arctic lichenology. His most significant Arctic work is *Lichenes arctoi* (1860), inspired by his first Finnmark visit. His magnum opus, *Lichenographia scandinavica* (1871, 1874), remained unfinished but has served as the foundational ("Bible") work for Scandinavian lichenologists due to its precision and thoroughness. Fries was a sharp-eyed and meticulous botanist, specialising in lichens far more than his father. His Genera heterolichenum europaea recognita (1861) was a brilliant attempt to moderate the extreme generic concepts of the Italian-Silesian school, admired in his time though criticised by Nylander, who repeatedly attacked his work. On the nature of lichens Fries maintained a cautious, expectant attitude, while Nylander rejected the dual theory outright. Fries authored many taxa, including genera such as Arctomia, Argopsis, Arthroraphis, Caloplaca, Chaenotheca, Ionaspis and Pilophorus. His herbarium forms the core of the extensive lichen collection at UPS. Ref.: Du Rietz (1966); Hemmendorf (1914); Jørgensen (2001); Lindman (1914).



Fritze, Richard (1841–1903) – Born in Rybnik, Schlesien, Kingdom of Prussia (now Poland), where his father operated a pharmacy. From an early age, he assisted in the family business, developing a lifelong fascination with botany. After completing his local secondary education, he trained in pharmacy and formally took over his father's apothecary in 1877. He managed the business until 1883, when he sold it to acquire a country estate in nearby Rydułtowy, a move that allowed him to devote his remaining years entirely to botanical research. Fritze became closely integrated with the active circle of lichenologists and bryologists based in Breslau (now Wrocław). He explored and published on the cryptogamic flora of Silesia and the Tatra Mountains, where he made several important regional discoveries. He also travelled extensively abroad, gaining particular renown for his pioneering natural history expeditions to Norway, the Balkans, and Macaronesia (including Madeira and the Canary Islands). Although he did not issue a formal personal exsiccatae series, his extensive Macaronesian and alpine specimens were widely distributed to herbaria worldwide via the *Schlesischer Botanischer Tauschverein* (Silesian Botanical Exchange Society), which he led for a time. The genus *Fritzea* Stein is named after him. He did not describe any new taxa himself. His herbarium is housed at B, with duplicates at WRSL and other herbaria. Ref.: Wilhelm (1997).



Fryday, Alan Michael **(1948–)** – Born in Minster-in-Sheppey, Kent, England, UK. Following his local eucation, he commenced university studies in the natural sciences, specialising in chemistry. He was an avid hiker, particularly fond of exploring the Scottish mountains; at the age of 35, he noticed an unfamiliar lichen along a montane path and became intrigued by its identity. Discovering that little accessible information was available on the group, he purchased Ursula Duncan's *Introduction to British Lichens* to decipher his collections. This pursuit brought him into contact with Brian Coppins, who warmly encouraged his bur-

geoning passion for lichenology. Fryday subsequently became a postgraduate pupil of Oliver Gilbert at the University of Sheffield, earning his doctorate in 1998 with a thesis on the lichens of the montane regions of the British Isles. In 1999, Fryday was appointed Curator of Lichens at the Michigan State University Herbarium (MSU) in East Lansing, USA. In this role, he shifted much of his research focus to the subantarctic and southern subpolar regions, methodically revising and publishing the vast volumes of historical material left behind by the expeditions of Henry Imshaug. Fryday established an international reputation as a leading authority on the challenging taxonomy of crustose, saxicolous lichens, conducting major generic revisions within the *Porpidiaceae* and the non-yellow species of *Rhizocarpon*. He described numerous new species from habitats spanning Alaska to the Falkland Islands. Though he formally retired from his curatorial post in 2019, he continues to conduct active taxonomic research. His herbarium is housed at E and MSC. Ref.: *Pers. comm.*



Fuchs, Leonhart (1501–1566) – Born in Wemding, Herzogtum Bayern-Landshut (now Bayern, Germany). He received an excellent humanistic education and graduated with a bachelor's degree in philosophy from the University of Erfurt at the exceptionally young age of 16. From 1519, he continued his advanced studies at the University of Ingolstadt, further refining his mastery of classical languages and natural philosophy. It was only after 1521 that he pivoted to the medical faculty, ultimately receiving his medical doctorate from Ingolstadt in 1524, after which he established a successful medical practice in München. In 1526, Fuchs returned to Ingolstadt as professor of medicine, and in 1528, he was appointed personal physician (*archiater*) to the Margrave of Brandenburg-Ansbach. In 1535, he accepted a medical professorship at the University of Tübingen, an institution where he remained as a central academic figure for the rest of his life. Fuchs achieved global renown for his monumental botanical masterpiece, *De historia stirpium commentarii insignes* (1542), and its subsequent German translation, *New Kreüterbuch* (1543). These volumes were revolutionary for their unprecedentedly fine, life-sized woodcut illustrations executed by the artists Albrecht Meyer and Heinrich Füllmaurer, alongside the master block-cutter Veit Rudolph Speckle, all of whom Fuchs personally directed. Leveraging his superb command of classical Greek and Latin, Fuchs systematically identified and corrected centuries of pharmacological misunderstandings accumulated since Antiquity. His position in the history of lichenology is modest but significant; it rests upon his inclusion of tree lungwort (*Lobaria pulmonaria*) under the name *Pulmonaria*, providing one of the earliest and most morphologically accurate illustrated printed records of a lichen in Central Europe. His herbarium, if he ever had one, is unknown. Ref.: Greene (1983); Hitzler (1566); Meyer & al. (1999).

Fünfstück, Lebrecht **Moritz (1856–1925)** – Born in Dittelsdorf, Königreich Sachsen (now Germany), the son of a property owner. He pursued extensive natural history studies across several universities, including Tübingen, Berlin, Leipzig, and Würzburg. Whilst studying in Berlin, he came under the profound scientific influence of Simon



Schwendener. Fünfstück successfully completed his doctorate in 1884 at the University of Leipzig, presenting a prize-winning dissertation that examined the development of the lichen thallus from an evolutionary standpoint (*Beiträge zur Entwicklungsgeschichte der Lichenen*), which was published in Berlin. In 1885, Fünfstück relocated to southwestern Germany to take up an assistantship at the *Technische Hochschule Stuttgart* (now the University of Stuttgart). He commenced formal lecturing there in 1887 and subsequently served as the institution's Rector across three separate academic periods. Following the death of his former mentor and colleague, Wilhelm Ernst von Ahles (1829–1900), Fünfstück was elevated to the full Chair of Botany and director of the botanical collection. As a dedicated student of Schwendener, Fünfstück focused his microscopic research on clarifying the structural dynamics of lichenised symbiosis. His most enduring contribution to science was authoring the comprehensive introductory section on lichen structural morphology for Adolf Engler and Karl Prantl's monumental *Die natürlichen Pflanzenfamilien*. This text remains highly regarded by taxonomists for its extraordinarily exact anatomical descriptions and detailed diagnostic illustrations. Later in his career, his research expanded beyond core lichenology; he contributed advanced entries, such as a major treatise on bacteriology, to the multi-volume *Lexikon der gesamten Technik*. During his editorial work for major reference encyclopaedias, he famously clashed with Rudolf Steiner, successfully removing him from a collaborative writing contract due to Steiner's persistent failure to deliver manuscripts on natural philosophy. Fünfstück passed away in Stuttgart. His herbarium, if he had one, has disappeared. Ref.: Lakon (1925).



Funck, Heinrich **Christian (1771–1839)** – Born in Wunsiedel, Fürstentum Bayreuth (now Bayern, Germany). He was the son of Heinrich Christian, the *Rentschreiber* (city treasurer) of Bayreuth, though his father played no role in his upbringing; his mother, Anna Sabina (née Schmidt) (1748–1820), the daughter of a pharmacist, returned to her parental home in the Fichtelgebirge, a rugged region that Funck grew to love passionately. When he was twelve, the family relocated to nearby Gefrees, where his mother married the resident apothecary, Johann Caspar Daniel (1729–1799). As a boy, Funck attended the secondary school in Hof, where his early interest in plants was actively encouraged; he is famously said to have collected tree-dwelling cryptogams along his daily route to school. Following his education, in 1789 he honoured family tradition by entering the pharmaceutical trade. From 1790 to 1792, Funck trained in Regensburg under the guidance of David Heinrich Hoppe (1760–1846), an eminent botanist and founder of the Regensburg Botanical Society, of which Funck became a highly active co-founding member. In 1793, he relocated to Salzburg, and in 1794, took up an assistantship at the *Hofapotheke* in Erlangen, owned by Ernst Wilhelm Martius (1756–1849), the father of the celebrated future botanist Carl Friedrich Philipp von Martius. Whilst in Erlangen, he enrolled at the university, attending natural history lectures delivered by Johann von

Schreber. He later studied under the pioneering mycologist August Batsch (1761–1802) at the University of Jena (1795–1796), before being recalled to Gefrees to assist his ailing stepfather. Funck formally took over the family pharmacy from his widowed mother in 1803. The financial security generated by the business allowed him to dedicate vast amounts of time and capital to field botany, and he served concurrently as the mayor of Gefrees from 1823 until 1836. During these decades, his home in Gefrees became an international crossroads and meeting ground for Europe's leading cryptogamic scholars, hosting figures such as H. Flörke, Hoppe, C. Hornschuch, C. Nees von Esenbeck, C. Schwägrichen, and W. Schimper. He became such a dominant figure in German botany that he was offered an elite position as a scientific advisor and state researcher in Berlin in 1820, a post he ultimately declined. He sold his pharmacy in 1834 to focus exclusively on his collections. Funck contributed critical sections to Jacob Sturm's landmark *Deutschlands Flora* (1819) and distributed a monumental, multi-fascicle exsiccatae series titled *Cryptogamische Gewächse des Fichtelgebirg's* (issued between 1801 and 1838). While his primary research focus leaned towards bryology, his collections contained important historical lichen material. His herbarium is housed at M. Ref.: Hertel (1995); Schmidt (1879); Stübler (1972).



Fuss, Johann **Michael** (Mihály) **(1814–1883)** – Born in Hermannstadt (Nagyszeben), Siebenbürgen, then part of the Austrian Empire (now Sibiu, Romania). He belonged to the ethnic Transylvanian Saxon community and published his scientific treatments primarily under the name Michael Fuss. From 1832, he studied theology at the Protestant Theological Institute (*Theologische Lehranstalt*) in Wien (Vienna), whilst concurrently cultivating a passionate interest in natural history. Upon his return to Transylvania, Fuss was appointed a professor and subsequently served as the headmaster of the Evangelical Gymnasium in Hermannstadt. He was later ordained as a Lutheran pastor, ministering to the parish of Gross-Scheuern (Nagy-Csűr, now Şura Mare, Romania). His clerical and educational duties allowed him to systematically explore the regional flora. He developed a profound expertise in cryptogamic botany, meticulously collecting and recording the lichens of the Southern Carpathians. Because Transylvania was politically tethered to the historic Kingdom of Hungary within the Habsburg crown, Hungarian botanical histories frequently list him as a foundational figure of their regional lineage, though his cultural and academic output was distinctly Transylvanian Saxon. Fuss described several new regional plant and and a few lichen taxa, publishing his landmark overview, *Flora Transsilvaniae Excursoria*, in 1866. Between 1862 and 1872, he edited and distributed the pioneering exsiccatae series *Herbarium Normale Transilvanicum*, curating Centuries I through XII, which contained numerous important lichen collections. His private herbarium is now housed at SIB, with the exsiccatae at BP and several other herbaria. Ref.: Teutsch (1884); Verseghy (1963).

Gärtner, Joseph (1732–1791) – Born in Calw, Herzogtum Württemberg (now Germany), where his father was a court physician who died in 1731 before their son Joseph



was born, whilst his mother was a housewife born into an educated family from Württemberg, who passed away in 1743 at the young age of 28, leaving her son completely orphaned by the age of eleven. Following his early private and local education, the young Joseph was taken in and raised by a succession of relatives and guardians; he briefly studied law at the University of Tübingen before switching to medicine. He pursued his medical and botanical education (focusing on anatomy and physiology) at the University of Göttingen under the celebrated Albrecht von Haller. After an extended *Bildungsreise* (educational grand tour) through England, France, and Italy, he completed his medical doctorate at Tübingen in 1754 (officially defended in 1758). He spent the early 1760s travelling and researching marine biology across Europe, and was appointed Professor of Anatomy at Tübingen in 1761. Following a stay in Holland, where he attended the influential botanical lectures of Adrian van Royen (1705–1779), his focus shifted entirely to botany. In 1768, he accepted an appointment as Professor of Botany and Director of the Botanical Garden in St Petersburg, Russia. However, he resigned from this post in 1770, returning to his native Calw to work as an independent scholar and dedicate himself fully to botanical research. His monumental two-volume masterwork on seed and fruit morphology, *De Fructibus et Seminibus Plantarum* (1788–1791), represents his sole but highly valuable contribution to lichenology. In it, he became one of the earliest scientists to examine and describe the nature of reproductive organs in lichens, specifically evaluating soredia and isidia. He did not describe any new lichen species. His herbarium, including the carpological collection, is housed at TUB. Ref.: Deleuze (1802); Kärnefelt & al. (2012); Stafleu (1969).

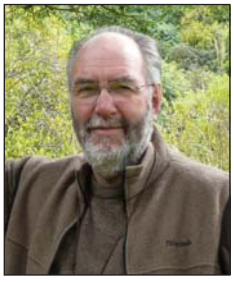


Gallé, László (Ladislaus) **(1908–1980)** – Born in Bács-Bodrog in the Austro-Hungarian Empire (now Zenta, Serbia). After completing his basic education locally, he entered the University of Beograd in 1926 to study natural sciences. However, he soon transferred to the University of Szeged, graduating in 1930 with a thesis on the lichen communities of the Szeged region, the first study of its kind in Hungary and an early European example of lichen phytosociology. He served as an assistant at the Botanical Institute in Szeged from 1930 to 1936 before pursuing a career in secondary education. He taught at several high schools and ultimately became the director of the *Klauzál Gábor Gimnázium* (later renamed the *Miklós Radnóti Gimnázium*) in Szeged. Throughout his life, Gallé collected and published extensively on the lichens of Hungary and its neighbouring countries, collaborating closely with Ödön Szatala and describing several new taxa. His herbarium is housed at SZE, with many duplicates at BP. Ref.: Bodrogközy (1980); Verseghy (1963; 1980).

Galløe, Olaf (1881–1965) – Born in København, Denmark, he studied natural history from 1900 at the university there under Eugenius Warming (1841–1924). Warming's



enthusiasm for eco-sociology deeply influenced him, leading Galløe to publish several papers on higher plants and heathland vegetation before discovering lichens, which he found to be a far more rewarding group to study. He was awarded a gold medal in 1908 for his work on bark anatomy and its relationship to lichen distribution. He later obtained his doctoral degree in 1913 with an expanded version of this research, entitled *Preliminary investigations on the general ecology of lichens*. By that time, he was already teaching at the *Østre Borgerdydsskole* secondary school in København, where he himself had been educated, and he continued to teach there until his retirement, having no desire to pursue an academic career. Concurrently, he remained highly active in lichenology, embarking on a major project to produce lifelike drawings of all Danish lichens in their natural habitats, adding anatomical details later. Believing that textual descriptions alone failed to characterise them adequately, he sought to document a selected "standard specimen" through his artwork. A gifted artist, he produced a magnificent, large-format, ten-volume work, *The Natural History of Danish Lichens*. Supported by the Carlsberg Foundation, its publication spanned nearly half a century (1927–1972), partly posthumously, though it did not receive the widespread acclaim he had hoped for. Because he prioritised illustration over physical preservation and rarely kept vouchers, his herbarium collections at C are modest. He did not describe any new species, focusing instead on the variations within existing ones. The genus *Galloea* Alstrup & Søchting was named in his honour. Ref.: Christiansen (1972).

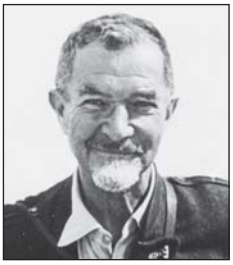


Galloway, David John **(1942–2014)** – Born in Invercargill, New Zealand, he was the son of a Scottish immigrant, whilst his mother, who belonged to a well-established Southland family, was a keen naturalist and amateur gardener with a deep enthusiasm for the unique flora and landscape of southern New Zealand. She directly fostered her son's lifelong fascination with wildlife and the outdoors from his early childhood. Following his local basic education, he studied natural sciences at the University of Otago, specialising in biochemistry and earning his PhD in 1972. He developed an interest in lichens during his boyhood, a passion reinforced by meeting James Murray, a distinguished Associate Professor of Chemistry at Otago and an internationally recognised organic chemist who was tragically killed in a car accident during Galloway's student years. Consequently, the British lichenologist Peter James was invited to New Zealand to curate Murray's extensive collections. Recognising Galloway's immense potential, James arranged for him to work at the British Museum (Natural History) in London. Beginning in 1972, supported by a grant from the New Zealand Department of Scientific and Industrial Research, Galloway embarked on the *Flora of New Zealand Lichens*, which became his life's work. The first edition appeared in 1985; an expanded, two-volume second edition was completed in 2007 (published in 2008), marking a monumental milestone in New Zealand lichenology. He later joined the permanent staff at the BM, ultimately becoming Head of the Lichen Division in 1987, a post he held until his return to New Zealand in 1994 to work at Landcare Research in

Lincoln. While preparing the *Flora*, he revised numerous genera, frequently adopting a broader Southern Hemisphere perspective. His most significant publications include definitive works on *Pseudocyphellaria* (1988, 1992) and *Placopsis* (2013). He contributed profoundly to our understanding of Southern Hemisphere phytogeographical patterns and the history of lichenology. Indeed, the forthcoming *The History of Lichenology* was planned with him as a co-author and was ultimately dedicated to his memory. As President of the International Association for Lichenology (IAL) from 1987 to 1992, he initiated several major initiatives, including a seminar on tropical lichens (London, 1990) and the installation of a memorial plaque on Erik Acharius's house in Vadstena (1992). The IAL awarded him the Acharius Medal in 2008. He described numerous new taxa, including the genera *Bartlettiella* (with Jørgensen), *Degelia* (with Arvidsson), and *Metus* (with P. James). The genera *Davidgallowayia* Aptroot and *Gallowayella* S.Y. Kondr. & Kärnefelt were named in his honour. His herbarium is housed at BM and CHR. Ref.: Arvidsson (2007); Dickinson & Breitwieser (1995); Jørgensen (2015); Kärnefelt & al. (2015).



Galun, Margalith (orig. Melitta Katz) **(1927–2012)** – Born in Wien (Vienna), Austria, into a Jewish family, she began her primary education in her native city before being sent to safety in Switzerland in 1938, where her parents later joined her. In 1947, she emigrated with her family to Palestine (subsequently Israel), completing her secondary education in Tel Aviv in 1948. She then enrolled at the Hebrew University of Jerusalem, studying botany under Tscharna (Thelma) Rayss (1889–1965). She married Ezra Galun (1927–2014), a plant physiologist at the Weizmann Institute, and remained in Israel for the rest of her life. After earning her PhD in 1960, she worked initially at the Israel Institute for Biological Research in Ness Ziona. In 1965, she was appointed Professor at Tel Aviv University. Galun is best known for her pioneering electron microscopy research into the early cellular interactions between algae and fungi during lichenisation. Inspired by Israel Reichert, she also produced the first lichen flora of Israel. In 1988, she edited the three-part *Handbook of Lichenology*, authoring several chapters herself due to the difficulty of securing external contributors. She founded the international journal *Symbiosis* and was highly active in the IAL, serving as Vice-President from 1983 to 1993, and receiving the Acharius Medal in 1994. A quiet but remarkably strong-willed academic, she successfully established and developed Israeli lichenology under challenging conditions. Her herbarium is housed at TELA. Ref.: Balaban (2012); Richardson & Seaward (2013).



Gams, Helmut (1893–1976) – Born in Brünn in the Austro-Hungarian Empire (now Brno, Czech Republic). When he was five, his family moved to Zürich, where he developed a keen interest in the natural environment as a schoolboy. After completing his basic education, he studied natural sciences in Zürich, earning a doctorate in 1918 for his vegetation studies under Professor Carl Schroeter (1855–1939). From 1920 to 1923, he served as secretary to Gustav Hegi (1876–1937) in München dur-

ing the compilation of Hegi's monumental flora of Central Europe. Between 1921 and 1928, Gams founded and directed a biological station in Wasserburg on Lake Constance (Bodensee). He was subsequently appointed by the University of Innsbruck, where he remained from 1929 until his retirement, becoming a full professor in 1947. A multifaceted botanist with a deep interest in vegetation dynamics, its development, and its history, Gams was also an inspiring teacher. Cryptogams were central to his research, and he is remembered in particular for his excellent *Kleine Kryptogamenflora*, which he initiated with the first volume in 1940. He was notably among the first scientists to accept certain basidiomycetes as true lichens. Several fungal genera, such as *Gamsia* M. Morelet and *Gamsiella* (R.K. Benj.) Benny & M. Blackw., were named in his honour. His herbarium is housed at IB. Ref.: Pitschmann (1977); Steiner (1977).



Garovaglio, Santo (1805–1882) – Born in Como, Lombardia, Kingdom of Italy, where his father was a pharmacist, whilst his mother was a housewife born into an established family from the Lombardy region. He began his studies at the Faculty of Medicine in Pavia in 1821, but transferred after a year to study pharmacy in Milan. Two years later, he travelled to Wien (Vienna) to study chemistry before returning to Italy to complete his medical degree. In 1833, he became an assistant to Giuseppe Moretti (1782–1853) in Pavia. From 1836 onwards, he published papers on cryptogams based on his field excursions across northern Italy and Austria. Between 1846 and 1849, he issued a substantial exsiccatae series of lichens, collected mostly from the Como region, under the title of *Medicinae Doctor,* a degree he had formally received in Wien in 1840. He succeeded Moretti as Professor at the University of Pavia (1853–1882), where he also served as the director of the botanical garden. Garovaglio dedicated much of his later lichenological career to the study of pyrenocarpous lichens, particularly the genus *Verrucaria*. In 1864, he presented a seminal paper on the geographical distribution of Lombardy's lichens, which introduced a major new taxonomic rearrangement of *Verrucaria*. He followed this in 1865 with an influential, detailed critical analysis evaluating the morphological and microscopic characters used to define both the genus and its individual species. Garovaglio strongly supported the taxonomic systems promoted by his close friend Abramo Massalongo, and he generously supported Martino Anzi during the latter's early lichenological career. Following the unification of Italy, Garovaglio proposed the creation of a specialised laboratory in Pavia in 1869 to combat agricultural diseases caused by parasitic fungi. This initiative won the confidence of the Ministry of Agriculture and the local administrative authorities of Pavia, who subsequently funded the establishment of the *Laboratorio Crittogamico*. In total, he issued two lichen exsiccatae series focusing on northern Italy. The genus *Garovaglina* Trevis. (now a synonym of *Polychidium*) was named after him. His herbarium is housed at PAV. Ref.: Cattaneo (1882); Nimis (1993, 2016).

Gaudichaud-Beaupré, Charles (1789–1854) – Born in Angoulême, Charente, France, where his father was a bailiff and his mother belonged to a well-to-do and highly respected bourgeois family which owned substantial estates. Orphaned at a young age, he was raised



by his maternal grandfather and later by an uncle who encouraged his budding curiosity about natural history. At the age of eleven, a visit to a family friend's natural history collection deeply fascinated him. This interest was further nurtured by his brother-in-law, a pharmacist in Cognac. After serving an apprenticeship there, he studied pharmacy at the *Officine de Cognac* before moving to Paris in 1808 to study botany under Louis-Claude Richard (1754–1821) and René Desfontaines (1750–1833). Concurrently, he trained under the prominent pharmacist Pierre Jean Robiquet (1780–1840), who possessed a keen interest in the chemistry of lichens. In 1811, Gaudichaud joined the French Navy as a dispenser, eventually securing a post on the major scientific expedition of *L'Uranie* (1817–1820) commanded by Louis de Freycinet. During this voyage, he amassed a vast herbarium that included extensive lichen collections. When *L'Uranie* was shipwrecked in the Falkland Islands in 1820, he managed to rescue his specimens, spending months painstakingly drying them. He authored the monumental botanical volume of the expedition's report (*Voyage autour du monde... Botanique*, 1826–1830); however, Christiaan Hendrik Persoon was tasked with writing the specific section on cryptogams, in which he named *Sticta gaudichaudiana* in his honour. Gaudichaud later participated in major naval expeditions aboard *L'Herminie* (South America, 1831–1833) and *La Bonite* (a global circumnavigation, 1836–1837). These voyages yielded vital cryptogamic discoveries, including the material from Hawaii that served as the basionym for *Pannaria lurida*. Upon his return to Paris, he was appointed curator at the *Muséum National d'Histoire Naturelle*, where his extensive lichen collections were subsequently revised and published by Camille Montagne. His herbarium is housed at PC. Ref.: Coutance (1870); Léandri (1971).

Gauslaa, Yngvar (1951–) – Born in Kristiansand, Agder, Norway, he developed a deep interest in the natural environment during his boyhood, inspired by his father. After specialising in natural sciences during his secondary education, he enrolled in 1970 at the Agricultural University of Norway at Ås (NLH, now the Norwegian University of Life Sciences), focusing on Nature Management. He graduated with a *cand. agric.* degree in 1976 and was immediately employed as a research assistant. He subsequently undertook doctoral research, completing a thesis entitled *Heat resistance and energy budget in different Scandinavian plants*. His work was formally supervised by the prominent botanist Eilif Dahl, though the ecophysiologist Stein Sæbø (1930–2012) acted as supervisor during Dahl's absences. After earning his degree in 1984, Gauslaa was appointed Assistant Professor, later achieving the rank of full Professor in 2001, a position he held until his retirement. Over the course of his career, his research focus progressively shifted from higher vascular plants to cryptogams, particularly lichens. He worked extensively on the ecology of old-forest indicator species and conducted pioneering ecophysiological studies, frequently collaborating with Knut Asbjørn Solhaug, to investigate the complex influence of light on lichen thalli. Notably, Gauslaa was the first scientist in Norway to establish and conduct dedicated physiological research on lichens. He described no taxa. His herbarium is housed at NMBU. Ref.*: Pers. comm.*

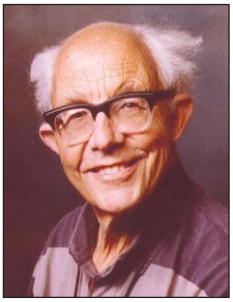


Gay, Claude (‘Claudio’) (1800–1873) – Born in Draguignan, France. He moved to Paris in 1818 to study medicine but soon shifted his focus to natural history, during which time he became acquainted with Antoine Fée. On the advice of René Desfontaines (1750–1833), Gay travelled to Chile in 1828 to teach, and by 1829 he had accepted a position with the Chilean government to conduct a comprehensive scientific survey of the country. He returned to France in 1832 with a rich botanical collection (now held at the *Muséum National d’Histoire Naturelle* in Paris, PC). Camille Montagne later treated this lichen collection in an 1849 paper, which included the description of *Coccocarpia* (now *Degelia*) *gayana*. Gay went back to Chile in 1834 to continue his explorations. From 1839, he resided in Santiago and was granted Chilean citizenship in 1841. He returned to France in 1842 to oversee the publication of his monumental, multi-volume *Historia física y política de Chile* (1844–1871), in which his lichen collections were extensively detailed by Montagne. After surveying mines and agriculture across Russia and the United States on behalf of the French Academy of Sciences (1856–1860), he settled in France in 1860, making one final, brief visit to Chile in 1863. Ref.: Barros Arana (1876); Sanhueza-Cerda (2022).



Gelting (orig. Hansen)**, Paul** Emil Elliot **(1905–1964)** – Born in Åkirkeby on Bornholm, Denmark, where his father Holger Alfred, worked as a railway engineer and also managed the local *Hotel Rønne*, whilst his mother, Kathrine Vilhelmine (née Rønne) was a housewife born into a long-established local family. As a youth, he developed a deep appreciation for the island’s natural environment. Following his initial education locally, he studied geography and natural sciences in København, earning a *cand. mag.* degree in 1931 with a major in botany. He then joined an expedition to Greenland led by Lauge Koch (1892–1964) and became captivated by the island. There, he investigated local vegetation, focusing particularly on ptarmigan grazing, which earned him a doctorate in 1937. He subsequently joined Eigil Knuth’s (1903–1996) expedition to Northeast Greenland (1938–1939), where he amassed significant lichen collections. Some of these specimens formed the basis of his major lichenological paper on peltate *Rhizocarpon* species (1954). From 1946 to 1954, Gelting served as the director of the Arctic Biological Station in Godhavn (Qeqertarsuaq), before returning to København to teach at a secondary school. In 1958, he was appointed associate professor of phytosociology in Uppsala, Sweden, but later returned to Denmark to teach at Aurehøj Gymnasium, where he was celebrated as an inspirational educator. The genus *Geltingia* Alstrup & Hawksworth was named in his honour. He described a few taxa. His herbarium is housed at C and UPS. Ref.: Hansen (1965).

Gilbert, Oliver Lathe **(1936–2005)** – Born in Lancaster, Lancashire, England, UK, into a family with strong interests in natural history. His father was the manager of Durham Chemicals, and his mother, Ruth (née Ainsworth), was a celebrated children’s author; her



brother was the prominent mycologist Geoffrey Ainsworth (1905–1998). Gilbert developed an early interest in the natural environment whilst living in Wales during the Second World War, having been evacuated to Borth-y-Gest. After the war, the family relocated to Harpenden, Hertfordshire, where he completed his schooling and A-Levels before studying at Exeter University. He continued his education at Imperial College, London, specialising in plant pathology. In 1964, he joined the Botany Department at Newcastle University as a demonstrator. During his early years at Newcastle, he also worked as the deputy warden at Malham Tarn Field Centre, where he developed a passion for rock climbing, a skill that later proved invaluable for his fieldwork in Scotland. His groundbreaking research mapping lichen decline near industrial zones around Newcastle earned him a PhD in 1970. Before the completion of his doctorate, he moved to the University of Sheffield in 1968 to accept a lectureship in the Department of Landscape Architecture, becoming the first ecologist appointed to such a department in the UK. He remained at Sheffield for the rest of his career, eventually rising to become a Reader in Landscape Ecology. He expanded his research into high-altitude montane communities (such as Ben Lawers, Ben Nevis, and the Cairngorms), as well as urban wastelands. He held a particular affinity for lichens in neglected or extreme habitats, such as metalliferous soils, where he discovered and described several new taxa. There, he authored influential books, including *Lichens* (New Naturalist series, 2000), which shaped future generations of lichenologists, and his largely autobiographical final book, *The Lichen Hunters* (2004), which documents the rise of British ecology. Gilbert was a cornerstone of the British Lichen Society, serving in numerous capacities and leading memorable field excursions. The genus *Gilbertaria* M. Svenss. & Fryday was named in his honour. His herbarium is housed at BM. Ref.: Gilbert & Purvis (2005); Purvis (2005).

Giralt Esteve, **Mireia (1960–)** – Born in Vilafranca del Penedès, Alt Penedès, Catalonia, Spain. She graduated with a degree in Biological Sciences from the University of Barcelona in 1985 and completed her doctorate at the same institution under the mentorship of Xavier Llimona, writing a thesis on epiphytic lichens in the coastal and southern regions of Catalonia, with an extensive focus on the genera *Buellia* and *Rinodina*. For many years, she served as a researcher and lecturer within the Department of Plant Biology (Botany section) at the University of Barcelona, contributing significantly to the development and maintenance of the university's herbarium. In the 1990s, she spent three years at the University of Graz, working with J. Poelt on *Teloschistaceae* and H. Mayrhofer on *Rinodina*. Giralt subsequently transitioned from local floristic studies to becoming a leading authority on the family *Physciaceae*, combining classical morphological and anatomical microscopy with thin-layer chromatography to identify secondary lichen metabolites. She authored the volume on *Physciaceae* (*Endohyalina*, *Rinodina*, and *Rinodinella*) for the *Flora Liquenológica Ibérica*, and also published extensive revisions of *Physciaceae* across Europe, North America, and the Neotropics, discovering, describing, and renaming over 30 lichen taxa. In 1998, she moved to the *Universitat Rovira i Virgili* in Tarragona, where she shifted her research focus to other fields, such as viticulture. The species *Halecania*

giraltiae van den Boom & Etayo and *Waynea giraltiae* van den Boom were named in her honour. Her herbarium is housed at BCN. Ref.: Nimis *pers. comm.*



Glanc, Kazimierz (1928–2022) – Born in Rzeszyn in the Mogilno region of Poland. Following his initial education locally, he studied forestry at the Agricultural University in Poznań (now the Poznań University of Life Sciences), graduating with a master's degree in 1950. After completing his military service, he was appointed in 1953 as an assistant lecturer in the Department of Forest Botany at the Higher School of Agriculture in Poznań. He spent the majority of his academic career there in various roles, ultimately serving as a *docent* and Head of the Department. Following his introduction to Zygmunt Tobolewski, Glanc dedicated much of his research to lichenological studies, earning a doctoral degree in 1964 with a thesis on the phytosociology of forest cryptogamic communities. His research heavily prioritised lichen ecology and phytosociology, culminating in major floristic contributions such as the landmark Białowieża CRYPTO project. Particularly valuable were his distributed exsiccatae series focusing on the lichens of the Poznań region, and he also assisted Tobolewski with the publication of a national Polish exsiccatae series. He did not describe any new taxa. His herbarium is housed at KRAM. Ref.: Danielewicz & Manka (2019).



Glowacki, Julius (Julij) **(1846–1915)** – Born in Idria, Carniola, Austrian Empire (now Idrija, Slovenia), he attended secondary school in Ljubljana, graduating in 1865. He subsequently studied natural history in Wien (Vienna) and Graz, where he developed a keen interest in botany, particularly cryptogams. From 1870 to 1875, he was appointed as a professor at the secondary school in Görz (now Gorizia, Italy), marking the beginning of a long career within the state education system. In his botanical research, Glowacki was especially devoted to bryophytes and lichens, which he collected extensively wherever he was stationed as a teacher and headmaster (including Pettau/Ptuj, Leoben, Cilli/Celje, and Maribor). Ferdinand Arnold served as his closest lichenological advisor. Glowacki's most valuable lichen collections were gathered from the woodlands near Görz, where he found many rare and now regionally extinct species, such as *Pannaria craspedia* (now treated as *Fuscopannaria leucosticta*); he published a detailed paper on these findings in 1871. He also revised the lichens held in the historical herbarium of Muzio de Tommasini (1794–1779). Although he did not describe any new species himself, Arnold published three new taxa in 1874 based on Glowacki's exceptional field collections. His primary herbarium collections are split between GJO and LJU. Ref.: Anonymous (1957); Sajovic (1915, non vidimus), Nimis, *pers. comm.*

Gmelin, Johann Georg **(1709–1755)** – Born in Tübingen, Herzogtum Württemberg (now Germany), where his father was a professor of medicine at the university, whilst his



mother gave birth *to* 12 children**,** several of which went on to become prominent scientists. A gifted child, Gmelin began attending university lectures at the age of 14 and graduated with a medical doctorate in 1727. He then travelled to St Petersburg, Russia, where he obtained a fellowship at the Academy of Sciences in 1728 and was appointed professor of chemistry and natural history in 1731. His greatest achievement was *Flora Sibirica* (1747–1769), a monumental work resulting from his participation in Vitus Bering's Second Kamchatka Expedition (1733–1743). On this journey, he was accompanied by the young student Stepan Petrovich Krasheninnikov (1711–1755), later professor of natural history in St Petersburg, who, according to some sources, authored the unfinished, unpublished fifth volume on cryptogams, which included many lichens. However, the surviving manuscript is not in Gmelin's handwriting. Beyond this work, there is little evidence that Gmelin possessed any true interest or competence in lichens, despite the *Flora* including a number of them. Regarding him as a pioneer of Russian lichenology is therefore wide of the mark. Disillusioned by his experiences in Russia, he published a travelogue, *Reise durch Sibirien* (1751–1752), which painted an unflattering picture of the country and caused a scandal in St Petersburg. He returned to the University of Tübingen in 1747, serving as a professor of medicine for four years before being appointed director of the botanical garden in 1751. His herbarium is housed at BM and LE. Ref.: Andreev & al. (2014); Gmelin (1911).



Golubkova, Nina Sergeevna **(1932–2009)** – Born in Leningrad (now St Petersburg), Soviet Union (now Russia). After completing her undergraduate studies at Leningrad State University in 1955, she was accepted as a postgraduate student under Vsevolod Savicz at the Komarov Botanical Institute. She defended her Candidate of Sciences thesis on the lichen flora of the Moscow region in 1962. Her research expanded deeply into extreme environments, producing highly regarded work on the poorly understood lichen biota of the Pamir Mountains, alongside a major, long-term collaborative study of the Mongolian region frequently co-published with her student, Tsogt Ulziy. This vast geographical output earned her a higher Doctor of Sciences degree in 1984. She also produced a critical monograph on the desert-dwelling *Acarosporaceae* of the USSR. Appointed Head of the Laboratory of Lichenology and Bryology at the Komarov Institute in 1982, she directed the department for over two decades and served as Editor-in-Chief for volumes 6–10 of the important *Handbook of the Lichens of Russia*. Furthermore, she evaluated extensive polar collections gathered by Soviet and Russian Antarctic Expeditions and acted as a vital bridge for international research collaboration. Golubkova was awarded the Acharius Medal by IAL in 2000. She described numerous taxa. The genus *Golubkovia* S.Y. Kondr. *et al.* is named after her. Her herbarium is housed at LE. Ref.: Biazrov & al. (2010).

Gómez-Bolea, Antonio (1955–) – Born in Almería, Spain, Gómez-Bolea completed his university education at the Faculty of Biology of the University of Barcelona, where he



began his career balancing secondary-school teaching with university research. He advanced his academic path by completing a doctoral thesis on the epiphytic lichen flora of Catalonia, published in 1985. Appointed to the faculty at the University of Barcelona in 1988, he worked within the Department of Evolutionary Biology, Ecology and Environmental Sciences for decades, eventually serving as a long-standing Associate Professor and a key member of the Institute for Research on Biodiversity. Driven by a lifelong interest in lichens, he completed extensive fieldwork across Catalonia, the wider Mediterranean basin, and fragile ecosystems globally, including high-latitude expeditions to Navarino Island in Chile. Throughout his career, Gómez-Bolea became a major reference point for Spanish lichenology, serving as a pillar of the Spanish Lichenological Society (*Sociedad Española de Liquenología*) and collaborating closely with key national and international specialists such as X. Llimona, N.L. Hladun, and C. Roux. His early taxonomic milestones established essential baselines for the region, culminating in substantial contributions to the checklist of the lichens and lichenicolous fungi of the Iberian Peninsula and the Balearic Islands. Beyond strict floristics, he pioneered key applied research programs in urban and environmental biology. Beginning in the 1990s, he spearheaded environmental biomonitoring surveys, utilising the cover and physiological responses of species like *Ramalina* to map vehicular traffic impacts and coal-fired power station pollution. Concurrently, he established a major research agenda in the biodeterioration and bioprotection of historical monuments, evaluating lichen-stone interfaces at major archaeological sites, including the Roman ruins of Baelo Claudia in Cádiz. He also expanded his ecological research into post-fire forest ecosystems, detailing how pioneering corticolous and lignicolous communities recolonise Mediterranean *Quercus ilex* stands following severe wildfire disturbances. In his later career, his technical expertise led to innovative interdisciplinary collaborations in architecture and engineering, where he acted as the biological specialist for a patented “biological concrete” engineered by the Polytechnic University of Catalonia to stimulate the sustainable growth of living lichen and moss facades on urban buildings. He continuously described or co-described notable additions to the regional biota. His large herbarium is housed at BCN. Ref.: *Pers. comm.*



Gowan, Sharon (1957–) – Born in St. Stephen, New Brunswick, Canada, Gowan developed an early interest in the natural environment. Following her local education, she attended Mount Allison University in New Brunswick. There, her interest in lichens was nurtured by the German-born biology professor Hinrich Harries (1928–2016), who had studied in München and worked with Josef Poelt. Harries similarly inspired two of her contemporaries, Trevor Goward and Stephen Clayden. After completing her Bachelor’s degree, she moved to Carleton University in Ottawa. Her primary supervisor, the botanist John Lambert, suggested a Master’s study on the biogeography of lichens in Fundy National Park, New Brunswick, with Irwin Brodo serving as her external advisor. She then pursued her doctor-

al studies at Duke University, North Carolina, under the supervision of William and Chicita Culberson. She was awarded her PhD in 1988 for her dissertation on the crustose lichen genus *Porpidia* and its allied genera. In 1990, she was appointed Lecturer and Postdoctoral Fellow at Harvard University, where she co-taught cryptogamic botany and conducted research at the Farlow Herbarium. She later transitioned out of full-time academic research, teaching specialised seminars at the Eagle Hill Institute in Maine while redirecting her career towards computer science and the development of database software for herbaria. She has described a few taxa. Her herbarium is housed at CANL and DUKE. Ref.: Brodo, *pers. comm.*



Goward, Trevor (1952–) – Born in Vancouver, British Columbia, Canada, Goward was the son of a logger and housing contractor. Disliking city life, he felt "reborn" when his family relocated to the dry interior town of Kamloops, which brought him into intimate contact with the natural world. After completing his local education, he initially pursued language studies at Simon Fraser University (1970–1973). He continued his education at the Université de Sherbrooke in Quebec and Mount Allison University in New Brunswick, graduating in 1977 with a BA in French and Latin. It was at Mount Allison that biology professor Hinrich Harries inspired his early fascination with lichens. During his university summers, Goward took on various seasonal jobs. In 1971, he was hired to build a trail to Battle Mountain in Wells Gray Provincial Park, British Columbia, and immediately fell in love with the region. He spent several subsequent summers working there as a park naturalist, teaching himself to identify diverse groups of organisms before ultimately specialising in lichens. In 1976, he established contact with the Finnish lichenologist Teuvo Ahti, who had collected extensively in the park during the 1960s. Ahti proposed a joint paper on the park's lichen flora, a project that took fifteen years to complete and effectively served as Goward's informal doctoral training. Goward subsequently became a prolific author on lichen ecology, distribution, and taxonomy. Alongside technical papers, he has published a series of unconventional, philosophical essays exploring the fundamental nature of lichens and their ecological significance. Deeply committed to environmental conservation, Goward settled in Clearwater in 1984 and established a private consultancy, Enlichened Consulting Ltd., to integrate lichen metrics into land-use planning. In 1989, he was appointed Honorary Curator of Lichens at the University of British Columbia Herbarium. An instrumental figure in exploring the lichens of the Pacific Northwest, Goward has described numerous taxa, including the genus *Brodoa*. The genus *Gowardia* Halonen *et al.* is named after him. His herbarium is housed at UBC. Ref.: Gies (2017); Hertel & al. (2017); *pers. comm.*

Grassi, Marta Maria **(1921–2005)** – Born in Buenos Aires, Argentina, Grassi studied natural history at the University of Buenos Aires in her native city, graduating in 1945. Her mentor, the prominent phanerogamist Alberto Castellanos (1896–1968), recognised an urgent national need for cryptogamic specialists and brought her to San Miguel de Tucumán. There, she joined the newly formed scientific circle at the Miguel Lillo Institute



and studied under the renowned British lichenologist Ivan Mackenzie Lamb. In 1949, she earned her doctorate for a dissertation on the macrolichens of the Tucumán region, which was published the following year as *Los líquenes foliosos y fruticulosos de Tucumán*. In the same year, she published her monumental country-wide baseline index, *Contribución al catálogo de líquenes argentinos* (1950). Following Lamb's departure in 1950, Grassi was appointed professor of cryptogamic botany at the Fundación Miguel Lillo. As the first native South American woman to specialise in lichenology, she published a select number of highly meticulous papers, including a critical review of the *Teloschistaceae* of Tucumán (1953). She remained an influential educator and an active bryologist until her retirement in 1985. Her herbarium is housed at LIL. Ref.: Cristóbal (2005); Krapovickas (2005).

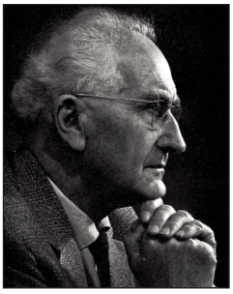


Gray, Samuel Frederick **(1766–1828)** – Born in London, England, UK, Gray was the son of Samuel Gray (1739–1771), a third-generation seedsman based in Pall Mall. He grew up surrounded by botany, developing an early interest in Linnaean taxonomy from his father. Unable to finance the completion of his medical qualifications, Gray relocated to Walsall, Staffordshire, following his marriage in 1794, where he established a metallurgical assay office (1797–1800). Upon returning to London, he opened an apothecary business in Wapping, though this venture ultimately failed. He subsequently supported his family through scientific writing and lecturing on botany and *materia medica*. Gray's botanical legacy rests on his two-volume magnum opus, *A Natural Arrangement of British Plants* (1821). The work is historically significant as the first English flora to reject the artificial Linnaean system in favour of the natural classification system of Antoine Laurent de Jussieu (1748–1836). While published under his name, the text was largely compiled by his son, the zoologist John Edward Gray (1800–1875). The volumes provided a substantial treatment of lichens, cataloguing roughly 400 species. Gray dismantled the broadly defined Linnaean genus *Lichen* into multiple distinct genera. Taking groups that Erik Acharius had more cautiously treated as sections or subgenera, Gray elevated them to generic status. Consequently, he remains the author of several widely accepted genera today, including *Enchylium* (Ach.) S.F. Gray, *Leptogium* (Ach.) S.F. Gray, and *Placynthium (*Ach.) S.F. Gray. The specimens utilised for the *Natural Arrangement* were integrated into his son's collections, and were later deposited at BM. Ref.: Boulger (1890); Desmond (1977).

Green, Thomas George **Allan (1945–) –** Born in Penzance, Cornwall, UK, Green graduated with a PhD from the University of Oxford in 1970. Shortly afterwards, he relocated to New Zealand, which became his second homeland, serving as a Professor at the University of Waikato from 1972 to 2006. Although his broader research in terrestrial ecology has focused on plant physiology ranging from trees and ferns to mosses, the majority of his scientific output and his highest-impact papers have dealt specifically with lichens. His extensive record of peer-reviewed publications began in 1974 with a seminal paper on

lichen physiology. In 1998, Green was awarded a Humboldt Research Fellowship, which allowed him to collaborate closely with Otto Lange (Würzburg) and Ludger Kappen (Kiel) in Germany, a country he considers his third homeland. Working alongside German and Spanish colleagues including Lange, Kappen, Burkhard Büdel, Burkhard Schroeter, and Leopoldo Sancho, he conducted highly innovative, pioneering experiments that resulted in foundational papers on lichen ecophysiology. He has also led numerous Antarctic expeditions to the Transantarctic Mountains on behalf of Antarctica New Zealand. Following his retirement from Waikato, Green undertook a ten-year research fellowship at the Complutense University of Madrid, Spain, where he headed the Spanish component of the European BiodivERsA project. In recognition of his distinguished career, he was awarded a Higher Doctorate (DSc) by the University of Oxford in 2012. He received the New Zealand Antarctic Medal in the 2013 Queen's Birthday Honours List for his services to Antarctic research, followed by the Acharius Medal from the IAL in 2016. Ref.: L. Sancho *pers. comm.*; Sancho (2016).

Grisley, Gabriel (c. 1620–1700) – Born in Germany (erroneously recorded as English by Grummann in 1974) Grisley was a Jewish physician who settled in Lisbon during the 1640s. In 1652 he received the royal privilege from King João IV to manage and elevate the existing Xabregas garden into a formal royal instructional facility, the *Horto Real de Xabregas*. In 1661, he published *Viridarium Lusitanicum*, which he dedicated to the German count Friedrich von Schönberg (1615–1690). This work included several lichens, marking the earliest known records of these organisms from Portugal. In the book's preface, Grisley styled himself *"chymiater et botanicus"* (chemist and botanist). Although no physical herbarium has survived, his botanical observations were later systematically indexed using modern Linnaean binomial taxonomy by the naturalist Domenico Vandelli (1735–1816) in 1789. Ref.: Silva da (1859); Sousa Viterbo (1906).



Groenhart, Pieter (1894–1965) – Born in Ilpendam, north of Amsterdam, the Netherlands. Trained as an educator, he taught at several primary schools in his youth before relocating to the Dutch East Indies in August 1926. Following a brief stay in Batavia (now Jakarta), he was appointed on 1 November 1926 as a botany instructor at the School of Agriculture in Malang, East Java, where he became captivated by the region's rich tropical lichen flora. He took an extended leave of absence from 1932 to 1936 to study biology at the University of Utrecht while examining tropical specimens at the *Rijksherbarium* in Leiden. He returned to Java, and in 1940 was transferred to a higher-grade government school in Buitenzorg (now Bogor), receiving special dispensation to spend one day a week conducting research at the Bogor Botanical Gardens. This arrangement was shattered by the Second World War; he survived three years in a Japanese internment camp, emerging in 1945 with severely impaired eyesight. After recuperating in Leiden, he returned to Bogor in 1947 to serve as the institutional lichenologist. He repatriated to the Netherlands in early 1955, working from Leiden to process his collections. Though his tumultuous life hindered him from publishing major works on the region's lichens, he left

an unfinished monograph on the enigmatic genus *Cryptothecia*, on which he had published several short papers. He also managed to produce a series of floristic contributions on poorly understood Malaysian lichens, describing several new taxa, including the genus *Aglaothecium*. His personal herbarium of 5,000–6,000 specimens (with totals expanding to 8,000) is housed at L. Ref.: Maas Geesteranus (1966).



Grube, Martin (1965–) – Born in München, Bayern, Germany, where his father worked as a physicist for Siemens. At the age of seven, he moved to Marktoberdorf in Ostallgäu before completing his education in Deutschlandsberg, Austria, where he was inspired by the diverse natural environment of the Eastern Alps. Seeking a deeper engagement with the natural sciences than his secondary education provided, he enrolled at the University of Graz in 1983 to study biology. There, he joined the academic circle of the influential professor Josef Poelt, a defining milestone for his career. Focusing on lichens, he completed a diploma thesis on lichen parasites in 1989 under the supervision of Poelt's student Josef Hafellner; a revised version was published in 1990 (as Grube & Hafellner). His subsequent research into red-pigmented *Arthonia* species culminated in a doctoral thesis in 1995. During this period, he spent time at the Smithsonian Institution in the United States working alongside Paula T. DePriest (1952–). This experience provided him with valuable insights into emerging molecular methods, which he introduced to Graz by establishing a dedicated molecular laboratory—one of the earliest in Europe to focus specifically on lichens. This facility attracted numerous guest researchers, significantly advancing the field of lichenology at the institution. He was appointed professor in 2004 and later served as Head of the Institute of Biology. His recent research addresses broader evolutionary themes, including the genomics of lichenisation, the metagenomics of complex symbiotic microbiomes, photobiont association patterns, and facultatively lichenised fungi. He has described several taxa. His herbarium is housed at GZU. Ref.*: Pers. comm.*



Gruezo, William Salim **(1951–)** – Born in Majayjay, Laguna province, on Luzon Island in the Philippines. Following his local education, he began studying forestry in 1968 at the Agricultural College of the University of the Philippines Los Baños (UPLB), graduating in 1972. He continued his academic training at the same university's graduate school, earning a Master's degree in botany in 1979. His career path shifted during a BIOTROP training course at the Bogor Botanical Gardens, where he became captivated by the sheer abundance of bryophytes and lichens, as well as the ease with which they could be collected and preserved. Realising that no local scientists were actively investigating Philippine lichens, he established his own specialised lichen herbarium. In 1983, he attended a course at Cornell University in New York, and the following year became a graduate teaching assistant at the University of Alberta in Edmonton, Canada. He completed his doctoral studies there in

plant taxonomy and biosystematics in 1988. Upon returning to the Philippines, Gruezo served as associate curator of the mycological herbarium at UPLB until 1999, having been appointed Director of the Museum of Natural History in 1992. He held several teaching posts at UPLB, culminating in his appointment as Professor of Biosystematics at the School of Environmental Science and Management in 2005. Gruezo has been a key figure in regional environmental conservation. Although his contributions span multiple botanical fields, he has long been the only active lichenologist in the archipelago. He is particularly recognised for his work on the richly developed family *Lobariaceae*, and in 1979 he published a valuable compendium summarizing everything known about Philippine lichens up to that time. He has described some taxa. His herbarium is housed at CALP. Ref.*: Pers. comm.*



Grummann, Vitus Johannes **(1899–1967)** – Born in Jacobsdorf, Oberschlesien, Kingdom of Prussia (now Jakubowice, Poland). Intending to pursue a career in education, he attended a teachers' training college in Bad Ziegenhals (now Głuchołazy, Poland) from 1913 to 1920, a period interrupted by his military service in the First World War. He subsequently worked as a primary schoolteacher in Berlin until 1942. Throughout his teaching career, Grummann actively collected and studied lichens, publishing various discoveries, including a notable paper on the lichen flora of the island of Rügen. In the late 1930s, he began studying natural sciences at the Friedrich-Wilhelm University in Berlin. Although his studies were disrupted by conscription during the Second World War, he successfully earned his doctorate in 1939 under Professor Friedrich Diels (1874–1945). His doctoral thesis focused on abnormal structures in lichen thalli, making a major contribution to the frequently neglected field of lichen teratology. Following the Second World War, Grummann balanced his roles within the Berlin school system with an appointment heading a department at the institute for educational film and imagery (the former *Reichsanstalt für Film und Bild*, later reorganised as the *FWU*). Despite his scientific output, he never secured a permanent university appointment. Nonetheless, he remained dedicated to lichenology, co-authoring a comprehensive lichen flora of Mark Brandenburg with Johannes Hillmann in 1957. He is best remembered for two meticulously researched catalogues: his checklist of German lichens (1963) and his monumental biographical-bibliographical handbook of lichenology, which was finalised after his death and published by Oscar Klement in 1974. This handbook remains a goldmine of information; Grummann's thoroughness was such that he personally verified church registries and gravestones to confirm the exact lifespans of early lichenologists. He described a few taxa, among them the genus *Vorarlbergia* (a synonym of *Epigloea*). His herbarium is housed at B. Ref.: Kärnefelt & al. (2012); Klement (1968).

Gunnerus, Johan Ernst (1718–1773) – Born in Christiania (now Oslo), Norway (at that time in union with Denmark), where his father, Rasmus, was the town physician; his mother, Anna Gerrard, was of Scottish descent. A precocious child, he excelled in classical languages, but his father's untimely death in 1732 disrupted his initial studies at the



University of København. Owing to financial difficulties after his first year, he was forced to return to Christiania to work as a private tutor. He eventually secured a royal scholarship, enabling him to study in Halle, Germany. He subsequently moved to Jena, where he earned a doctorate in philosophy in 1745 and continued to teach until 1754. Gunnerus was then recalled to Denmark by the King to serve as a pastor and rector at the Herlufsholm school for the nobility. However, following formal complications regarding his theological ordination, he instead took up the post of provost at the university's *Kommunitetet* and acted as an extraordinary professor at the University of København. He became so popular with the students that established professors reportedly complained to the King. To Gunnerus's surprise and initial disappointment, the King suddenly appointed him Bishop of Nidaros (Trondheim) in Norway in 1758. Nevertheless, he used this influential position to advance science in his native country, co-founding the Royal Norwegian Society of Sciences and Letters. He botanised extensively during his pastoral visits across his vast diocese, which stretched throughout northern Norway to the Russian border. He produced Norway's first flora, *Flora Norvegica* (1766–1776), which included descriptions of several lichens and a number of new species, e.g. *Lichen normoericus*, the type species of the genus *Cornicularia*. His herbarium is housed at TRH. Ref.: Jørgensen (2010, 2012); Lysaker (2001).

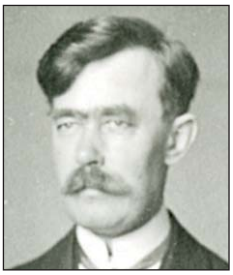


Guo, Shou-you (1966–) – Born in Beiguo village, Huangji Town, Hongze County, Jiangsu province, China, where his father worked as a teacher. After completing his local education, he began studying biology at Nanjing University in 1983, having developed a keen interest in the natural world while assisting his mother with agricultural work. During his undergraduate studies, he became fascinated by the symbiotic nature of lichens. On the recommendation of one of his lecturers, he applied for a scholarship to study under Professor Jiang-Chun Wei in Beijing. There, he successfully completed an M.Sc. in Microbiology in 1990 and subsequently earned his Ph.D. in 1996, specialising in the *Cladoniaceae* family. In 1999, he was appointed associate professor at the Institute of Microbiology, Chinese Academy of Sciences in Beijing, where he has since remained an active member of the research faculty. In addition to revising the taxonomic material of several genera, most notably the *Umbilicariaceae* and *Cladoniaceae,* his primary research focus lies in establishing phylogenies through molecular methods and investigating the lichenisation process. Throughout his career, Guo has served as an authoritative and invaluable conduit for research on Chinese lichenology, and he has described several new taxa. His herbarium is housed at HMAS. Ref.*: Pers. comm.*

Gyelnik (Kőfaragó-Gyelnik, after 1935**), Vilmos** (Wilhelm) **(1906–1945)** – Born in Budapest, Austro-Hungarian Empire (now Hungary), into a working-class family. Despite his modest background, he managed to enter the Pázmány Péter University in Budapest in 1924, where he distinguished himself as an outstanding botany student specialising in



lichens. In 1929, he earned his doctorate with a thesis on Hungarian lichen vegetation and was appointed a *Privatdozent* the following year. He subsequently became the keeper (*kustos*) of the herbarium at the Hungarian Natural History Museum in Budapest, having received his foundational training in lichenology from György Timkó, the head of the museum's botanical department. In 1927, Gyelnik spent six months in Finland to further his specialisation following an invitation from Veli Räsänen in Kurkijoki; during this trip, he also visited Edvard Vainio in Turku and conducted herbarium studies in Helsinki. The following year, he worked in Cairo to help organise the newly established agricultural museum. In 1930, he travelled across Sweden, occasionally accompanied by Ödön Szatala, and met several leading Swedish lichenologists. Gyelnik was a highly prolific author, but he was frequently criticised by his contemporaries, such as Kušan (1934), for working too rapidly and uncritically. His poor reputation was further compounded when, in a highly unusual move, the editors of Rabenhorst's *Kryptogamen-Flora* included a footnote in his volume on the *Pannariaceae* explicitly disclaiming any responsibility for his text. Tragically, Gyelnik and his family were killed in early 1945 during a bombing raid on a railway station in Amstetten, Austria, whilst fleeing the war zone. During his brief but intense career, he described numerous taxa, including 264 new species and several new genera. Among these were *Moelleropsis* (now *Fuscopannaria*,) and *Vestergrenopsis* (now *Tingiopsidium*). He also issued two exsiccatae series, primarily composed of Hungarian lichens. His herbarium is housed at BP. Ref.: Sjödin (1954); Verseghy (1963).



Häyrén, Ernst Fredrik (1878–1957) – Born in Lempäälä (Lembois), Finland, where his father was the master of the local railway station. Following his father's death in 1883, his mother, Betty Charlotta (née Reuter), relocated the family to her ancestral home in Ekenäs (Tammisaari). This coastal setting profoundly shaped Ernst's early natural history interests, which were actively nurtured by his prominent maternal uncle, the entomologist Odo Morannal Reuter (1850–1913). Häyrén studied botany at the University of Helsinki under Fredrik Elfving, a plant physiologist known for his unique theories on lichenisation. More significantly, Häyrén trained under Johan Petter Norrlin, whose instruction emphasised field excursions and rigorous dialogue over formal lectures. He was also deeply influenced by the brilliant plant sociologist Ragnar Hult (1857–1899), who inspired him to systematically study seashore vegetation. Häyrén conducted a masterful, detailed analysis of the plant and lichen communities at Ekenäs, graduating with his candidate degree in 1901. In doing so, he described and characterised numerous saxicolous lichen communities for the first time, directly anticipating the work of the famous Uppsala school, where G. Einar Du Rietz later treated similar ecological units. He was assisted by E. A. Vainio in the identification of the more critical lichens, until Vainio shifted to the University of Turku following Finnish independence. Häyrén defended his doctoral thesis in 1915, delivering a seminal study based on the coastal vegetation around the Tvärminne Zoological Station in the south-

west. In 1922, he was appointed docent of botany at the University of Helsinki (H), where he was ultimately awarded the personal title of Professor in 1942. While his highly detailed local monographs have occasionally been overlooked outside the Nordic region, Häyrén was an international pioneer in the study of rocky shore lichen communities, and his plant-sociological methodology directly influenced subsequent urban and coastal ecology studies as far away as Poland. His herbarium is housed at H. Ref.: Collander (1965); Luther (1960); Segerstråle (1959).



Hafellner, Josef (1951–) – Born in Leoben, Steiermark, Austria, he was the son of a bookkeeper, but during his childhood he loved spending time on his grandfather's farm, where he became fascinated by the natural world and its flora. After completing his local education, he studied biology at the University of Graz. There, his interest in lichens was kindled by Josef Poelt, under whose guidance he earned his doctorate in 1978 with a monographic thesis on the genus *Karschia*. In 1975, upon completing his master's degree for secondary school education, he had already been appointed an assistant (*Universitätsassistent*) at the University of Graz. He qualified as a university lecturer (*Habilitation*) in systematic botany and geobotany in 1983 with a monograph on *Letrouitia*, later becoming an associate professor. Hafellner was a guest professor at the *École Normale Supérieure* in Fontenay-aux-Roses/St. Cloud, France, in 1980 and 1982, collaborating with André Bellemère on transmission electron microscopy (TEM) studies of asci. This collaboration resulted in a landmark publication in 1984 that comprehensively revised the classification of the order *Lecanorales* by pioneering the use of ultrastructural characteristics of ascus tips. This work revolutionised lichenology, establishing ascus morphology as a standard method in generic taxonomy. He subsequently revised numerous genera worldwide, including a vast number of lichenicolous fungi. Throughout his career, he has described a multitude of new taxa, including well-known genera such as *Aspilidea*, *Bryodina*, *Calvitimela*, *Megalaria*, *Myxobilimbia*, *Poeltinula*, and *Pycnora*. His contribution to the field is honoured by the genera *Hafellia* Kalb *et al.*, *Hafellnera* Houmeau & Cl. Roux, and *Fellhanera* Vězda (an anagram of his surname), as well as numerous eponymic species. He received the Acharius Medal from IAL in 2016. His herbarium is housed at GZU. Ref.: Hertel & al. (2017); Grube (2016); Grube & al. (2016).



Hagen, Carl Gottfried **(1749–1829)** – Born in Königsberg, Kingdom of Prussia (now Kaliningrad, Russia). He began an apprenticeship in 1763 at his father's pharmacy, the *Hofapotheke*, in Königsberg. In 1775, he completed his doctoral degree in medicine, subsequently becoming an extraordinary professor in 1778 and a full professor in 1779. From 1807, he held the influential chair of chemistry, physics, and natural history, establishing the first academic laboratory for pharmaceutical chemistry in Germany. Appointed *Medizinalrat* (medical councillor) in 1809, he played a central role in restructuring the Prussian pharmaceu-

tical education system and authored two definitive textbooks. Highly esteemed by the Prussian royal family, Hagen was a true polymath who also founded the Königsberg Botanical Garden. His significance in the history of lichenology is secured by his pioneering work, *Tentamen Historiae Lichenum et praesertim Prussicorum* (1782). This treatise represents a remarkably early local lichen flora of broader historical significance, in which he recorded 80 distinct species. It stands as one of the earliest examples of a comprehensive lichenological survey for that region. The lichen genus *Hagenia* Eschw. (1824) (now a synonym of *Anaptychia* Körb.) was named in his honour. His historical herbarium was lost during the destruction of Königsberg in the Second World War. Ref.: Dann (1966); Zekert (1955).



Hakulinen, Rainar Alarik **(1918–1991)** – Born in Kurkijoki, Karelia, Finland (now in Russia), where, as a schoolboy, he became acquainted with Veli Räsänen, who was then teaching at the local agricultural college. The two frequently went on botanical excursions together. After completing his secondary schooling, Hakulinen's plans to study at the University of Helsinki were severely disrupted by the outbreak of the Finnish-Soviet wars. He served at the front, was wounded multiple times, and witnessed his home region being permanently ceded to the Soviet Union in 1944. Despite these profound wartime hardships, he successfully completed his Master's degree shortly after the war, in 1948. He subsequently worked as a schoolteacher in Kyrö (Varsinais-Suomi) and later, from 1951, in Hämeenlinna (Tavastland). In 1954, he defended his doctoral thesis on the lichen family *Candelariaceae*, a landmark work for which he remains best known internationally. Hakulinen wrote extensively on the distribution and ecology of boreal and arctic lichens, authored the first popular lichen flora of Finland, and meticulously completed Räsänen's famous exsiccatae series, *Lichenotheca Fennica*. His herbarium is housed at TUR. Ref.: Ahti (1993b).



Hale jr., Mason Ellsworth **(1928–1990)** – Born in Winsted, Connecticut, USA. He began his studies in natural history at Yale University in 1946, where he became an assistant to Professor Alexander Evans, who inspired him to study lichens, particularly from a chemical perspective. Hale's first paper (1950), however, was a floristic study of the lichens at the Ashton Forest Estate in Connecticut. He had attended a field course there in 1949 led by the prominent ecologist Fredric E. Egler (1911–1996), who maintained a keen interest in the group and had accumulated a considerable lichen herbarium that Hale curated and studied. On the recommendation of John W. Thomson, with whom Hale had corresponded as a student, he joined the ecologist Pierre Dansereau (1911–2011) as a field assistant on Baffin Island. The lichens he collected during this expedition formed the basis of his Master's degree, completed in 1951 under Thomson's supervision at the University of Wisconsin, where Hale subsequently earned his doctorate in

1953. Influenced by the plant ecologist John T. Curtis (1913–1961), Hale focused his doctoral thesis on lichen communities in the upland forests of southern Wisconsin. He was subsequently appointed as an assistant professor at the University of Wichita, Kansas, and later at the University of Virginia, Charlottesville, before joining the Smithsonian Institution in Washington, D.C., as an assistant curator in 1957. Over the following decades, Hale systematically built up the Smithsonian's lichen collection, primarily through his own extensive fieldwork in tropical and subtropical regions, including Australia, Central America, India, the Philippines, and the West Indies. These collections supported his monumental project to revise the massive genus *Parmelia*, which he was convinced required fragmentation into smaller, natural genera. To achieve this, he pioneered a multidisciplinary approach combining secondary chemistry (principally Thin-Layer Chromatography), scanning electron microscopy, and early computer technology. Although subsequent molecular studies have necessitated some adjustments, his generic segregates remain foundational to modern lichen taxonomy. His index of epithets used in *Parmelia* contains over 4,000 names, the type specimens of which he painstakingly attempted to verify, a work completed and published posthumously by his wife, Beatrice, and his former student, Paula DePriest (1959–). Hale's scientific interests were remarkably broad; he published extensively on lichen ecology, plant geography, growth rates, dispersal mechanisms, and air pollution monitoring. He even authored a pioneering paper on the biodeterioration of ruined Maya monuments by lichens, proposing methods to mitigate their destructive impact on historic stone structures. Furthermore, he made seminal contributions to the taxonomy of the tropical families *Graphidaceae* and *Thelotremataceae* (the latter now widely subsumed within the former). To assist amateur botanists, Hale published several introductory identification handbooks. This was a critical milestone for North American science, as most available reference works at the time were based on European material and were poorly suited to the American flora. Beyond his research, he served as the editor of the first *IAL Newsletter*, which he personally printed with the assistance of his son, Bobby. He served as President of the IAL from 1981 to 1987 and was posthumously awarded the Acharius Medal in 1992. Throughout his prolific career, he described numerous new taxa, including the genera *Arctoparmelia*, *Bulbothrix*, *Flavoparmelia*, *Karoowia*, *Namaqua*, *Parmelina*, *Psiloparmelia*, and *Relicina*. The genus *Masonhalea* Kärnefelt, along with numerous eponymic species, was named in his honour. He also distributed an exsiccatae series of American lichens. His herbarium is housed at US. Ref.: Culberson (1991), DePriest (1999); Thomson (1993).

Halicz, Benedykt (1903–1997) – Born in Stryi, Galicia, Austro-Hungarian Empire (now Stryi, Ukraine). After completing his secondary education in Jasło, he began studying philosophy at the Jan Kazimierz University in Lwów (now Lviv) in 1921, but later switched to natural history. He graduated in 1927 with a diploma in biology and chemistry. He subsequently passed his pedagogical examinations and, following further training at the University of Poznań, spent the 1930s working as a secondary schoolteacher. At the outbreak of the Second World War, he was teaching at a high school in Konin, eastern Greater Poland. Evacuated to Pinsk in the Soviet-occupied sector, he continued teaching until the German invasion of the region. During the subsequent occupation, he worked as a church organist while simultaneously serving as an intelligence officer for the Polish partisans.

Following the liberation in 1944, Halicz initially served as the head of the Department of Culture and Art Education, before being appointed as a lyceum teacher in Łódź in 1945. In 1948, he joined the University of Łódź, where he earned his doctorate in 1950 with a thesis on the cellular slime mould *Dictyostelium mucoroides*, supervised by the mycologist Franciszek Ksawery Skupieński (1888–1962). For his habilitation in 1960, he presented a study on the epiphytic lichens of the Łódź region, a research theme suggested by the botanist Jakub Mowszowicz (1901–1983). Although he initially had little academic interest in lichenology, Halicz subsequently redirected his research towards the ecology and distribution of lichens, focusing heavily on their utility as bioindicators. He became deeply involved in urban ecology and the environmental conditions of industrial areas. In late 1957, he was appointed director of the university's 'Rogi' biological station. This facility was later integrated into the Department of Evolutionism, which Halicz chaired for many years alongside his tenure as Dean of the Faculty of Biology and Earth Sciences (1964–1969). He was a highly popular lecturer who trained numerous students in urban ecology, most notably Stanisława Kuziel (1923–2012). Halicz described no new taxa. His herbarium is housed at LOD. Ref.: Tomaszewski & Różalski (1997).



Haller, Albrecht von (1708–1777) – Born in Bern, Switzerland, the son of a lawyer; his mother came from a family which held significant political and economic ties in the Bernese region. He was educated privately by a strict religious tutor, Abraham Billere, and his step-uncle, Johann Neuhaus, who was a physician. In 1724, he began his medical studies at the University of Tübingen, before transferring in 1725 to the University of Leiden. There, he studied under the celebrated botanist Herman Boerhaave (1668–1738) and earned his doctorate in medicine in 1727. Between 1729 and 1734, Haller practised as a physician in Bern. During this period, he wrote celebrated poetry, such as his famous poem *Die Alpen* (1732), and travelled extensively through the Alps to study and collect plants, having embarked on his first major botanical expedition in 1728 with Johannes Gessner. His earliest lichen specimens date from these high-altitude excursions, with the core of his historical collection gathered in 1732. He was appointed city librarian of Bern in 1735. The following year, he was made professor of anatomy, surgery, and botany at the University of Göttingen, Germany, where he remained until 1753 and founded its botanical garden. He returned to Bernese public service in 1753, serving as the director of the salt mines in Roche near Aigle (Vaud) from 1758 to 1764, before returning to Bern as a high-ranking council member. A versatile polymath, Haller was celebrated as one of the preeminent natural scientists of the Enlightenment. Although his conservative, pre-Linnaean approach restricted his long-term impact on botanical taxonomy, he treated numerous lichens in his monumental works on the Swiss flora, most notably *Historia stirpium indigenarum Helvetiae inchoata* (1768). These works contain detailed field observations, emphasizing the importance of recording morphological variations alongside detailed biogeographical commentary. Notably, he was among the sharpest contemporary critics of Linnaeus's sexual system and binomial nomenclature. His Swiss botanical collections were acquired by the University of Göttingen (GOET) in 1764, where his original bound volumes are preserved, whilst a portion of his extensive medical library and secondary manuscripts, purchased by

Emperor Joseph II for Pavia and Milan, was later impacted by Napoleonic looting. His main herbarium (lichens in three bound volumes) is housed at P, taken as booty by Napoleon (originally at PAV as gift from the Austrian emperor Josef II.). Ref.: Chavannes (1840); Frey (1964); Kärnefelt & al. (2012); Zimmermann (1755).

Halsey, Abraham (1790–1857) – Born in Livingston, New Jersey, USA. Although he spent his professional career working in banking, facing notable personal hardships, including declaring insolvency in 1821, the natural sciences were his primary passion. He was a prominent founding member of the Lyceum of Natural History of New York (the predecessor of the New York Academy of Sciences), where he actively lectured on lichens, establishing himself as a true pioneer of American lichenology. His sole published lichenological work was a checklist of the lichens of the New York City region, published in 1823. This landmark paper recorded a baseline of 129 species, including some new to science. As the first treatise entirely devoted to the group in North America, it is widely regarded as the first local lichen flora in the United States. The precise origins of his lichenological education remain obscure, but in his work, he extended his gratitude to Lewis David von Schweinitz for his guidance, confirming their academic correspondence. This connection is further evidenced by duplicates of Halsey's specimens preserved via the Schweinitz herbarium at the Academy of Natural Sciences of Philadelphia (PH). For over a century, Halsey's personal herbarium was believed to have been lost in the catastrophic 1866 fire that destroyed the stored collections of the New York Lyceum. Remarkably, a bound volume containing 265 of his historic specimens was recently rediscovered within the herbarium collections of the Brooklyn Botanic Garden (BKL). This major discovery has resurrected Halsey's legacy, providing scientists with an invaluable pre-industrial baseline to study centuries of ecological change in New York. Ref.: Lendemer (2024).



Hammer, Samuel (1953–) – Born in Chicago, Illinois, USA to East European Jewish immigrants; his father worked as a mechanical engineer. Following his primary and secondary education, Hammer attended Grinnell College in Iowa, graduating with a BA in anthropology. He subsequently continued his education at DePaul University in Chicago, where he earned an MA in counselling. In 1981, he relocated to Alaska, living there for two years. During his time there, he became captivated by the subarctic environment and was struck by the extraordinary richness of the local lichen flora. [Encouraged by Alix Wennekens (1916–1997), Hammer decided to transition into biological research. He undertook studies at San Francisco State University, earning an MA in biology under the supervision of the noted mycologist Harry Thiers (1919–2000). He then pursued advanced graduate research at Harvard University under Donald Pfister (1949–), successfully completing his Ph.D. in taxonomy in 1993. In his doctoral research, Hammer pioneered modern developmental techniques to study lichen morphogenesis, focusing extensively on the family *Cladoniaceae*. Hammer joined the academic staff at Boston University's College of General Studies in 1991, where he was later appointed associate professor of natural sciences. Throughout his career, he has described several new taxa, and distributed a dedicated exsiccatae series titled Cladoniaceae *Americanae exsiccatae.* His herbarium is housed at FH. Ref.: *Pers. comm.*



Hampe, Georg **Ernst** Ludwig **(1795–1880)** – Born in the principate of Fürstenberg (now Sachsen Anhalt, Germany). After completing his primary education locally, he became an apprentice pharmacist to his uncle in Brakel, Westphalia, in 1810. Over the following fifteen years, he gained extensive experience working as an assistant in various pharmacies. During a stay in Halle, he became acquainted with the prominent botanist Kurt Sprengel (1766–1833), who awakened his interest in cryptogamic botany. In 1818, he moved to Göttingen to work at the university pharmacy, where he took the opportunity to attend lectures delivered by Heinrich Adolf Schrader. The University of Göttingen later awarded him an honorary doctorate in 1870 and appointed him an honorary professor in 1875. In 1825, Hampe was appointed head of a local pharmacy in Blankenburg, situated in the Harz region. He began aggressively collecting and studying the plants of this area, eventually publishing his definitive regional flora, *Flora Hercynica*, in 1873. During his tenure in Blankenburg, he met the bryologist Karl Müller (1818–1899), who inspired him to focus heavily on bryological studies, the field in which Hampe ultimately achieved his greatest scientific renown. Although lichens were never his primary focus, they were regularly incorporated into his German fieldwork, and he included several specimens in a distributed exsiccatae series. His enduring place in lichenology rests on a seminal 1852 paper describing Australian lichens. The collection had been sent to him by Ferdinand von Mueller, composed largely of specimens gathered in Tasmania by Mueller's associate Charles Stuart (1812–1877). In this work, Hampe described the iconic yellow-green Australian lichen *Heterodea muelleri* (originally placed under the genus *Sticta*) based on a type specimen collected by Mueller in the Mount Lofty Ranges. He described some other taxa as well, and his herbarium of of roughly 25,000 specimens was bought by BM after his death. Ref.: Müller (1881).



Hansen, Eric Steen **(1943–)** – Born in Frederiksberg, København, Denmark, where his father worked as the regional manager of a newspaper distribution network. As a schoolboy, Hansen participated in a field excursion to the island of Bornholm, where he became deeply captivated by the natural environment, particularly its geology. At university, he pursued studies in the natural sciences and was heavily influenced by the inspiring professor of botany, Tyge W. Böcher (1909–1983). Hansen chose to specialise in lichenology, guided by the university lecturer Mogens Skytte Christiansen. He earned his *cand.scient.* degree from the University of København in 1971 with a thesis dedicated to lichen taxonomy. That same year, Hansen secured a position at the Botanical Museum in København, where he was eventually appointed principal curator of the lichen herbarium in 1977. His primary scientific passion has been the lichen flora of Greenland. Over his career, he has conducted forty-one challenging expeditions to remote, inhospitable Arctic districts, successfully filling in many of the blank spaces on the phytogeographical map. During these travels, he also established numerous permanent ecological plots, the devel-

opmental progress of which he has monitored across several decades. In 1995, Hansen published the first-ever illustrated, popular lichen flora of Greenland. He also distributed an important Arctic exsiccatae series based on his field research, titled *Lichenes Groenlandici Exsiccati*, alongside a separate dedicated exsiccatae series of Danish lichens. The genus *Erichansenia* S.Y. Kondr. *et al.* is named after him. His herbarium is housed at C. Ref.: *Pers. comm.*



Hariot, Paul Auguste **(1854–1917)** – Born in Méry-sur-Seine, Aube, France, the father was a highly cultivated pharmacist and passionate amateur botanist, the mother a houswife who raised Paul alongside his father in their science-oriented household. Following his initial education locally, he attended the *Lycée de Troyes* before pursuing his pharmacy studies in Paris. In 1877, he was appointed a demonstrator (*préparateur*) at the *École de Pharmacie de Paris*, subsequently qualifying as a first-class pharmacist in 1882. That same year, he was selected as the official botanist for the celebrated French Scientific Expedition to Cape Horn (1882–1883) aboard the vessel *La Romanche*. He returned from this voyage with a remarkably rich collection of Fuegian cryptogams, which greatly advanced contemporary polar botany. Profoundly influenced and mentored by the eminent cryptogamist Édouard Bornet, Hariot abandoned commercial pharmacy to dedicate his career entirely to scientific research. He worked at the *Muséum National d'Histoire Naturelle* under Philippe van Tieghem (1839–1914), and in 1888 was formally appointed as the assistant curator (*préparateur*) for the museum's expanding cryptogamic collections. He later served under Louis A. Mangin (1852–1937), earning a promotion to assistant director of the cryptogamic laboratory in 1908. While primarily focused on phycology and mycology, Hariot made notable contributions to lichenology through his Patagonian collections and described several new cryptogamic taxa. His herbarium is housed at PC. Ref.: Lloyd (1906); Mangin (1918).



Harmand, Julien **('Jules')** Hubert Auguste **(1844–1915)** – Born in Saulxures-lès-Vannes, Lorraine, eastern France, he was the son of a winegrower, and also his mother's family belonged to the agrarian and viticultural working class of Lorraine. He studied at the *Chartreuse de Bosserville* (*Séminaire de Nancy*) and was ordained as a priest in 1868, subsequently serving as an Abbé and Professor at the Collège de la Malgrange, as well as chaplain to the *Institut des Sourds-Muets* (a school for deaf children). In 1891, he retired to Docelles in the Vosges to care for his ageing parents. There, he established a close scientific partnership with the brothers Victor Claudel (1862–1918) and Henri-Marie Claudel (1865–1909), who were local paper manufacturers and enthusiastic cryptogamists. Harmand botanised extensively with the Claudel brothers, authoring the *Guide Élémentaire du Lichénologue* (1904). He belongs to the celebrated tradition of 19th-century French clerical lichenologists, operating within the intellectual circle of Abbé Jean-Marie Hue and

being deeply influenced by William Nylander. Harmand wrote several lichen floras and issued three sets of exsiccatae. Later in life (from 1909), he described numerous new taxa from across the globe. The genus *Harmandiana* B. de Lesd. was named in his honour. His herbarium is housed at DUKE, with many specimens at ANGUC. Ref.: Chipon (2018); Vargas (1916); Werner (1954).



Harris, Carolyn Wilson **(1849–1910)** – Born in Springfield, Ohio, USA, relatively little is known of her early education. However, because she ultimately bequeathed her natural history library to Antioch College in Yellow Springs, Ohio, a pioneering co-educational institution, it is widely accepted that she studied there. She married Isaac Harris (1838–1907) of Brooklyn, New York, a American Civil War veteran who had served as a corporal in the 13th Regiment of the New York State National Guard. In 1885, the couple established a summer residence on Chilson Lake in Essex County, New York. Captivated by the abundant local cryptogamic flora, she began collecting extensively and joined the Sullivant Moss Society, quickly establishing herself as a central pillar of the organisation. Operating primarily within Edward Tuckerman's morphological system, she corresponded globally, notably exchanging specimens with Annie Lorrain Smith in London. In 1901, she met the prominent American lichenologist Bruce Fink. Celebrated for her willingness to 'freely and cheerfully' assist amateurs, she mentored many entering the discipline, including her own son, Wilson Park Harris (1880–1957). She later co-authored a 1906 treatise with him on the lichens of western Montana, which was based on material he had gathered during a 1901 biological expedition. Harris organised and directed the Society's newly formed Lichen Department from 1901 to 1905. Designed to aid beginners using nothing more than a hand lens, her instructional series on macrolichens debuted in *The Bryologist* in January 1901, marking the first dedicated lichenological article series published in the journal. Although a conservative taxonomic approach prevented her from describing new species, she remains an essential pioneer in popularising American lichenology. Her herbarium is split between BM, to which A. L. Smith was presented with a set of her collections in gratitude, and MICH. Ref.: Fink (1910); Miller (1910).



Harris, Richard ('Dick') Clinton **(1939–2021)** – Born in Ann Arbor, Michigan, USA, where his father was employed by a camera firm, Harris developed an early interest in gardening and fondly remembered visiting his maternal grandparents on their remote farm. Following his local primary education, he moved to Oberlin College in Ohio to study classics. However, botany remained his primary hobby and he subsequently adopted it as his main subject, inspired by Professor George T. Jones (1897–1998) to scrutinise lichens, an understudied organismal group. HHarris graduated in 1962 and continued his education at Michigan State University in East Lansing. There, he became a student of the prominent lichenologist Henry Imshaug, who assigned him a formidable Master's topic: 'The pyrenocar-

pous lichens of the Great Lakes Region'. Although he completed this work late in 1966, he spent several further years refining it for publication, developing a new taxonomy, a continuous process as he encountered diverse floras and broadened his expertise in these notoriously complex lichens requiring exhaustive microscopic examination. He gradually emerged as a leading global authority on this group, which is particularly abundant in the tropics, a region he eventually visited. Before those travels, he made vital contributions to domestic North American lichenology; whilst teaching a course at the University of Michigan Biological Station in 1976, he compiled a definitive set of identification keys for regional species and discovered several undescribed taxa among the poorly known crustose communities. Harris subsequently undertook a doctoral thesis focusing on another critical and challenging group, the genus *Arthopyrenia*, receiving his PhD in 1975. His academic progress had been delayed by his participation in Imshaug's extensive expeditions to subantarctic regions, including the Antipodes, Campbell Island, the Snares, Kerguelen, and the Falklands. In 1974, Harris was appointed curator of the collections at the University of Michigan Herbarium (MICH), which had been largely neglected since the era of Bruce Fink and his student Joyce Hedrick. He remained there until 1979, when he relocated to New York with his partner, the bryologist William R. Buck (1950–), to manage the lichen collection at the New York Botanical Garden (NYBG). From the mid-1980s, he and Buck undertook systematic studies of lichens in Florida, Buck's native state, resulting in numerous new discoveries. He later shifted his focus to the Ozark region, and was still actively reviewing this material when he died following complications from a stroke. Harris possessed a profound love for teaching and led many courses, introducing generations of students to the discipline, most notably via the iconic Tuckerman Lichen Workshops which he co-founded with Buck in 1994. Because he never held a formal professorial faculty position, he only ever supervised three graduate students; his most celebrated disciple, James C. Lendemer (1984–), continues his research trajectory at NYBG. Over his career, Harris described 14 genera and more than 200 species. The genus *Harristroma* Le Renard *et al.* is dedicated to him. His herbarium is housed at MSC and NYBG. Ref.: Buck (2009); LaGreca (2021).

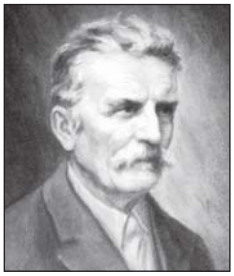


Hasse, Hermann Edward **(1836–1915)** – Born in Freiburg, Großherzogtum Baden (now Sachsen, Germany), he emigrated to Milwaukee, Wisconsin, USA, with his family in 1845. His father, a lawyer possessing an extensive library, ensured his son received an excellent education. At the age of 19, young Hermann developed a deep interest in botany whilst working in a local pharmacy. He pursued medical studies in St. Louis, Missouri, graduating in 1857, and subsequently returned to Europe for advanced medical training in Leipzig (1857–1860). Following a brief period of study in Prague, he earned his medical doctorate at Würzburg, Bayern, in 1861. Returning to the United States, he served with distinction as a surgeon for the 9th Wisconsin Volunteer Infantry Regiment during the American Civil War. After the war, he practised medicine across several states, beginning to assemble a private botanical herbarium as a hobby in 1880. In 1890, Hasse received a circular from the Swiss lichenologist Ernst Stizenberger requesting specimens from the poorly docu-

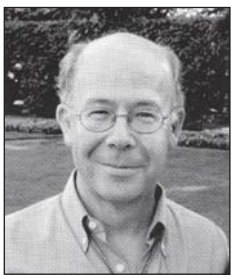
mented Pacific coast. Hasse's lichenological activity had already accelerated following his relocation to Los Angeles and his subsequent 1888 appointment as Chief Surgeon at the National Soldiers' Home in Santa Monica, California. He explored many remote regions of the state, frequently trading free medical consultations for local botanical access to private lands. He maintained an extensive correspondence with prominent American lichenologists, including W. G. Farlow, B. Fink, and G. K. Merrill, as well as European authorities W. Nylander, E. Stizenberger, and A. Zahlbruckner. Hasse published his first lichenological paper in 1895, cataloguing his regional discoveries. His field breakthroughs culminated in his seminal monograph, *The Lichen Flora of Southern California* (1913). Following his death, Charles Plitt, then curator of the Sullivant Moss Society, distributed a posthumous exsiccatae series under the title *Lichenes exsiccati ex herb. Dr. H. E. Hasse relicti.* The genus *Hassea* Zahlbr. (now a synonym of *Sarcopyrenia*) was named after him. While the New York Botanical Garden (NY) had acquired a foundational set of 4,500 specimens from him in 1907, his primary private herbarium was deposited at the Farlow Herbarium (FH) after his death. Ref.: Fink (1916); Knudsen (2010); Plitt (1916).



Hasselrot, Torsten Edvard **(1903–1970)** – Born in Granvik, Västergötland, Sweden, where his father, Carl-Axel Elias (1876–1936), was a vicar, and his mother, Anna Maria (née Braun) (1878-1935) the daughter of a military physician. Descending from a long lineage of clergymen dating back to the 16th century, he initially struggled to break away from family tradition. Following his matriculation exam in Göteborg in 1923, he met and befriended Gunnar Nilsson (later known as Degelius), who inspired his lifelong interest in botany. Hasselrot completed an introductory theological-philosophical degree at Lund University in 1926. Realising the ministry did not suit him, he shifted his academic focus to the natural sciences, completing his candidate degree in 1930 and his subsequent Master's equivalent (*filosofisk ämbetsexamen*) in 1933. He then relocated to Uppsala University, where he integrated into a dynamic group of young lichenologists at the *Växtbiologiska Institutionen* under Professor G. Einar Du Rietz. Alongside S. Ahlner and G. Degelius, he formed a legendary trio that travelled extensively across Scandinavia, accumulating massive collections and mapping distributions. Their collective research focused heavily on biogeography. Hasselrot investigated the southern limits of arctic-alpine lichens, eventually specialising in the genus *Umbilicaria*, a group of special interest to Du Rietz. Hasselrot earned his licentiate degree in 1941, a product of highly meticulous and exacting research methods that Degelius later noted occasionally verged on pedantry, adding that it was 'much better than the opposite'. His monumental biogeographical findings were published in his 1953 masterwork, *Nordliga lavar i Syd- och Mellansverige*. In 1947, he became an amanuensis at the *Naturhistoriska Riksmuseet* in Stockholm, where he had assisted since 1952, and was appointed curator (*intendent*) of its botanical department in 1956. He curated the museum's historic lichen collections with professional rigour and exceptional care. His contributions remained primarily floristic and biogeographical, spanning both lichens and phanerogams, and he described no new taxa. His primary herbarium is housed at S. Ref.: Degelius (1971).



Havaas, Johan Johnsen **(1864–1956)** – Born in Granvin, Hordaland, Norway, he was the son of John Vikingsen, a mountain smallholder. When his father passed away in 1878, Johan was only 14 years old, and his mother, Hildegunna (née Eide), forced him to run the family farm as a peasant farmer. Nevetheless, he managed to self-educate in biology, also getting hold of books in foreign languages. He developed a keen early interest in the natural world, particularly botany, but lacked the financial resources to pursue a formal university education. His sharp analytical capabilities were recognised during a military medical training course at Voss, which led to an introduction to the Bergen Museum. In 1902, the museum awarded him a research stipend, a position he proudly maintained until his retirement. A self-taught lichenologist, Havaas received taxonomic guidance through a lifelong correspondence with the Finnish authority E. A. Vainio, though the two men never met in person. Whilst Havaas focused intensely on his native Hardanger district, he also undertook sweeping expeditions across Norway, collecting specimens as far north as Kirkenes in Finnmark. He published relatively few papers; far more significant are his distributed exsiccatae series, which he mounted and annotated personally with exceptional artistic and scientific precision. His main collection is in BG, though his private herbarium was bought by DUKE after his death. Today, a dedicated museum at his ancestral farm in Granvin honors his extraordinary botanical legacy. Ref.: Dahl (1956); Kjerland & Haugse (2005).



Hawksworth, David Leslie **(1946–)** – Born in Sheffield, England, UK, he was the son of a grammar school teacher. Upon moving to Derbyshire at the age of 11, he developed a deep interest in the natural environment and spent much of his time collecting plants and insects across the Peak District. Although his school biology teacher was a keen naturalist, he was unable to identify local lichens, prompting the young Hawksworth to search for a definitive reference book in his local library. Surprisingly, the only text available was Des Abbayes' *Traité de Lichénologie*, an advanced volume that profoundly inspired him. Following his primary and secondary education, he attended the University of Leicester, graduating with a degree in botany under Tom G. Tutin in 1967. Tutin initially wished for him to pursue postgraduate research into the vegetational history of Shetland; however, when the project failed to materialise for economic reasons, Tutin suggested that Hawksworth pivot to lichenology, a field he had recently explored whilst collaborating with the local lichenologist Frank A. Sowter during a botanical survey of the ancient Bradgate Park. Encountering significant difficulties when trying to identify certain alectorioid lichens, Hawksworth established a successful project to re-examine the group using modern methodology. Although his primary supervisor, David M. Moore, subsequently relocated to the University of Reading, Hawksworth successfully completed the project largely independently, supported by Peter W. James on taxonomy and Arthur Chater on nomenclatural matters. In 1970, he defended his doctoral thesis on the alectorioid lichens of the British Isles, receiving his PhD. He later published a comprehensive revision of the genus *Alectoria*

(1977) and co-authored a seminal monograph with Irwin M. Brodo, which divided the group into several distinct genera. Around the same time, collaborating with Francis Rose, he developed a qualitative lichen-based scale for estimating regional sulphur dioxide air pollution levels, which significantly stimulated the use of lichens as bioindicators worldwide. From 1983 to 1997, he served as the Director of the CAB International Mycological Institute (IMI), developing it into a pre-eminent global institution in the field. Throughout his directorship, he played an instrumental role in integrating lichenology more closely into mainstream mycology. Of even greater taxonomic impact was the *Systema Ascomycetum* series, a bold collaborative initiative he co-founded with Ove Eriksson to construct a unified, modern classification system for all ascomycete fungi. Hawksworth was also extensively engaged in international biological nomenclature, serving as President of the International Union of Biological Sciences from 1994 to 1997. In 1994, he was elected Honorary President of the International Mycological Association (IMA). Between 2006 and 2016, he held a position as a Research Professor at the *Universidad Complutense de Madrid* in Spain, where he became heavily involved in molecular phylogenetic research. He also dedicated substantial study to lichenicolous fungi, emerging as a leading global authority on these lichen-inhabiting organisms. He was appointed a Commander of the Most Excellent Order of the British Empire in 1996 and was awarded the Acharius Medal by IAL in 2002. Hawksworth has described numerous new taxa, including the genera *Bryoria* (with Brodo), *Epicladonia*, *Geltingia* (with Alstrup), *Illosporiopsis*, and *Skyttella* (with Santesson). The genera *Hawksworthia* Manohar *et al.*, *Hawksworthiana* U. Braun, and *Hawksworthiomyces* Z.W. de Beer *et al.*, alongside many species, are named after him. His herbarium is housed at IMI. Ref.: Brodo & Crespo (2002); Kärnefelt (2009); *pers. comm.*



Hazslinszky (de Hazslin)**, Frigyes** Ákos **(Friedrich** August) **(1818–1896)** – Born into an old noble family in Késmárk in the Austrian Empire (now Kežmarok, Slovakia). His mother belonged to the *Zipser German* community, an ethnic German minority that had settled in the Spiš (Szepes) region since the Middle Ages, maintaining a distinct cultural, linguistic, and religious identity while seamlessly integrating into the broader Hungarian kingdom. His father was a saddler and painter who possessed a profound interest in natural history, which he enthusiastically passed on to his son. Hazslinszky initially studied philosophy, law, and theology in his native city, working concurrently as a tutor before relocating to Wien (Vienna) in 1843 to study chemistry. However, he quickly shifted his attention to botany, training under the celebrated taxonomist Stephan Endlicher (1804–1849). In 1846, Hazslinszky was appointed a teacher, and subsequently professor, of physics and mathematics at the Lutheran College in Eperjes (now Prešov, Slovakia) in the Carpathian region, where he made numerous important botanical and mycological discoveries. He described a significant number of new lichen taxa and even formulated a novel structural system for their classification. An inspiring educator, he mentored several prominent regional scholars, most notably the exceptional Hungarian lichenologist Hugo Lojka. Hazslinszky published the very first comprehensive lichen flora of the region, *A*

magyar birodalom zuzmó-flórája (1884). In recognition of his foundational work, the fungal and lichen genera *Hazslinszkya* Körb. and *Hazslinszkyomyces* Crous & R.K. Schumach. were named in his honour. His herbarium is housed at BP. Ref.: Magocsy-Dietz (1899); Verseghy (1963).

Hedrick, Joyce (1897–1980) – Born in Fort Recovery, Ohio, USA, she completed her local education before studying biology at Miami University, Ohio, graduating in 1929. During her time there, she became a dedicated student and research assistant to the prominent American lichenologist Bruce Fink. Following Fink's sudden death in 1927, she took on the monumental and exhausting task of completing his unfinished life's work. She relocated to Ann Arbor in 1929, steering his massive, uncompleted manuscript through the publication process to ultimately deliver the landmark volume, *The Lichen Flora of the United States*, in 1935. From 1930 onwards, she meticulously curated and maintained the extensive lichen collections at the University of Michigan Herbarium (MICH). Despite executing the exhaustive labour of a full curator, institutional hierarchies restricted her formal advancement, ranking her initially as a Research Assistant and eventually as an Associate Curator. The Swedish lichenologist Gunnar Degelius remembered her as a somewhat draconian, yet highly knowledgeable curator during his pre-war visit to the institution. It is noteworthy that in response to a request for biographical data from Vitus Grummann around 1970, she replied that she worked '*at home as a housewife and mother'*, implying that she had entirely distanced herself from lichenology, a discipline with which she reportedly felt unfulfilled in her later years (by which time she was officially retired). Grummann subsequently listed her under her married name, Mrs Volney H. Jones, which is presumably how she preferred to be recognised at that stage of her life. None of her scientific papers were published under her married name, despite having married the well-known ethnobotanist Volney Hurt Jones (1903–1982) as early as 1933. In addition to her pivotal contributions to documenting the lichens of the North American mainland, she published several important papers on the poorly understood lichen flora of Puerto Rico as part of the broader Fink research project. She described a few taxa. Her herbarium is housed at MICH. Ref.: Crum (2014); C. Moriarty *pers. comm.*



Hedwig, Johann (1730–1799) – Born in Kronstadt under the Habsburg Monarchy (now Brașov, Romania). He studied medicine at the University of Leipzig in Sachsen from 1752, where he earned his doctorate in 1759. Thereafter, he practised as a physician for the next twenty years in Chemnitz, Sachsen, before returning to Leipzig in 1781. He took up botany as a serious hobby, famously beginning each day with morning field excursions before his patients arrived. He was subsequently appointed Professor of Medicine in 1786 and Professor of Botany in 1789, serving concurrently as the Director of the Leipzig Botanical Garden. Hedwig is universally celebrated as the 'father of bryology', as his primary research interest resided in the mosses. His most monumental work, *Species Muscorum Frondosorum*, was published posthumously in 1801 and was later designated as the official starting point for the nomenclature of the Musci. A brilliant empirical biologist, he com-

bined meticulous microscopic examinations with innovative growth experiments and field studies, enabling him to successfully unravel the life cycles of numerous mosses. He dispelled the contemporary misconception that cryptogamic reproductive bodies were analogous to the seeds of higher plants, proving that they developed directly into a protonema. Hedwig also holds an important position in the history of lichenology. He was among the first researchers to recognize the structural conformity between the fruit bodies of lichens and those of true fungi. Furthermore, he described the genus *Endocarpon,* which he had encountered whilst searching for minute mosses on exposed calcareous soils. His private herbarium was bought by Carl Fr. Schwägrichen (1775–1853), and is now housed at G. Ref.: Glime (1999); Schwägrichen (1801); Wunschmann (1880).



Heiðmarsson, Starri (1969–) – Born in Blönduós, northern Iceland, Heiðmarsson developed a profound fascination with subarctic vegetation and high-latitude ecosystems, which later led him to pursue academic studies in botany. He relocated to Sweden for his advanced graduate research, earning his doctoral degree (PhD) in Systematic Botany from Uppsala University with a dissertation focusing on the lichen genus *Dermatocarpon*. Upon returning to Iceland, he established an institutional career at the Icelandic Institute of Natural History, where he served for many years as a senior botanist, head of the Botany Department, and principal curator of the national lichen collection in Akureyri. He subsequently transitioned to regional research leadership, accepting his current position as the Managing Director of the Northwest Iceland Nature Research Centre (*Náttúrustofa Norðvesturlands*) in Sauðárkrókur. While his broader scientific interests are diverse, encompassing primary succession on glacial nunataks, Arctic vegetation networks, and avian monitoring, he specialised in the taxonomy, secondary chemistry, and molecular phylogenetics of the family *Verrucariaceae* and cetrarioid lichens. He is widely recognised as a leading contemporary authority on Icelandic lichen diversity, also spearheading long-term biological expeditions to monitor the colonisation and ecological development of life on the volcanic island of Surtsey. His international presence includes a one-year sabbatical residency within the Lutzoni Lab at Duke University, alongside long-standing appointments as Co-Chair of the Terrestrial Steering Group for the Circumpolar Biodiversity Monitoring Program (CBMP) under CAFF. His vast collection of subarctic and circumpolar vouchers is primarily deposited at AMNH. Ref.: *Pers. comm.*



Henssen, Aino Marjatta **(1925–2011)** – Born in Elberfeld (now Wuppertal), Germany, she was the daughter of the prominent German folklore professor Gottfried Henssen (1889–1966) and his Finnish wife, Toini (née Saraste) (1888-1961). She studied biology at the Universities of Freiburg and Marburg, earning her doctorate at Marburg in 1953 with a thesis on a plant physiological subject, before briefly working as an assistant at the Obstbau Institute in Bonn. Her research trajectory shifted decisively towards cryptogams during post-doctoral studies in Berlin along-

side the phycologist Ursula Geißler (1931–2018), where she became fascinated by cyanobacteria and the complex lichens that host them. Henssen quickly emerged as the pre-eminent global authority on these cyanophilic lichens, which she affectionately nicknamed in Finnish as *pieniä mustia* ('the small black ones'). A research scholarship enabled her to work in Finland in 1956, followed by a transformative period at Uppsala University (1957–1961). Operating under the mentorship of Rolf Santesson, she completed a monograph on the family *Lichinaceae* (1963). In this landmark study, she introduced meticulous observations of fruiting body ontogeny, demonstrating its paramount importance for supraspecific taxonomy, a methodology previously overlooked by Simon Schwendener's school. After spending some years undertaking research in the Americas, she returned to Marburg in 1963, serving initially as curator of the herbarium and later as professor. The developmental biology of ascomata became a true speciality of hers, demanding exhaustive work and patience at the microscope. Following her promotion to a full professorship in Marburg in 1970, she and her former doctoral student Hans Martin Jahns co-authored the highly influential textbook *Lichenes: Eine Einführung in die Flechtenkunde* (1974), which presented a revolutionary classification system based on her ontogenetic observations. Although she regarded this framework as preliminary, it pivotally steered contemporary taxonomy away from Alexander Zahlbruckner's outdated system. She also described numerous species of 'the small black ones' alongside several new genera, such as *Gudelia* (named in honour of Gunnar Degelius), *Hertella*, and *Metamelanea*. In tandem with her papers, she issued a specialised exsiccatae series titled *Lichenes Cyanophili et Fungi Saxicolae Exsiccati*. The genera *Ainoa* Lumbsch & Schmitt and *Henssenia* Ertz were named after her. Henssen was awarded the Acharius medal by the IAL in 1992. Her private herbarium is housed at H (after a legal battle with her university, which she found painful, clouding her last years), although some still remain in MB. Ref.: Honegger (2011); Jahns (1993); Jørgensen (2011); Kärnefelt & al. (2012).



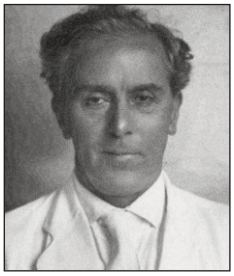
Hepp, Johan Adam **Philipp (1797–1867)** – Born in Kaiserslautern, Kurpfalz (now Rheinland-Pfalz, Germany). He studied medicine at the University of Würzburg in Bayern from 1817 and earned his doctoral degree in 1824, the same year in which he published *Lichenen-Flora von Würzburg,* his first major lichenological work, which was almost certainly a revised version of his thesis. From the acknowledgements, it appears that his primary mentor in lichenology was Wilhelm Daniel Joseph Koch (1771–1849), a physician with a keen botanical interest who had been based in Hepp's hometown ern from around 1800. From 1824, Hepp served as an assistant physician at a psychiatric hospital in Frankenthal, Germany. In 1826, he settled in Neustadt an der Weinstraße in the Palatinate, where he practised as a physician. There, he emerged as a leading figure in the Hambach Festival (*Hambacher Fest*) of 1832, delivering the opening address and officially demanding freedom of the press, an act for which he was subsequently prosecuted. He concurrently maintained his botanical pursuits in the region, helping to co-found the Pollichia Society in 1840, an organisation dedicated to nature conservation and scientific research, and serving as its president from 1842 to 1849. Although acquitted of the charges

relating to his participation in the Hambach affair, he continued his political activism. In 1849, he was elected to the Bavarian Parliament (*Landtag*) and was appointed Minister of Finance in the provisional Revolutionary Government in May 1849. After the revolution collapsed later that summer, he fled to Switzerland and was subsequently sentenced to death *in absentia* for treason. Hepp spent his exile in Switzerland largely dedicated to the study of lichens. He settled near Zürich, where he chose to remain even after being pardoned by the authorities in 1856. He became one of the most important Central European lichenologists of his era, considerably advancing the contemporary knowledge of Alpine lichens and disseminating his findings widely. This was achieved primarily through his outstanding exsiccatae series, *Die Flechten Europas in getrockneten mikroskopisch untersuchten Exemplaren mit Beschreibung und Abbildung ihrer Sporen*. This monumentally detailed work was later continued (from fascicle 13) and completed (fascicle 16) by Jean Müller Argoviensis, who had been a student in Zürich when Hepp first arrived. The neatly prepared labels are full of critical diagnostic data, including precise microscopic drawings of the fungal spores, setting a new standard for exsiccatae. These labels were also separately published in book form. The genus *Heppia* A. Massal., and many subgeneric taxa, are named after him. His personal set of this exsiccatae was bought by the University of Christiania (Oslo) in Norway from his widow and is still at O, whereas his personal herbarium was acquired by BM. Ref.: Kärnefelt & al. (2012); Wunder (1990).



Herk, Cornelis ('Kok') Martinus **van (1956–)** – Born in Stolwijk, the Netherlands. After completing his local primary and secondary education, he began studying biology at Utrecht University in 1976. He graduated in 1985, specialising in botanical ecology, with a Master's thesis focusing on snowbed vegetation in south-eastern Greenland supervised by the prominent plant sociologist Fred Daniëls (1943–). During his time at university, Van Herk was drawn to the Utrecht cryptogamic workgroup and soon became deeply involved in utilizing lichens as bioindicators of environmental health. In 1989, he joined the national lichen mapping project in the Netherlands, operating as a research scientist for the *Lichenologisch Onderzoekbureau Nederland* in Soest. Whilst conducting this intensive fieldwork, he discovered several overlooked, often inconspicuous species that had not yet been formally described by science. By collaborating with taxonomists within his research network, he co-authored descriptions for several of these widespread but previously unnoticed European macro- and microlichens. He also co-authored the widely acclaimed field guide *Veldgids Korstmossen* with André Aptroot, an essential text featuring exceptional diagnostic photographs of Dutch lichens. His herbarium is housed at L. Ref*.: Pers. comm.*; Hertel & al. (2017).

Herre, Albert William Christian Theodore **(1868–1962)** – Born in Toledo, Ohio, USA, he was the son of a German immigrant who worked as a musician and bookkeeper. Shortly after his birth, the family relocated to Detroit, where he grew up under impoverished conditions after his father died in a boating accident before Albert had reached the age of five. Following her husband's death, his mother Matilda (nèe Kirkman) single-handedly strug-



gled to raise and support her three children. Albert nevertheless managed to complete his primary education. During the summers, he lived with an uncle in the countryside, where he developed a deep fascination with the natural environment. After his mother remarried, his stepfather, William E. Carter, encouraged him to enter high school to prepare for matriculation at the University of Michigan. However, his stepfather also passed away prematurely, forcing Albert to seek immediate employment, working initially as a reporter for the *Illinois State Register* and subsequently, from 1891, as a high school teacher. In 1900, he relocated to California and enrolled at Stanford University, where he graduated with a Bachelor of Science degree in botany in 1903. He was subsequently engaged as an assistant within the United States Bureau of Fisheries. Herre began post-graduate work at Stanford in 1904, publishing his first lichenological paper shortly thereafter, though his formal Master's and PhD degrees were ultimately awarded in ichthyology. In graduate school, he studied fish biology under David Starr Jordan and Charles Henry Gilbert, but following a disagreement with the latter, he pursued his lichenological interests under the guidance of the botanist William Russell Dudley. In 1907, he travelled to Wien (Vienna) to study under the ichthyologist Franz Steindachner (1834–1919) and concurrently received specialised guidance in lichenology from Alexander Zahlbruckner. Zahlbruckner was notably one of the few established academics to take a serious interest in Herre's early lichenological endeavors, as contemporary North American authorities had largely failed to respond to his requests for taxonomic assistance. In 1908, Herre completed his doctorate at Stanford, delivering a landmark dissertation on the lichen flora of the Santa Cruz Peninsula. Thereafter, he served briefly as an assistant professor of biology at the University of Nevada before returning to California to work as a schoolteacher in Oakland. Following several academic appointments, primarily in Bellingham, Washington, he was appointed Chief of the Department of Fisheries at the Philippine Bureau of Science in 1919. He remained in this post until 1928, making pioneering collections of regional ichthyofauna and publishing approximately 200 zoological papers. Concurrently, he continued to collect lichens at the personal request of Zahlbruckner, frequently assisted by Adolph Daniel Edward Elmer (1870–1942) and local Philippine field hands. Many of these specimens were utilised by E. A. Vainio in his monumental lichen flora of the Philippine islands, though Herre also published extensively on this material himself. He returned to Stanford University as the Curator of Ichthyology, a position he maintained until his mandatory retirement at the age of 78. Only then did he fully resume his publishing career in lichenology, remaining highly active in the discipline well into his nineties. His final paper, a study of the genus *Usnea* in the Philippines, was published posthumously in 1963, leaving behind an uncompleted monograph on the group. His historic botanical collections, originally deposited at DS, are now permanently housed at CAS, with significant duplicate series at LASCA, UC, and US. Ref.: Herre (1997); Wiggins (1962).

Hertel, Hannes (1939–) – Born in München, Germany, to a mechanical engineer. Even as a schoolboy, Hertel was actively involved in environmental studies, leading a regional section of the *Deutscher Jugendbu nd für Naturbeobachtung* (the German Youth



Association for Nature Observation) between 1958 and 1964. During his final years at secondary school, he developed a keen interest in plant sociology, which he studied in peat bogs alongside his friend Hartmut Usinger (1938–2016), thereby becoming acquainted with bryophytes. When he began reading natural sciences at the University of München in 1959, he initially focused on vascular plants under Professor Hermann Merxmüller (1920–1988). However, in 1962, he shifted his attention to the plant sociology of alpine mires under the supervision of Josef Poelt. Following his first field season in the Allgäu Alps, Poelt suggested that he should redirect his research towards lichens. Hertel subsequently focused on the calcicolous taxa of the *Lecideaceae*, a lichen family he went on to revise meticulously on a global scale, emerging as the pre-eminent global authority on this challenging group. When Poelt was called to a chair at the Freie Universität Berlin in 1965, Hertel followed him, successfully defending his landmark doctoral thesis on calciphilous *Lecidea* species there in 1967. In 1972, he was appointed a professor at the Freie Universität Berlin, but returned to München the following year to take up a post as a curator at the *Botanische Staatssammlung München* (M). He served as the herbarium's provisional director from 1985 to 1992, and was ultimately appointed full Director from 1992 until his retirement in 2004. Throughout his career, Hertel continued to study high-alpine, Arctic, and Antarctic lecideoid lichens, and later participated in splitting the vast, heterogeneous genus *Lecidea* based on detailed anatomical and ontogenetic studies. Hertel has described numerous taxa, including several genera such as *Adelolecia* (with J. Hafellner), *Carbonea*, *Farnoldia*, *Lambiella*, *Lecidoma* (with G. Schneider), *Melanolecia*, *Miriquidica* (with G. Rambold), *Stenhammarella*, and *Trapeliopsis* (with G. Schneider). He continued Poelt's celebrated exsiccatae series of alpine lichens and issued a dedicated distribution series for the *Lecideaceae*. Hertel was awarded the Acharius medal from the IAL in 2008. The genera *Herteliana* James, *Hertelidea* Printzen & Kantvilas and *Hertella* Henssen, alongside many species, are named after him. His herbarium is housed at M. Ref.: *Pers. comm.*; Kärnefelt & al. (2012); Printzen (2009).



Hesse, Julius **Oswald (1835–1917)** – Born in Obereula near Deutschenbora, Königreich Sachsen (now Germany), where his father was an innkeeper who passed away when his son was only 13 years old. His mother, Rosine Beate (née Schulze) managed the family household during Julius Oswald's critical teenage years. He was initially sent to an agricultural training institute in Chemnitz, but he quickly became captivated by chemistry. The pharmacist and chemist Carl Friedrich Reichel (1800–1860) guided his early interests, introducing him to the analytical study of quinine alkaloids extracted from cinchona tree bark. In 1856, Hesse matriculated at the University of Leipzig to read chemistry, subsequently relocating to the University of Göttingen, where he earned his doctorate in 1860 with a thesis on quinones supervised by Heinrich Limpricht (1827–1909). Following

graduation, he was employed by the prominent Friedrich Jobst chemical firm in Feuerbach, a pioneering major producer of industrial quinine. Following the company's eventual integration into the Zimmer company network (*Vereinigte Fabriken Zimmer & Co.*), Hesse was appointed Director of the main Feuerbach factory. In this role, which he held for over fifty years, he introduced major efficiency improvements to their large-scale industrial manufacturing and purification processes. Despite these heavy corporate commitments, Hesse remained deeply dedicated to fundamental chemical research and published extensively, ultimately being honoured with the elite civil title of *Hofrat* and an honorary professorship. Hesse secured an enduring place in the history of lichenology through his pioneering work on lichen chemistry. He was among the very first scientists to isolate and systematically characterise secondary metabolites in lichens, successfully identifying 102 distinct lichen substances across nearly 30 scientific papers. He synthesised this lifetime of chemical exploration by writing the definitive chapter on *Flechtenstoffe* (lichen substances) for Emil Abderhalden's monumental reference work, *Biochemisches Handlexikon* (1912). Because his research relied almost exclusively on bulk chemical extractions rather than standard botanical classification, it is not known whether he ever maintained a personal botanical herbarium. Ref.: Kärnefelt & al. (2012); Ronge (1972).



Heufler von Hohenbühel, Ludwig Samuel Joseph David Alexander (Freiherr zu Rasen und Perdonegg) **(1817–1885)** – Born in Innsbruck in the Austrian Empire (now Austria), he belonged to an ancient noble family. After completing his basic schooling in his native city, he began studying law at the University of Innsbruck in 1835, before transferring to the University of Wien (Vienna) in 1837. Upon completing his studies, he entered the imperial civil service in 1842, advancing through a series of prominent administrative positions. He rose to become the President of the Central Statistical Commission in 1871, but was forced to retire the following year due to a severe mental illness that tragically culminated in his suicide in 1885. While studying in Wien, Heufler developed a profound passion for cryptogamic botany, having been introduced to the field by his close friend Otto Sendtner (1813–1859). Although his primary focus lay with bryophytes, he also enthusiastically collected lichens. His botanical and state duties took him as far east as Transylvania (now part of Romania), where in 1850 he was entrusted by the Ministry of Culture and Education with the highly successful reorganisation of the regional school system. He worked closely with the lichenologist Gustav Körber, who included many of Heufler's collections in his *Parerga Lichenologica* (1864) and dedicated that important work to him. Heufler focused much of his research on the flora of Tyrol; his extensive collections and observations were heavily integrated into Franz von Hausmann's flora of the region (1851–1854). He was elected a member of the prestigious *Academia Leopoldina* in 1855, going on to play an active, vital role in its administration. The fungal genera *Heuflera* Bail and *Heufleria* Auersw. were named after him. His herbarium is housed at M, with many lichens in L (herb. Körber). Ref.: Dolezal (1972); Hertel & al. (2017).



Hilitzer, Alfred (1899–1940) – Born in Graz in the Austro-Hungarian Empire (now Austria), Hilitzer was the son of a physician with a keen interest in entomology who frequently took him on field excursions. He attended school in Prague, where he matriculated in 1918, before completing his undergraduate studies in botany at Charles University in Prague in 1922. From 1921, he had already begun working as an assistant in the phytopathological laboratory of the Czech Technical University in Prague. He completed his doctorate at Charles University in 1925, presenting a thesis on the epiphytic vegetation of the Bohemian forests. Hilitzer subsequently became a docent (assistant professor) at the Botanical Institute of the Faculty of Agricultural and Forest Engineering at the Czech Technical University, where he collaborated closely on lichen research with Karel Kavina (1890–1948). Hilitzer was a pioneer in describing corticolous lichen communities during the early 1920s, heavily influenced by time spent studying under the renowned forest scientist and botanist Aimo Cajander (1879–1943) in Finland. Many of the ecological communities he described remain valid and widely recognised today. In addition to his work on lichens, he described several new lichen taxa and published a major monograph on the Czech *Hysteriales*. He was also an influential educator who trained subsequent generations of Czech lichenologists and cryptogamists. Together with Kavina, Hilitzer co-edited and distributed an important exsiccatae series of Czechoslovakian cryptogams, which featured a substantial selection of lichens. His herbarium is housed at PRC. Ref.: Halda (2009); Kavina (1940).



Hill, John (1714–1775) – Born in Peterborough, Northamptonshire (now Cambridgeshire), England, UK, he was the son of a local clergyman, the Reverend Theophilus Hill. His mother raised a large family under modest and financially straining circumstances. John Hill was her fourth-born and second surviving son. Following his basic education, he was apprenticed to an apothecary. After qualifying, he moved to London, where he ran a small apothecary shop in Westminster whilst also practising as a physician, having obtained a medical degree from the University of St Andrews in 1750. Despite his medical pursuits, his primary career was as a remarkably prolific author. Among his diverse literary engagements, he served as the editor of *The British Magazine* from 1746 to 1750. He also penned numerous novels and plays, though he remains best remembered for his expansive scientific publications, particularly in the field of botany. Between 1759 and 1775, Hill was commissioned by John Stuart, the 3rd Earl of Bute, to produce the monumental 26-volume botanical compendium *The Vegetable System*. He treated lichens extensively, both in *A History of Plants* (1751), which formed the second volume of his earlier *A General Natural History*, and in his *Flora Britannica* (1760). Unusually for his time, Hill accepted multiple distinct genera within the lichens, a progressive view that initially gained few followers. In recognition of his botanical achievements, King Gustav III of Sweden appointed him a Knight of the Order of Vasa in 1774. With the formal approbation of King George

III, Hill was subsequently permitted to use the title "Sir John". He was an extraordinarily controversial and highly vilified figure among his contemporaries, frequently engaging in bitter public feuds with literary and scientific institutions. His modern biographer, George Rousseau, characterised him as a complex individual ultimately undone by his own overweening ambition. Hill described nineteen lichens. His herbarium is housed at BM. Ref.: Rousseau (2012).



Hillmann, Johannes (1881–1943) – Born in Berlin, Kingdom of Prussia (now Germany), Hillmann read mathematics and natural history at the University of Berlin between 1901 and 1906, but withdrew before completing his degree to pursue a career in teaching. He taught at several regional secondary schools until a debilitating heart condition forced his early retirement in 1939. Hillmann dedicated much of his life to the study of lichens and had hoped that his retirement would allow him to complete his definitive work on the lichen flora of the Brandenburg region. Regrettably, his declining health and the outbreak of the Second World War disrupted his plans. The comprehensive volume, *Flechtenflora von Brandenburg*, was ultimately revised, expanded, and published posthumously by his close friend Vitus Grummann in 1957. Hillmann is perhaps best known for his treatment of the families *Parmeliaceae* and *Teloschistaceae* in the new edition of *Rabenhorst's Kryptogamenflora*. While he took a relatively conservative taxonomic view of these groups, this does not detract from the value of his thorough and detailed texts. His extensive herbarium was entirely destroyed during an air raid on Berlin towards the end of the Second World War; however, several duplicate specimens survive at B, largely preserved through the acquisition of Georg Lettau's herbarium. Ref.: Grummann (1974); Kärnefelt & al. (2012); Mattick (1954).

Hladun Simón**, Néstor** Luis **(1951–)** – Born in Barcelona, Catalonia, Spain, Hladun completed his university education in the biological sciences at the University of Barcelona, where he quickly aligned his scientific interests with botany and the study of cryptogams. Emerging as one of the earliest and closest disciples of Xavier Llimona, he undertook extensive floristic surveys across Catalonia. In 1984, he obtained his Ph.D. from the University of Barcelona, defending a celebrated thesis on the silicicolous lichens of the high Montseny mountain range. Following a specialised research stay in Paris to study under Marie-Agnès Letrouit-Galinou, he returned to Barcelona to take up an academic position within the Department of Plant Biology, later advancing to become *Profesor Titular* (Associate Professor) of Botany. Throughout his multi-decade academic career, Hladun established himself as a pillar of Iberian lichenology, dedicating much of his research agenda to the compilation, database management, and cartography of the regional lichen flora. He was highly influential as a research mentor and supervisor at the University of Barcelona, directing the doctoral theses of several major next-generation lichenologists, including Antonio Gómez-Bolea's work on epiphytic communities and Pere Navarro-Rosinés's studies on calcareous rock lichens. His own research ranged from monographic revisions of complex genera such as *Dimelaena* (with Llimona and Burgaz),

Sphinctrina, and *Acarospora*, to collaborative, international molecular phylogenetic assessments within the family *Teloschistaceae* and the "manna lichens". Hladun was a principal architect behind the modern cataloguing of southwestern European cryptogamic biodiversity. Alongside X. Llimona, he co-authored the monumental *Checklist of the Lichens and Lichenicolous Fungi of the Iberian Peninsula and Balearic Islands* (2001), a landmark reference work that synthesised centuries of scattered literature into a single unified taxonomy. He also contributed to conservation-oriented initiatives, including the preparation of the Red List of threatened lichens in Spain and Portugal. He has described a few new species of lichens. His herbarium is housed at BCN. Ref.: Nimis, *pers. comm.*



Hochstetter, Christian Ferdinand Friedrich **(1787–1860)** – Born in Stuttgart, Herzogtum Württemberg (now Baden-Württemberg, Germany), where his father, Johann Heinrich, served as a minister, whilst his mother, Johanna Magdalena (née Schlegel) was the daughter of the rector of the *Gymnasium* in the city of Heilbronn, Germany; through her lineage, she belonged to an educated, academic class of Swabian scholars. Following his early education, Christian entered the theological seminary at Blaubeuren in 1801, transferring to the Bebenhausen seminary near Tübingen in 1803. In 1805, he matriculated at the University of Tübingen, graduating with a Master of Philosophy and Divinity degree in 1807. During his university years, he co-founded a secret political society with the multidisciplinary scientist Carl Ludwig Reichenbach (1788–1869) that aimed to establish a utopian colony on Tahiti. The organisation was uncovered by the authorities in 1808, resulting in Hochstetter's brief imprisonment on suspicion of treason. Following his release, he spent six months teaching at a private institution in Erlangen and four years working as a private tutor for the Prussian statesman Baron von Altenstein in Thüringen. In 1816, Hochstetter relocated to Brünn (now Brno, Czech Republic), the capital of the Margraviate of Moravia (Mähren), taking up positions as a Lutheran pastor and school inspector. He returned to Württemberg in 1824 upon his appointment as a professor at the teacher training seminary in Esslingen am Neckar, later also serving as the town's chief pastor (*Stadtpfarrer*). Throughout his time in Brünn and Esslingen, he was an enthusiastic cryptogamist. He distributed numerous regional collections, including lichens, in his published exsiccatae series *Gewächse des Brünner Kreises* (1822–1826). In 1826, alongside the physician and botanist Ernst Gottlieb von Steudel (1783–1856), Hochstetter published *Enumeratio plantarum Germaniae Helvetiaeque indigenarum*, a comprehensive cataloguing of the known plants and lichens of Germany and Switzerland. The duo also established the *Württembergischer Botanischer Reiseverein* (or *Unio Itineraria*), a pioneering shareholding society designed to fund international botanical expeditions and distribute exotic specimens. Through this society, Hochstetter became celebrated for describing some of the very first lichens recorded from Ethiopia, based on North African collections sent back by the explorer Georg Wilhelm Schimper. His herbarium is housed at TUB, but specimens from the ERV are distributed in many herbaria. Ref.: Günther (1910); Schlechtendal (1860).



Høeg, Ove Fredrik **Arbo (1898–1993)** – Born in Larvik, Vestfold, Norway, to Thomas Arbo (1852–1930) a shipowner, politician, and Russian consul, and Sigrid (née Bugge) (1862–1915), who came from a prominent, affluent maritime and merchant patriciate, Høeg grew up in a highly educated environment. After completing his local education, he matriculated at the University of Kristiania (renamed the University of Oslo in 1925) in 1917 to read natural sciences. There, he studied under Bernt Lynge, graduating with a *cand.real.* degree in 1923. Høeg initially specialised in lichens; his master's thesis focused on the corticolous lichens of Larvik's famous beech forest (*Bøkeskogen*), Europe's northernmost naturally occurring stand of its kind. However, Lynge also inspired him to pursue a secondary interest in palaeobotany. Following graduation, he worked as a curator at the Palaeontological Museum in Oslo until 1926, when he was appointed curator of botany at the Museum of Trondheim. He remained there until 1947, when he returned to the University of Oslo to succeed Lynge, taking up a newly established chair as Professor of Palaeobotany, a position he held until his retirement in 1967. Høeg's most significant scientific contributions were to the Devonian macroflora, which he documented via fossil deposits in Svalbard, earning his doctorate on the subject in 1942. His palaeobotanical research took him on extensive field expeditions across Africa, most notably to the Congo and South Africa. Between 1951 and 1953, on an official assignment from UNESCO, he lived in Lucknow, India, serving as the first international director of the newly founded Birbal Sahni Institute of Palaeobotany. While there, he met the young Indian botanist Dharani Dhar Awasthi, mentoring him and fostering his career as a lichenologist. Throughout his global travels, Høeg collected lichens extensively. Although he never published detailed academic catalogues of his own collections, his specimens proved invaluable to other researchers, including O. Almborn. He did, however, publish descriptive impressions of the lichen flora of both India and Rhodesia (now Zimbabwe). In his later years, Høeg shifted his primary focus to ethnobotany. This work culminated in his 1974 masterpiece, *Planter og tradisjon* ("Plants and Tradition"), which remains the definitive "bible" on Norwegian plant folklore. As a taxonomist, he described several fossil and modern taxa, most notably the lichen *Pertusaria subviridis* (now placed in *Ochrolechia*). His herbarium is housed at LD, O, TRH. Ref.: Jørgensen (2007a); Manum (1995).



Hoffmann, Georg Franz **(1760–1826)** – Born in Marktbreit (then part of the Prince-Bishopric of Würzburg, now in Bayern, Germany), where his father worked as a physician. Hoffmann initially followed a similar career path, matriculating to read medicine at the University of Erlangen. However, under the influential mentorship of the eminent naturalist J. C. D. von Schreber, he developed a profound interest in cryptogamic botany. After graduating with his medical degree in 1786, he was appointed Professor of Medicine at Erlangen the following year, while simultaneously embarking on intensive, specialist studies of lichens. In 1792, he was elected to the prestigious Chair of Botany

at the University of Göttingen. This period marked the zenith of his lichenological career, during which he published several milestone, exquisitely illustrated works, including *Descriptio et Adumbratio plantarum e classe cryptogamica*. Hoffmann accepted an invitation to become Professor of Botany at Moscow (Moskva) University in Russia in 1804. From this point forward, his active publication output on lichens waned, as he directed most of his energy towards establishing the department of botany, its university herbarium, and its botanical gardens. Hoffmann is the authority for numerous well-known lichen species and established two major macrolichen genera: *Stereocaulon* and *Umbilicaria*. Contrary to the widespread historical assumption that his entire early collection perished during the catastrophic 1812 Fire of Moscow, Hoffmann's herbarium was actually stored at his private residence rather than the main university campus. While he tragically lost his home, personal wealth, and extensive library to the flames, the vast majority of his herbarium sheets, alongside the invaluable Jakob Friedrich Ehrhart collection he had brought with him from Germany, survived the Napoleonic wars intact. They are now preserved at MW, with significant duplicate material housed at GOET. Ref.: Fischer (1827); Kärnefelt & al. (2012); Killermann (1933).

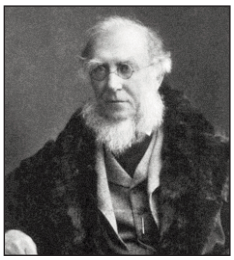


Homchantara, Natsurang ('Oy') (1957–2006) – Born in Bangkok, Thailand, Homchantara completed her early education in her native city before reading botany at Kasetsart University in Bangkok, graduating in 1979. She was subsequently employed by the Department of Pharmacognosy at Chulalongkorn University, where she developed a keen research interest in the medicinal properties of natural products derived from local plants, earning her Master of Science degree in pharmacognosy in 1985. Around this time, she became acquainted with Kansri Boonpragob, frequently regarded as the mother of Thai lichenology, and actively participated in her research initiatives. This included attending the milestone tropical lichen workshop led by Patricia Wolseley and other international experts in Chiang Mai in 1991. In 1997, she helped organise a major lichen workshop in Khao Yai National Park, sponsored by BIOTEC, which featured guest lectures from the Australian lichenologist Patrick McCarthy and the British authority Brian Coppins. She subsequently co-authored a pioneering paper on the park's diverse lichen flora. Recognising that taxonomy was a severely neglected field in Thailand at the time, she secured a scholarship in 1997 to undertake doctoral research at Liverpool John Moores University in England. Her thesis, focused on the taxonomy and ecology of the Thai *Thelotremataceae*, was supervised by Anthony Whalley and Brian Coppins. After earning her doctorate in 1999, she returned to Thailand to continue her academic career as an Assistant Professor at Ramkhamhaeng University in Bangkok, an institution she had been affiliated with since 1991. Tragically, shortly after consolidating her position as Thailand's first formally-trained lichen taxonomist, she was diagnosed with cancer, which cut her life and promising career short in 2006. She described numerous new tropical species. Her herbarium is housed at RAMK. Ref.: Boonpragob (2010).

Honegger, Rosmarie (née Lehmann) **(1947–)** – Born in Oberdiessbach in the Emmental valley, Switzerland, where her parents worked as shoe merchants. At that time,



it was highly unusual for young women from the region to pursue a formal academic education. However, even as a schoolgirl, Honegger became deeply fascinated by plant biology. She attended her local village school from 1954 to 1963 and subsequently studied at the teacher training college in Thun, Canton of Bern, from 1963 to 1967. Her biology teacher encouraged her to document the lichen flora of her hometown; the resulting research project was so outstanding that it won first prize in the national *Schweizer Jugend forscht* (Swiss Youth in Science) competition. As a consequence, she was invited to present her findings at the International Science Fair in San Francisco in 1967, where she was also awarded first prize. Her remarkable success caught the attention of regional academics, enabling her to read natural sciences at the University of Zürich. She completed her doctoral thesis there in 1976 under the supervision of the prominent cellular mycologist Hans Rudolf Hohl (1933–), focusing on the structural development and function of *Lecanora*-type asci. She analysed these using advanced scanning and transmission electron microscopy, a hallmark technique of her subsequent research career. Following a postgraduate research stay at the University of California, USA, which broadened her international research scope, she returned to the University of Zürich as a senior lecturer and researcher, eventually being appointed Professor of Cryptogamic Botany in 1997. Honegger's pioneering research has focused primarily on the structural, cellular, and functional mechanisms of lichenization. By deploying cutting-edge microscopic techniques, she elegantly resolved numerous intricate questions regarding cellular interactions and carbon transport between photobionts and mycobionts, contributing fundamentally to the modern understanding of lichens as complex, integrated organisms. In her later career, she developed a keen interest in fossil lichens, collaborating extensively with the renowned palaeobotanist Dianne Edwards (1942–) at Cardiff University in Wales. Honegger has described several new lichen taxa, including fossilised forms, as well as associated cyanobacteria. She was awarded the Acharius Medal by the IAL in 2008. The genera *Honeggeria* S.Y. Kondr. *et al.* and *Honeggeriella* Matsunag *et al.* (a fossil lichen) are named after her. Her herbarium is housed at ZT. Ref.: *Pers. comm.*; Stofer (2008).



Hooker, Joseph Dalton **(1817–1911)** – Born in Halesworth, Suffolk, England, UK, he was the son of Maria Sahra (nèe Turner), the eldest daughter of Dawson Turner (1775–1858), a wealthy banker from Great Yarmouth who was also a prominent botanist and antiquary; his father was the renowned botanist Sir William Jackson Hooker (1785–1865). During Joseph's childhood, his father held the chair of Regius Professor of Botany at the University of Glasgow, Scotland. Hooker read medicine at Glasgow, graduating with a medical degree (MD) in 1839. Almost immediately after qualifying, he joined Captain James Clark Ross's historic Antarctic expedition (1839–1843) as an assistant surgeon aboard HMS *Erebus*. This voyage marked the beginning of an illustrious career as an explorer and plant collector, ultimately resulting in three monumental floras covering Antarctica, New Zealand, and Tasmania. These

regions were all exceptionally rich in lichens, which consistently caught his attention. Although Hooker was a highly capable cryptogamist in his own right, he enlisted the expertise of his friend Thomas Taylor to prepare the lichen chapters for these early publications. Following Taylor's death in 1848, the Reverend Charles Cardale Babington took over the remaining cryptogamic treatments. Hooker's next major expedition was a pioneering journey to India and the Himalayas (1847–1851), which yielded groundbreaking geographic data and his definitive work on rhododendrons. In 1855, he was appointed Assistant Director of the Royal Botanic Gardens, Kew, working alongside his elderly father. Upon his father's death in 1865, Hooker succeeded him as Director, a post he held with great distinction until 1885. Despite heavy administrative responsibilities, he continued to undertake significant foreign expeditions, travelling to Palestine in 1860, Morocco in 1871, and the western United States in 1877. Hooker was the dominant figure in British botany during the second half of the nineteenth century, famously serving as a close confidant to Charles Darwin and presiding over the Royal Society from 1873 to 1878. He was knighted in 1877. He described thousands of plant and cryptogamic species, including the highly unusual, amphibious Antarctic lichen genus *Mastodia* Hook. & Harv. His lichen herbarium, formerly at K, is now housed at BM. Ref.: Allan (1967); Desmond (2006); Turrill (1963).



Howard, Grace Elizabeth **(1886–1978)** – Born in Media, Pennsylvania, USA, she moved west to Yarrow Point near Seattle, Washington, with her parents during her childhood, where she became captivated by the natural environment. Herbarium records indicate that she began collecting lichens as a teenager; her earliest preserved specimen was gathered in 1899 in British Columbia and was later identified by Irwin M. Brodo as *Ochrolechia juvenalis*. She read biology at the University of Washington, earning her bachelor's degree in 1911, and taught at a school from 1912 to 1915 before continuing her studies to complete a master's degree in botany in 1920. In 1923, she earned her doctorate from Washington University in St. Louis with a thesis on fruit pigmentation, supervised by the prominent plant physiologist Benjamin Minge Duggar (1872–1956). That same year, Howard was appointed an instructor at Wellesley College in Massachusetts, where the pioneering cryptogamist Clara Eaton Cummings had previously established a strong tradition of lichenology. Howard was subsequently promoted to Associate Professor and curator of the Wellesley herbarium, though her research remained primarily focused on the lichens of the Pacific region. Following her retirement from Wellesley in 1953, she returned to the University of Washington in Seattle. Her former professor, the bryologist Theodore Christian Frye (1869–1962), was instrumental in bringing her back into active service at the university. She curated the university's lichen collection and resumed her fieldwork, focusing extensively on the lichens of the Pacific Northwest. Regrettably, she did not train any graduate students who went on to specialise in lichenology. Howard published a foundational book, *Lichens of the State of Washington* (1950), based largely on field specimens she collected during a sabbatical leave between 1931 and 1932, and she also spent time revising the North American collections at the Farlow Herbarium of Harvard University

(FH). She later made valuable contributions to the knowledge of Alaskan lichens, collaborating with the bryologist Elva Lawton (1896–1993). Howard maintained a lifelong passion for mountain fieldwork, participating in rugged excursions well into her advanced years as a dedicated member of The Mountaineers Club, an organisation she had joined at its inception in 1906–1907 despite being underage at the time. In 1970, she published a comprehensive monograph on the lichen genus *Ochrolechia* in North America, though contemporary reviewers noted that it unfortunately failed to take full advantage of recent breakthroughs in lichen chemistry. She described a few taxa. Her herbarium is housed at WTU. Ref.: Brodo, *pers. comm.*; Gage (unpublished manuscript, 1988); Stieg (1979).



Howe Jr, Reginald Heber **(1875–1932)** – Born in Quincy, Massachusetts, USA. After completing his undergraduate studies at Harvard University (BSc, 1901), he took up a position as a science master at the newly established Middlesex School in Concord, Massachusetts. While teaching there, he acted as the first curator of the school's Thoreau Museum of Natural History. He developed a deep passion for cryptogamic botany, and between 1906 and 1908, he and his wife, Marion Appleton Barker (1884-1962), co-authored a highly popular multi-part guide, *Common and Conspicuous Lichens of New England*. Seeking advanced academic training, Howe travelled to Europe, where he earned his doctorate from the University of Paris (the *Sorbonne*) in 1912 under the supervision of the eminent plant morphologist Gaston Bonnier (1853–1922), whose own research focused heavily on the structural nature of lichenization. Howe's doctoral dissertation, however, was a rigorous taxonomic revision of the *Usneaceae* of North America, a macrolichen family that fascinated him and on which he had published extensively prior to leaving for Europe. During his stay in Europe, he also visited London to study the Linnaean Herbarium. This resulted in his landmark 1912 publication on the typification of Linnaeus's lichen names; although his systematic conclusions were largely accurate, his nomenclatural insights were long undeservedly ignored or neglected by contemporary European authorities. Upon returning to the United States, Howe resumed his secondary school teaching career and continued his biological interests, expanding his expertise to include ornithology and dragonflies. In 1923, he left the Middlesex School to found the Belmont Hill School in Belmont, Massachusetts, serving as its highly influential first headmaster until his sudden death in 1932. Due to the heavy administrative burdens of establishing and running the new institution, his research output on lichens diminished significantly during his final decade. His herbarium is housed at FH. Ref.: Johnson (1932); Plitt (1932).

Hudson, William (1730–1793) – Born in Kendal, Westmorland, England, UK, where his father was the landlord of the White Lion Inn. After completing his education at Kendal Grammar School, Hudson was apprenticed to an apothecary in London. He proved exceptionally capable; as a young apprentice, he won the prestigious botanical prize awarded by the Worshipful Society of Apothecaries, a copy of John Ray's *Synopsis Methodica Stirpium Britannicarum*. This prize inspired his lifelong ambition to modernise British

botany by reorganising and "translating" Ray's traditional species listings into the newly established Linnaean binomial system of taxonomy and nomenclature. From 1757 to 1758, Hudson served as the resident sub-librarian at the newly opened British Museum. This brief appointment granted him vital access to the vast Sloane Herbarium, enabling him to cross-reference Ray's original specimens against Carl Linnaeus's modern classifications. His efforts culminated in the landmark publication of his *Flora Anglica* (1762), a masterpiece praised by contemporary botanists as the work that firmly established Linnaean principles in Britain. In this compendium, he treated numerous cryptogams, introducing several new lichen species, such as *Ramalina siliquosa* (Hudson) A. L. Sm. From 1765 until 1771, Hudson was appointed *Praefectus Horti* (Director) of the Chelsea Physic Garden, while concurrently maintaining his highly successful London apothecary practice. He published a vastly expanded, two-volume second edition of *Flora Anglica* in 1778, and a third edition appeared posthumously in 1798. His large herbarium was destroyed in a fire in 1783, but some duplicates are housed at BM. Ref.: Edwards (1972); Koster (1969); Smith (1819).



Hue, Auguste-Marie (1840–1917) – Born in Saint-Saëns, Haute-Normandie, France, he was destined for the Church and was ordained as a secular priest in 1865. He initially served as a *précepteur* (private tutor) in Canisy before being appointed chaplain (*aumônier*) to the Little Sisters of the Poor (*Petites Sœurs des Pauvres*) in Levallois-Perret, a position he held from 1890 to 1915. In accordance with French custom for secular clergy, he was universally addressed by the honorary title of Abbé Hue. Alongside his ecclesiastical duties, he maintained a profound interest in the natural world, having enthusiastically collected lichens throughout France during his youth. After establishing a close relationship with William Nylander in Paris during the 1880s, the Abbé began to systematically study and revise exotic, foreign botanical collections. This collaboration resulted in several monumental publications that featured extraordinarily detailed illustrations of internal lichen anatomy, a subject that fascinated him. One of his most celebrated multivolume works, *Lichenes Exotici* (published between 1891 and 1892), was entirely dedicated to mapping these microscopic structural details. He was a remarkably meticulous researcher, remaining deeply devoted to the taxonomic principles of his mentor Nylander throughout his life. Hue described many new taxa, including several distinct genera such as *Polycauliona*. The genera *Huea* Dodge & Baker and *Hueidea* Kantvilas & McCarthy, alongside numerous species, were named in his honour. His herbarium is housed at PC. Ref.: Lamy (1917); Wuitner (1932).

Hulting, Johan (1842–1929) – Born in Skölvene, Älvsborg, Sweden, the son of the farmer Gustav and Anna Maria Hulting, daughter of Erik Sparv of Kyrkhult, an official responsible for summoning and leading wolf hunts. The couple had four children; Johan, the eldest, was traditionally expected to inherit the family farm, but he chose an academic path. After attending the local grammar school in Norrköping, he completed his secondary education in Uppsala. He subsequently entered Uppsala University, where he read natural



sciences under the mentorship of the eminent lichenologist Thore Magnus Fries. In 1872, Hulting successfully defended his doctoral dissertation, *Lichenologiska exkursioner i vestra Bleking*, a definitive floristic and taxonomic study of the lichen flora of the western Blekinge province. Rather than pursuing a permanent university career, Hulting dedicated himself to education. He served as a highly respected and treasured science master at various secondary schools in Norrköping until his formal retirement in 1909. Throughout his teaching career, he remained a remarkably productive and active field botanist. Beyond his extensive documentation of the Swedish cryptogamic flora, Hulting possessed a sharp analytical mind for challenging microlichens. This expertise led him to revise and publish a major study in 1896 on the subarctic lichens collected by the missionary Arthur Waghorne in Labrador and Newfoundland. He described several new taxa, and a few species, such as *Acarospora hultingii* H. Magn., are named after him. His herbarium is housed at LD, UPS. Ref.: Krok (1925).

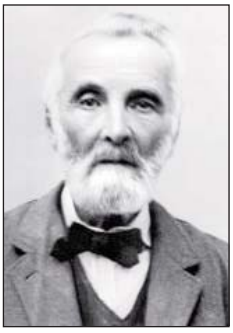


Huneck, Siegfried (1928–2011) – Born in the village of Floh in the Thuringian Forest, Germany, he was the son of Emil Huneck, a *Heilpraktiker* (natural health practitioner). His early education was severely disrupted by the Second World War, and he completed his secondary education in 1947. By this time, his hometown was located within the newly established German Democratic Republic (DDR). Under the regime's strict sociopolitical zoning, his background as the son of a self-employed professional initially barred him from entering higher education, a privilege heavily reserved for the children of the working class. After working several manual and technical jobs, first as a road builder and later as a laboratory assistant, he was finally permitted to read chemistry at the University of Jena in 1952. He graduated in 1957 with a thesis on oleanolic acid, subsequently securing a position as an assistant at the university's Institute of Chemistry and Biochemistry, where he completed his doctorate on triterpenes in 1959. Deeply devoted to the chemistry of natural products, Huneck accepted a position at the Institute of Plant Chemistry at the Technical University of Dresden in Tharandt, Sachsen, in 1961. However, because he steadfastly refused to join the ruling Socialist Unity Party (SED), his academic advancement was blocked by state authorities. In 1969, he relocated to Halle (Saale), taking up a post as a research associate at the Institute of Plant Biochemistry of the Academy of Sciences (now the Leibniz Institute of Plant Biochemistry), where he remained until his retirement in 1993. Despite working under the strict economic and structural constraints of East Germany, Huneck became a globally renowned pioneer of lichen phytochemistry. Maintained by an international network of colleagues who supplied him with critical scientific literature and small equipment parts, he expertly combined traditional large-scale chemical extractions with modern thin-layer chromatography to isolate and map complex structural compounds. Because he was forbidden from travelling to Western nations, he focused his field efforts on other communist states, leading pioneering botanical expeditions to Mongolia (1978, 1983, and 1988)

and North Korea (1982, 1986, and 1988). Following the reunification of Germany in 1989, Huneck was finally free to travel widely, participating in international symposia and collecting specimens globally. Although this political liberation arrived at the twilight of his career, he remained highly active, publishing his definitive reference manual, *Identification of Lichen Substances*, co-authored with Isao Yoshimura, in 1996. That same year, the IAL awarded him the Acharius Medal. The genus *Huneckia* S.Y. Kondr. *et al.* is named after him. His lichen herbarium, containing roughly 15,000 specimens, plus 1,500 purified substance samples, is housed at B. Ref.: Kärnefelt & al. (2012); Stordeur & al. (2011).



Hur, Jae-Seoun (1963–) – Born in Seoul, South Korea, where his father worked as a government lawyer. Following his primary and secondary education in his native city, he read biology at Seoul National University, graduating with a Master of Science degree in plant pathology in 1989. Between 1989 and 1993, he undertook doctoral research at Lancaster University in the United Kingdom, where he successfully defended a thesis investigating the effects of air pollution on the *Azolla-Anabaena* symbiosis. It was during this period that he became acutely aware of symbiotic organisms as critical environmental bioindicators. Upon returning to South Korea, Hur was employed as a research scientist at the major steel conglomerate POSCO, where he sought to develop an integrated environmental biomonitoring system for the country. As he lacked formal specialist training in lichenology at the beginning of his career, Hur proactively established networks with international experts. This collaboration included a valuable month-long research residency in 2004 within the laboratory of the Japanese lichenologist Hiroshi Harada. In 2003, Hur joined the faculty of Sunchon National University in Suncheon, where he was appointed a full Professor of Biology in 2012. He was instrumental in establishing the Korean Lichen Research Institute there, which has grown into the premier hub for lichenology in South Korea. He has published extensively on the lichen flora of the Korean Peninsula, focusing heavily on their utility in environmental biomonitoring and secondary metabolite chemistry, whilst consistently championing the necessity of rigorous baseline taxonomy. He has described, often together with other colleagues, many new taxa. The genera *Huriella* S. Y. Kondr. and *Jasonhuria* S. Y. Kondr. *et al.* are named after him. His large herbarium is housed at KoLRI. Ref.*: Pers. comm.*



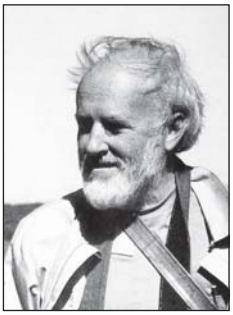
Husnot, Pierre-Tranquille (1840–1929) – Born in La Bijude, Cahan, in the department of Orne, Normandie, France, he developed a passionate interest in botany during his youth. Following his local primary education, he entered the *Collège de Condé-sur-Noireau* in 1852 before progressing to the prestigious *École Nationale d'Agriculture de Grignon*. During this formative academic period, he became acquainted with several prominent French naturalists, most notably the bryologist Émile Bescherelle (1828–1908), who inspired him to pursue rigorous floristic and taxonomic studies. Upon returning to Normandie, Husnot inte-

grated into the influential scientific circle surrounding René-Alphonse Lenormand (1796–1871) and Louis Alphonse de Brébisson (1798–1872). From that point forward, he dedicated himself to cryptogamic botany, specialising primarily in bryophytes, which he collected extensively both in France and abroad. His botanical expeditions to the New World were of major historical importance. During a five-month research voyage to South America and the West Indies in 1868, he amassed vast collections in the French Antilles. This fieldwork resulted in his pioneering catalogue of the region's cryptogams, which provided the first systematic overview of these organisms in the French Caribbean. To distribute his findings, he issued a highly valuable exsiccatae series in 1868, *Plantes des Antilles*, which included a significant selection of tropical lichens. Upon returning to France, Husnot inherited and diligently managed his family's agricultural estate, actively participating in field cultivation while dedicating his evenings and winter months to botanical scholarship. In 1874, he achieved lasting international renown by founding the *Revue Bryologique*, a landmark scientific journal that he edited single-handedly for over half a century. In 1928, the management of the journal was transferred to the prominent botanist Pierre Allorge, who expanded its scope by renaming it *Revue Bryologique et Lichénologique*, cementing its position as one of the world's premier lichenological publications for decades to come. His herbarium is housed at PC. Ref.: Allorge (1929); Chevalier (1929).



Imperato, Ferrante (c. 1525–1615) – Born in Napoli, Kingdom of Napoli (now Italy), he established himself as a highly prosperous pharmacist and apothecary operating from a well-frequented workshop in the historic heart of the city. Though he did not receive a formal university education, his natural curiosity and keen observational skills drove him to become one of the most distinguished self-taught naturalists of the Late Renaissance. Imperato dedicated much of his wealth and decades of extensive travels across southern Italy to collecting geological, mineralogical, and biological specimens. In 1572, his professional standing was cemented when he was elected to the *Consiglio degli Otto* (Council of Eight), a civic body tasked with inspecting and regulating the regional pharmacies and apothecary guilds of Napoli. At his residence in Palazzo Gravina, he amassed an unparalleled collection of over 12,000 specimens, establishing one of Europe's earliest and most celebrated *Wunderkammern* (cabinets of curiosities). This private museum became a major intellectual hub, drawing visiting scholars from across the continent. Imperato also founded a private botanical garden and corresponded widely with contemporary intellectual giants, including Ulisse Aldrovandi (1522–1605) and Carolus Clusius. Urged by his peers and assisted by his son Francesco, he published his monumental 28-volume treatise, *Dell'Historia Naturale*, in 1592–1599. This landmark work featured the first-ever printed illustration of a natural history research collection and included pioneering, empirical observations on early geology, paleontology, and herpetology. Here, he discussed seven species of lichens, two of which (*Roccella phycopsis* and *R. fuciformis*) are illustrated with the xylographic technique, and provided with a detailed description of the techniques for obtaining dyes. Following his death, his massive collections were inherited by his son. Today, the grass genus *Imperata* bears his name,

while the sole surviving volume of his original 80-volume herbarium is preserved in the *Biblioteca Nazionale di Napoli*. Ref.: Roca & Nimis (1997).



Imshaug, Henry Andrew **(1925–2010)** – Born in Chicago, Illinois, USA, to Norwegian immigrants who soon relocated to New York, Imshaug attended the prestigious Stuyvesant High School, graduating at the exceptionally young age of 15. As a teenager, he participated in the meetings and field excursions of the Torrey Botanical Club, where he befriended local lichen enthusiasts, including G. G. Nearing, author of the seminal field guide *The Lichen Book*. Imshaug began his undergraduate studies at Columbia College in 1943, but his education was interrupted by wartime military service in Hawaii. Following the war, he enrolled at Hofstra College in New York, graduating in 1948. He then undertook graduate research at the University of Michigan, Ann Arbor. As there were no lichenologists on the faculty at the time, the mycologist Edwin Butterworth Mains (1890–1968) served as his official supervisor. Imshaug earned his doctorate in 1951 (following the completion of his thesis in 1950) with a taxonomic revision of the North American species of *Buellia*. Following graduation, Imshaug was awarded a postdoctoral fellowship at Harvard University, followed by a prestigious Fulbright scholarship that enabled him to conduct intensive tropical fieldwork in Jamaica and Grenada. This research yielded monumental contributions to the understanding of West Indian lichens. In 1953, he accepted a teaching position at the University of Idaho, which allowed him to explore the lichen flora of the Rocky Mountains. He had already developed a passion for the Pacific Northwest in 1948 when, immediately after his undergraduate studies, he embarked on a legendary western collecting trip with his mentor, the renowned mycologist Alexander H. Smith (1904–1986), making remarkable discoveries in Mount Rainier National Park. In 1956, Imshaug returned to Michigan upon his appointment as Assistant Professor and Curator of the Cryptogamic Herbarium at Michigan State University (MSC) in East Lansing, where he remained for the rest of his academic career. He was an extraordinarily prolific and observant field worker, personally amassing more than 53,000 meticulously prepared specimens. He possessed a particular fondness for remote and rugged terrain, leading major expeditions to the inhospitable subantarctic islands of New Zealand and South America. His collections were curated with exquisite care and remain highly valued baseline repositories. They have served as the type material for numerous new taxa described by global authorities, including the unique New Zealand endemic genus *Labyrintha*. Imshaug was also an exceptionally inspiring and rigorous educator, attracting a brilliant cohort of students to his courses. He supervised and mentored many of the leading figures of modern North American lichenology, including I. M. Brodo, R. C. Harris, C. M. Wetmore, R. Common, K. E. Ohlsson, and R. M. Taylor. The genus *Imshaugia* F. Meyer, alongside many species, is named after him. His herbarium is housed at MSC. Ref.: Brodo (2011); Fryday (2011); Fryday & Prather (2001).

Itzigsohn, Hermann (1814–1879) – Born in Neudamm, near Cüstrin in the Margraviate of Brandenburg, Prussia (now Dębno, Poland), where his Jewish family operated an ink

manufacturing business, Itzigsohn was educated by a private tutor during his childhood and later attended the gymnasium in Frankfurt an der Oder. A remarkably gifted student, he matriculated at the University of Berlin in 1832 to read medicine, graduating with his medical doctorate (MD) in 1836 after defending a thesis on the clinical use of leeches. During his time in Berlin, he also immersed himself in the natural sciences, particularly cryptogamic botany. The eminent plant anatomist and physiologist Professor Alexander Braun (1805–1877) served as his academic mentor and became a lifelong friend. Itzigsohn maintained a passionate devotion to microscopic botany until the end of his life, even after a severe mental breakdown led to his long-term confinement in an asylum, where he gradually lost touch with everyday reality. Following his graduation, Itzigsohn briefly lectured at the University of Berlin before returning to his native Neudamm to establish a private medical practice. His practice flourished until the sudden, tragic death of his fiancée caused him to retreat into profound social isolation. Turning his attention fully to microscopy, Itzigsohn secured a lasting legacy in cryptogamic botany through his exceptional observations on algae, mosses, and lichen structure. His primary importance to lichenology rests on his highly precise investigations into the lichen thallus and its gonidia (photobiont cells), which he published in 1854. Itzigsohn was the first to explicitly declare that the green cells within the gelatinous lichen genus *Collema* were morphologically identical to the free-living cyanobacterium *Nostoc*. By isolating cell clusters from young lichen thalli, he meticulously documented algal division and searched for signs of sexual reproduction. However, bound by the pre-symbiotic theories of his generation, he concluded that *Nostoc* was merely an underdeveloped, juvenile phase of *Collema* rather than an independent partner organism. Though his reclusive lifestyle and deteriorating mental health caused contemporaries to occasionally dismiss his broader theories, his rigorous microscopic data provided evidence that Simon Schwendener later used to demonstrate the dual, symbiotic nature of lichens. Itzigsohn was member of the *Königlich Bayerischen Botanischen Gesellschaft zu Regensburg*, the *naturforschenden Gesellschaft zu Görlitz*, the *Gesellschaft Flora zu Dresden* and the *Pollichia*. In 1856, his scientific merits were formally acknowledged when he was elected as a member of the prestigious *Leopoldina* Academy (the German National Academy of Sciences). His botanical collections are widely scattered Ref.: Britten (1879); Schimmelpfenning (1880).



Jacquin, Nicolaus **Joseph von (1727–1817)** – Born in Leiden, the Netherlands, to Claude Nicolas and Elisabeth Marie (née van Heyningen). He initially studied philosophy in Leuven (Louvain) before pursuing medical and botanical training in Leiden, Paris, and Wien (Vienna), concluding his medical doctorate in 1752. Between 1754 and 1759, the Austrian Emperor commissioned him to lead a scientific expedition to the West Indies and Suriname to collect plant specimens for the imperial gardens. Following his return, Jacquin was appointed in 1763 as the first professor of chemistry and mineralogy at the Mining Academy (*Bergakademie*) in Schemnitz (now Banská Štiavnica, Slovakia). In 1768, he became professor of botany and chemistry at the University of Wien (Vienna). There, he served as director of the university's botanical garden and supervised the impe-

rial gardens at Schönbrunn until his retirement in 1797. He published numerous heavily illustrated books and papers describing new species, including lichens, from both the Americas and Austria; however, Franz Xaver von Wulfen authored many of the accounts from Carinthia (*Kärnten*) featured in Jacquin's publications. His herbarium is housed at W. Ref.: Reichardt (1881); Dörfler (1906–1907).



Jahns, Hans **Martin (1941–2017)** – Born in Holzminden, Niedersachsen, Germany. Following his local education during the challenging post-war reconstruction years, he enrolled at the University of Marburg in 1960. It was here that he met Aino Henssen, becoming her very first doctoral student. He studied the development of apothecia and thalli in the *Cladoniaceae*, earning his doctorate in 1967. He then secured a position at the Botanical Laboratory at the University of Groningen (*Rijksuniversiteit Groningen*) in the Netherlands, where he remained until 1972. He subsequently moved to the University of Frankfurt am Main. After a decade there, he permanently settled in Düsseldorf, where he served as professor and head of the botany department until his retirement in 2007. He also served a term as Prorector of the university. Nevertheless, he remained dedicated to lichenological research and teaching well into his retirement. He was particularly enthusiastic about field courses, frequently taking students to taxonomically interesting localities. Although trained in ontogeny and a sharp observer under the microscope, he gradually shifted his focus toward the environmental responses of lichens and the specific conditions of their habitats. Jahns served as president of the International Association for Lichenology (IAL) from 1996 to 2000. In addition to his numerous individual papers, he contributed to several general works on lichenology, most notably the 1973 textbook *Lichenes: Eine Einführung in die Flechtenkunde*, co-authored with his mentor, Aino Henssen. Jahns also completed a few taxonomic revisions (for instance, on the genera *Baeomyces* and *Pilophoron*); however, because his work primarily addressed broad lichenological questions, he described relatively few individual taxa. His herbarium is housed at the institute in Düsseldorf where he worked. The genus *Martinjahnsia* S. Y. Kondr. *et al.*, is named after him. Ref.: Arvidsson (2010); Kärnefelt & al. (2012).



James, Peter Wilfrid **(1930–2014)** – Born in St Just in Roseland, near Falmouth, Cornwall, UK, into a family with a long lineage of educators. Peter grew up in Sutton Coldfield, near Birmingham, where his father had taken up a teaching post. Following his local education, he attended Bishop Vesey's Grammar School in Warwickshire and was subsequently awarded a State Scholarship to Liverpool University, where he graduated with an honours degree in botany and zoology in 1952. As a postgraduate student, he visited Bala in North Wales and was profoundly struck by the richness of the local lichen flora. Because no one in his university department possessed expertise in lichenolo-

gy, arrangements were made for him to study as an exchange student at the British Museum (Natural History) in London, where he arrived in 1954. In 1955, he was offered a permanent position at the museum as a scientific officer, but his research was almost immediately interrupted when he was called up for two years of National Service. He served from 1955 to 1957 in Bayern, Germany, as a cryptographer for the 12th Royal Signals Wireless Squadron. During this deployment, he established invaluable lichenological contacts with Josef Poelt and Poelt's student Hannes Hertel, which proved highly beneficial upon his return to the museum. He spent the remainder of his career at the institution, eventually rising to become Deputy Keeper of the Herbarium before his retirement in 1990, after which he returned to his family home in Sutton Coldfield. During his tenure at the museum, James revitalised British lichenology, which had been in steady decline since the era of Annie Lorrain Smith. He laid the groundwork for a resurgence in the discipline by playing an active role in founding the British Lichen Society (BLS) in 1958. James served as the editor of its journal, The Lichenologist, for its first 30 years, elevating it into a premier international publication for lichen research. Recognising the critical importance of a sound, stable nomenclature, he established and regularly updated the checklist of British lichens, and meticulously studied historic type collections, including those of Dillenius at Oxford (OXF) and Linnaeus at the Linnean Society. James was also instrumental in establishing the International Association for Lichenology (IAL) and served as its inaugural president from 1969 to 1975. He made monumental contributions to the lichenology of the Southern Hemisphere, undertaking extensive collecting expeditions to Argentina and Chile in 1958–1959 and 1988. Most notably, he was seconded to New Zealand in 1962–1963 to curate the vast collections of the late James Murray at the University of Otago. While there, he met David Galloway, recognised his immense potential, and initiated a collaborative partnership that drastically advanced the understanding of New Zealand's exceptionally rich lichen flora. It was during this stay that James discovered populations of *Sticta filix*, which formed the basis of his landmark 1976 paper with Aino Henssen on the significance of photobiont choice in the morphology and taxonomy of these lichens. He was awarded the Acharius Medal by the IAL in 1992. The genera *Jamesiella* Lücking *et al.*, *Japewia* Tønsberg, *Japewiella* Printzen, and *Peterjamesia* D.Hawksw. were named in his honour. James described numerous new taxa throughout his career, including the genera *Herteliana*, *Metus* (with Galloway), and *Sarrameana* (with Vězda). Ref.: Coppins (1993); Galloway (2014a); Purvis & al. (2014); Wolseley & al. (2015).

Jatta, Antonio (1852–1912) – Born in Ruvo di Puglia, Kingdom of the two Sicilies (now Italy), into a wealthy family whose father was a prominent archaeologist whilst his mother was an offspring from one of the most economically powerful and socially influential dynasties of the region, her family having built massive fortunes through extensive landownership, agricultural commerce, and maritime trade. Antonio attended school in Napoli before studying natural history at the local University. He subsequently continued his studies at the Royal Higher School of Agriculture in Portici (*Regia Scuola Superiore di Agricoltura*) to train as an agronomist. Upon returning to his native town in 1881,



he sought to revolutionise local agricultural practices and concurrently entered local politics. He was elected to the Provincial Council (*Consiglio Provinciale*), through which he oversaw various provincial institutions, and in May 1903 he was elected as a member of the Italian Parliament. Alongside his political career, Jatta maintained a profound interest in botany, focusing not only on cultivated plants but also extensively on cryptogams. He was a student of Vincenzo Cesati, who engaged him in the preparation of a major collection of Italian cryptogamic exsiccatae. Jatta later published his own independent exsiccatae series of lichens from southern Italy. In 1874, he published a first survey of the lichens of southern Italy, but his magnum opus was *Flora Italica Cryptogama. Lichenes* (1909–1911). In this work, he treated all lichens known from Italy at the time, an enormous task, given that Italian lichenology had blossomed considerably shortly before his generation. Understandably, he did not quite manage to resolve all taxonomic problems so soon after this explosion of new descriptions; furthermore, his inclination was more floristic than strictly taxonomic. He also revised foreign lichen collections and described numerous new taxa. His herbarium is housed at NAP. Ref.: Cavara (1915); Mattirolo (1912); Nimis (1993, 2016).



Jørgensen, Per Magnus **(1944–)** – Born in Stavanger, Norway, the son of a bank manager; his mother, Anne Margrete ('Mossi') (née Svennsen) belonged to a wealthy merchant family with gardening interests. He developed an early interest in plants that was enthusiastically encouraged during secondary school by his biology teacher, Olav Ekrheim (1897–1975), who had been a pupil of the prominent botanist Jens Holmboe (1880–1943). In 1963, he began studying natural history at the University of Bergen, where he graduated with a *cand.real.* degree in botany in 1969 under the supervision of Knut Fægri (1909–2001). Fægri fostered Jørgensen's growing fascination with lichens by inviting Rolf Santesson to deliver a specialised lichen course in Bergen. Around this time, he also happened to meet Gunnar Degelius during one of Degelius' botanical travels through Norway. In 1971, Jørgensen relocated to Uppsala University to be supervised directly by Santesson, focusing his research on a monograph of the European *Pannariaceae*. He subsequently defended this work as his doctoral thesis (*dr.philos.*) in Bergen in 1978. He was appointed curator of the Botanical Garden of Bergen in 1973 and was elevated to professor of systematic botany in 1980. Following the untimely death of its first director, Per Wendelbo (1927–1981), Jørgensen's academic duties expanded to include the development and establishment of the Norwegian Arboretum and the new botanical garden at Milde near Bergen. He became deeply involved in botanical nomenclature, serving as a long-standing member of the international nomenclatural committee. He was also secretary of the International Association for Lichenology (IAL) from 1981 to 1987. His passion for the history of science has yielded numerous papers on Johan Ernst Gunnerus, Carl Linnaeus, and their contemporaries. Over his career, Jørgensen systematically revised the *Pannariaceae* on a global scale, culminating in a landmark 2014 survey (with Ekman, Lindblom, and Wedin) that established a new generic taxonomy for this complex family; he produced a similar milestone overview for the *Collemataceae* with Otálora and Wedin in 2013. Jørgensen has described

numerous new taxa across multiple families, including the genera *Acantholichen*, *Fuscoderma*, *Fuscopannaria*, *Hepaticopsis*, *Kroswia*, and *Vahliella*, as well as the families *Massalongiaceae* and *Vahliellaceae* (the latter with Mats Wedin). The genus *Joergensenia* Passo *et al.* was named in his honour, and in 2021 he was awarded the Acharius Medal by the IAL. His herbarium is housed at BG, with duplicates at UPS. Ref.: *Pers. comm*.; Andersen & Tønsberg (2021).



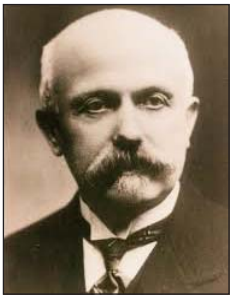
John, Volker (1952–) – Born in Spiesen, Saarland, Germany. Following his secondary education locally at the Gymnasium in Neunkirchen, he studied natural sciences at the University of Saarland, graduating with a degree in biology, chemistry, and geography in 1981. In 1986, he earned his doctorate in phytogeography with a thesis examining the distribution patterns of lichens within the Saarland region. His interest in lichenology was originally sparked by his mentor, the botanist Erhard Sauer (1928–2024), who remained a lifelong friend and source of inspiration. During his doctoral research, John examined the collections of the *Pfalzmuseum für Naturkunde* in Bad Dürkheim. He comprehensively revised and reorganised these materials, which led to him securing a position as an assistant curator of the collections there in 1983. He remained at the museum for the rest of his career, ultimately rising to become the head of the botanical collections before his retirement. John was highly active in regional botanical circles and played a leading role in mapping the distribution of lichens across the Rhineland-Palatinate (*Rheinland-Pfalz*) region. Concurrently, he taught at several academic institutions, including the universities of Saarbrücken, Trier, Mannheim, and Landau. Alongside his deep dedication to the flora of his home region, which yielded a long series of papers on the lichens of the Saarland and Rheinland-Pfalz, he initiated studies into the lichens of Turkey in 1982, a country his mentor Sauer had loved and botanised extensively. This long-term research culminated in the publication of the first comprehensive lichen checklist for Turkey. He also issued a set of lichen exsiccatae from Anatolia, the first ever produced from Turkey. John has described a number of new taxa. His herbarium is housed at POLL, with duplicates in M. Ref.: Hertel & al. (2017); Kärnefelt & al. (2012).

Johnson, Thomas (1600–1644) – Born in Selby, Yorkshire, England, UK, where parish registers designate his father as a gentleman (*gent*.). Johnson appears to have received a high-quality classical education in his youth. Around 1616, he began his training as an apprentice apothecary in London, eventually being formally admitted to the Society of Apothecaries in late 1628. By 1629, he had established his own business at Snow Hill, London, where he cultivated a physic garden and rapidly became a prominent member of the Worshipful Society of Apothecaries. Widely regarded as the premier English herbalist of his era and often hailed as the ‘father of British field botany’, he is most famous for his monumental revision and expansion of John Gerard’s *Herball* (1633). In this work, he incorporated a substantial number of lichens that he had personally collected, making him the very first author to publish local lichen records for the British Isles. A staunch Royalist during the English Civil War, Johnson actively took up arms for the King, rising to the rank

of Lieutenant-Colonel. He died from wounds sustained during the defence of Basing House in 1644. The current whereabouts of his personal herbarium remain unknown. Ref.: Kew & Powell (1932); King (2004).



Johnson, William (1844–1919) – Born in Halifax, Yorkshire, England, UK. He trained in theology and subsequently served as a minister for the Primitive Methodist Church across various circuits in Yorkshire and northern England between 1864 and 1908. Johnson was a highly regarded preacher of keen intellect, famously described as having "more appeal to the scholar than to the man in the street". From 1903 until 1908, he also served as the Principal of Hartley College in Manchester. Owing to failing health, he was superannuated in 1908, moving first to Hull before permanently retiring to Harrogate in 1910, where he later died. Like many 19th-century clergymen, he pursued botany as a pastime, later specialising deeply in lichenology. His interest was reportedly sparked while hunting for second-hand books in Newcastle upon Tyne one Saturday evening, where he purchased a copy of William Allport Leighton's *The Lichen-Flora of Great Britain, Ireland, and the Channel Islands* (first published in 1871), a work he credited with opening an entirely new world to him. His inaugural paper, published in 1879, was highly progressive, treating lichens as sensitive indicators of environmental pollution. The bulk of his specimens were gathered while walking between rural villages on his regular preaching appointments across the North of England, though he also made collections during two holiday trips to Norway. He published research papers continuously until the year of his death, discovering several species new to Great Britain. Between 1894 and 1918, he distributed a highly regarded local exsiccatae series titled *The North of England Lichen-Herbarium*. When he was elected a Fellow of the Linnean Society of London in 1888, his candidacy was supported by James Morrison Crombie, with whom he regularly corresponded and exchanged reference specimens. His herbarium is housed at LDS. Ref.: Burrell (1929); Seaward (1972).



Johow, Friedrich ('Federico') Richard Adalbert **(1859–1933)** – Born in Kolmar, Posen, Kingdom of Prussia (now Chodzież, Poland). Following his early schooling, he moved to Berlin in 1876 to begin his higher education, subsequently transferring to the University of Bonn, where he studied zoology and botany, earning his doctorate in 1884. In 1882, financed by the Royal Prussian Academy of Sciences via the Bunsen Foundation, he participated in a major scientific expedition to Venezuela and the Lesser Antilles, which permanently sparked his lifelong fascination with South American and insular floras. He was appointed an associate professor of natural sciences at Bonn in 1888. In 1889, Johow emigrated to Chile after being personally recruited by the administration of President José Manuel Balmaceda (1840–1891), who sought to modernise national scientific education by employing elite German academics. He was appointed as the founding professor of natural sciences and director at the newly established *Instituto Pedagógico de*

Chile in Santiago, a chair he held for 36 years, nand later succeeded Federico Philippi (1838–1910) in his medical botany classes. He also concurrently held the chair of botany at the University of Chile. After settling in Chile, Johow dedicated his field research to the Juan Fernández Archipelago, culminating in his landmark 1896 treatise *Estudios sobre la flora de las Islas de Juan Fernández*. In addition to examining the islands' conventional flora, he documented their lichens and conducted pioneering developmental studies on the poorly understood basidiolichens. He described several new taxa, most notably introducing the genus *Laudatea* in 1884. His herbarium is housed at SGO. Ref.: Porter (1933).

Joshua, William (1828–1898) – Born in Westminster, Middlesex, London, England, UK, he was the son of a grocer from a wealthy Quaker family, whilst his mother came from a comfortable, well-established merchant and trading family. Little is recorded regarding his early education, but he eventually settled on a farm in Cirencester, Gloucestershire, which he likely inherited from his grandfather who had moved to the area in 1838, two years prior to his death. Upon his marriage to the daughter of a local solicitor in 1852, William was described as a gentleman farmer managing an estate north of Cirencester; however, census records after 1871 list him as a salesman residing within the town itself. Records suggest that his interest in lichenology developed during the 1870s, a period when he was in active contact with James M. Crombie. In 1874, Crombie published several of Joshua's local findings of *Collema* species, three of which were entirely new records for Britain. Joshua possessed a particular fascination for these gelatinous taxa, and his sole independent lichenological paper (1875) focused on this group, utilising specimens he collected near his home. These complex organisms likely appealed to him due to their internal anatomy, as his primary botanical passion was microscopy. This micro-anatomical expertise culminated in 1879 when he began commercially producing an unusual and highly successful series of educational microscope slides of British lichens. He offered these sets for sale, advertising them as a "quick and easy method of familiarizing the eye with the appearance of the structures of thallus and apothecia". In his correspondence, Joshua noted that the sections were mounted in Dean's medium (a specialised gelatine mountant), which he confidently believed would preserve them permanently, famously writing that they were "in fact indestructible", though few functional samples survive today. From 1880 onwards, Joshua developed expertise in another cryptogamic field, specifically the desmids (microscopic green algae), describing numerous new species from international collections. His broader scientific contributions were recognised by the Linnean Society of London, where he was elected a Fellow in 1877 on account of his dedicated studies in natural science and lichenology. Following the death of his wife in 1885, he relocated to Bath and ceased publishing academic papers, subsequently resigning his fellowship in 1889. In his final years, facing severe financial hardship, he was reportedly commissioned by the Royal Botanic Gardens, Kew to identify lichen specimens. He passed away in Cheltenham. His herbarium is housed at BM. Ref.: Dingley (2003); Riddlesdell & al. (1948).

Jumelle, Henri Lucien **(1866–1935)** – Born in Dreux, Eure-et-Loir, France. After completing his basic education locally, he moved to Paris, where he obtained his *Baccalauréat ès-sciences* in 1883. Following a brief period studying pharmacy, he returned to the natural sciences, graduating in 1887. He then joined the *Laboratoire de Biologie Végétale* in



Fontainebleau as a pupil of its founder, Gaston Bonnier. There, he earned his doctorate in 1889 with a thesis on the physiology of annual plants. He was appointed supervisor of practical work (*chef de travaux*) at the Faculty of Sciences in Paris in 1893. It was during this Parisian period that he conducted pioneering physiological experiments on lichens, contributions that are now largely, and undeservedly, forgotten. In 1894, he relocated to the University of Aix-Marseille, where he climbed the academic ranks, becoming an assistant professor in 1897 before ultimately attaining the full chair of botany in 1913. From 1898, he also served as assistant director, and later director, of the *Musée colonial* and the *Jardin botanique* in Marseille. During his tenure in Marseille, his research shifted towards colonial phanerogams, focusing heavily on economic botany, particularly species from Madagascar. He received numerous decorations, having been appointed a *Chevalier* of the *Légion d'Honneur* in 1923 and promoted to *Officier* in 1935. His herbarium is housed at P (mostly phanerogams). Ref.: Choux (1936).



Junghuhn, Friedrich **Franz ('Francis')** Wilhelm **(1809–1864)** – Born in Mansfeld, Kingdom of Westphalia, (now Sachsen-Anhalt, Germany). He began his medical studies at the University of Halle in 1827 but left in 1829 without obtaining a degree. He resumed his studies in Berlin in 1830 and subsequently served as a Prussian military physician. Following a tumultuous period that included a brief imprisonment, he escaped to France, served in the French Foreign Legion in Algeria, and was eventually invalided out. In 1834, he travelled to Paris, where a chance meeting with the renowned mycologist Christiaan Hendrik Persoon proved decisive. Persoon highlighted the acute lack of botanical knowledge regarding Southeast Asia and strongly urged Junghuhn to join the Dutch colonial service. Later that year, Junghuhn passed his medical examinations in the Netherlands and was commissioned as a military physician for the Dutch East Indies. He arrived in Java in 1835, where he spent most of the remainder of his life, except for a period of leave in Europe between 1848 and 1855. He made pioneering collections of plants, fungi, and lichens, which were distributed to major herbaria and later systematically catalogued in the multi-part publication *Plantae Junghuhnianae* (1851–1857). His lichen specimens, many of which were entirely new to science, were formally described by Jean-François Camille Montagne and Roelof Benjamin van den Bosch in the fourth fascicle of the work (1855), edited by F.A.W. Miquel. Ref.: Kroon (1864); Schmidt (1909).

Kärnefelt, Jan Eric **Ingvar (1944–2026)** – Born in Göteborg, Sweden. In 1966, he began studying odontology in Köln, but in 1968, he shifted his focus to biology, which he studied in Göteborg under the tutelage of G. Degelius. Following Degelius's retirement in 1969, Kärnefelt moved to Lund to attend a taxonomy course taught by Professor Hans Runemark. Ove Almborn subsequently became his doctoral supervisor. In 1979, Kärnefelt defended his thesis on the brown *Cetraria* species, thereafter establishing himself as a spe-



cialist in cetrarioid lichens. Together with his associates, he completely restructured their taxonomy using innovative methods. Inspired by Almborn, and following a joint field excursion to South Africa, he developed a keen interest in the *Teloschistaceae*, which he later partially revised. In 1986, he was appointed assistant professor, and in 1994, he became the director of the Biological Museums at Lund University. He also served as President of the IAL from 1992 to 1996. Alongside his taxonomic research, Kärnefelt has published numerous biographical and historical articles on lichenology and its key figures. He has described several taxa, including the genera *Arctocetraria*, *Flavocetraria*, and *Masonhalea*. The genera *Ingvariella* Guderley & Lumbsch, *Kaernefeltia* A. Thell & Goward, and *Kaernefia* S. Y. Kondr. *et al.* are named after him. His herbarium is housed at LD. Ref.: Arup & al. (2009); Kärnefelt (2025); Thell & al. (2026).



Kalb, Klaus (1942–) – Born in Nürnberg, Bayern, Germany, he studied biology, chemistry and geography at the University of Erlangen-Nürnberg from 1960 to 1965, quickly developing a keen interest in botany. He completed his doctorate in 1970 with a dissertation on the lichen communities of the Ötztaler Alpen. Although his formal academic supervisor was Professor Konrad Gauckler (1898–1983), his true mentor was Oscar Klement, with whom he maintained a close relationship during his student years. Kalb later shifted his focus to floristics and taxonomy, particularly in the São Paulo region of Brazil, where he worked as a teacher at the *Colégio Visconde de Porto Seguro* between 1978 and 1981. Upon returning to Neumarkt in the Upper Palatinate (*Oberpfalz*) in 1881, he continued his career in school teaching. Nevertheless, he dedicated most of his spare time to studying and expanding his vast tropical collections. In 1996, he was appointed Adjunct Professor (*außerplanmäßiger Professor*) at the University of Regensburg, Bayern, where he supervised numerous students. Together, they made significant contributions to the taxonomy of tropical lichen genera, particularly those native to South America. Kalb distributed a famous exsiccatae series of tropical lichens titled *Lichenes Neotropici*. He has also described numerous taxa, including several tropical genera, such as *Ampliotrema*, *Auriculora*, *Bahianora*, *Frutidella*, *Phyllopeltula*, and *Vainionora*, as well as the family *Loxosporaceae* (with J. Hafellner). The genera *Kalbiana* Henssen, *Kalbionora* Sodamuk, S.D. Leav. & Lumbsch and *Kalbographa* Lücking were named in his honour. His extensive herbarium is maintained privately at his research institute in Neumarkt (KALB). Ref.: *Pers. comm.*: Kärnefelt & al. (2012); Galloway (2007).

Kantvilas, Gintaras (1956–) – Born in Hobart, Tasmania, Australia, to post-Second World War Lithuanian immigrants who arrived in Australia in 1949, initially settling in the Adelaide Hills before moving to Tasmania, where his father worked for the Tasmanian Railways. Following his local education, Kantvilas studied at the University of Tasmania. His interest in botany was sparked there, initially focusing on vascular plants, under the mentorship of Professor William D. Jackson (1921–2002), an inspiring teacher. Through a



close friendship with Jean Jarman (1947–), he developed a passion for rainforest cryptogams. This interest was solidified when he secured a university scholarship to undertake a PhD on the subject, further encouraged by the positive feedback he received from Peter James at the Natural History Museum of London on lichen specimens which he had sent for identification. Having graduated with honours in botany in 1978, Kantvilas benefited hugely from a field visit by P. James to Tasmania in 1981, during which James formalised his role as a doctoral supervisor. Kantvilas obtained his PhD from the University of Tasmania in 1985 with a thesis entitled *Studies on Tasmanian rainforest lichens*. He worked as a botanist for the Tasmanian National Parks and Wildlife Service from 1980 to 1987, before spending a period as a Research Fellow at the University of Tasmania and the National Herbarium of New South Wales. In late 1988, he was appointed Curator of the Cryptogams at the Tasmanian Herbarium at the Tasmanian Museum and Art Gallery (TMAG), and has served there as Head of the Herbarium since 1992. His research into characterising cool temperate rainforests prompted a closer examination of their highly diverse but poorly understood lichen flora. He established collaborations with leading international lichenologists, including B. Coppins, D. Galloway, A. Henssen, J. Poelt and A. Vězda, resulting in a prolific output of papers on all aspects of Australasian lichenology. This work included the description of numerous new taxa and several new genera, such as *Australidea* (with Wedin and Svensson), *Austropeltum* (with Henssen *et al.*), *Hertelidea* (with Printzen), *Ramboldia* (with Elix), *Pseudoramonia* and *Topeliopsis* (with Vězda), *Parasiphula* (with Grube), *Siphulella* (with James), and *Wawea* (with Henssen). Currently, he is compiling an online lichen flora of Tasmania while continuing his specialist taxonomic work. The lichen genera *Kantvilasia* P.M. McCarthy, Elix & Sérus., *Gintarasia* Kraichak, Lücking & Lumbsch, and *Gintarasiella* S.Y. Kondr. & Hur are named in his honour. His large herbarium is housed at HO. Ref.: P*ers. comm.*



Kappen, Ludger (1935–) – Born in Boppard am Rhein, Rheinland-Pfalz, Germany, he completed his primary and secondary education in Goslar, Niedersachsen. He went on to study natural sciences in Freiburg (Baden-Württemberg) and Göttingen (Niedersachsen). In 1963, he earned his doctorate from the University of Göttingen for a physiological study focusing primarily on the cold resistance of ferns. In 1967, he joined the team of Otto L. Lange in Würzburg, Bayern, as a research assistant, where he completed his *Habilitation* in 1974. It was during this period that he began studying lichens and their physiology, particularly their cold resistance, subsequently publishing several seminal papers alongside Lange. In 1981, he was appointed Professor of Botany at the University of Kiel, a role that included the permanent directorship of its Botanical Institute and Botanical Garden. In 1984, his duties expanded when he was appointed chairman and director of the newly established Institute for Polar Ecology (*Institut für Polarökologie*), and he later directed a new department at the university's

Ecosystem Research Centre (*Ökologiezentrum*). He remained in these positions until his retirement in 2000, having elevated the polar institute to a leading international standing. His field research was worldwide in scope, focusing predominantly on extreme arid and polar regions. Kappen's work remains fundamental to our understanding of how lichens adapt and function in harsh environments. He is particularly renowned for developing advanced field instrumentation for accurate gas exchange measurements, an innovation that proved vital for studying lichens, which are notoriously difficult to maintain under artificial laboratory conditions. Kappen was awarded the Acharius Medal by the IAL in 2004. His herbarium is housed at KIEL. Ref.: Kärnefelt & al. (2012); Seaward (2004).



Kashiwadani, Hiroyuki (1944–) – Born in Hyogo, Kansai region of Honshu, Japan. Following his primary and secondary education, he studied at Kobe University, receiving his bachelor's degree in 1966. It was there that he was encouraged by Dr S. Nakanishi (1928–) to continue his postgraduate studies at Hiroshima University. At Hiroshima, he began studying lichens under the guidance of the bryologist H. Suzuki, while also counting Syo Kurokawa as his primary lichenological mentor. In 1973, Kashiwadani earned his doctorate for a taxonomic study on the genera *Physcia*, *Physconia*, and *Dirinaria* in Japan. During his postgraduate studies, he also worked as an assistant in the Department of Botany. In 1973, he was appointed as a curator at the National Science Museum, Tokyo (now the National Museum of Nature and Science), where he spent the remainder of his career, ultimately serving as chief curator from 1993 until his retirement in 2004. Concurrently, he held visiting or adjunct professorships at several elite institutions, including Hokkaido University in Sapporo (1989–1990), Kochi University (1990–1991), the University of the Ryukyus in Naha (1991–1992), Tohoku University in Sendai (1997–1998), and the University of Tokyo (1995–2005). He has collected widely across Japan and its neighbouring countries, as well as in New Guinea, South America, Antarctica, and Svalbard. Kashiwadani has described numerous new taxa and issued two highly regarded exsiccatae series of Japanese lichens, titled *Lichenes Japonici Exsiccati* and *Lichenes Minus Cogniti Exsiccati*. The genus *Kashiwadia* S.Y. Kondr. *et al.* is named after him. His herbarium is housed at TNS. Ref.*: Pers. comm.*

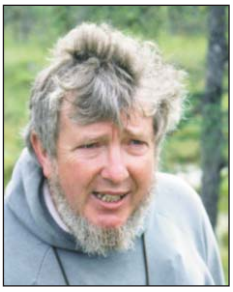


Kazandzhiev (Kazandieff), Sava Spasov **(1877–1901)** – Born in Sevlievo, in the Gabrovo Province of Bulgaria. Following his primary and secondary education, he began studying natural history at the University of Sofia, graduating with distinction in botany in 1898. He was subsequently appointed as an assistant to Sofia's first professor of botany, Stefan Georgieff (1859–1900), at the university's botanical institute. While the origin of his interest in lichens remains undocumented, he made extensive lichen collections throughout the country between 1897 and 1899. In July 1900, he published the first comprehensive account of Bulgarian lichens, which documented no fewer than 109 species. Unfortunately, he contracted tuberculosis and passed away the following year. A second

paper documenting a further 40 new taxa for the country was published posthumously in 1906 through the efforts of Professor S. Petkoff. His pioneering collections and early checklists played a vital role in establishing the very foundation of modern lichenology and mycology in Bulgaria. His material is housed at SOM. Ref.: Zhelezova *pers. comm.*; Mayrhofer & al. (2005).

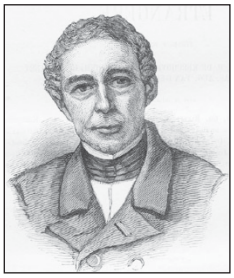


Keissler, Karl von (1872–1965) – Born in Wien (Vienna), Austro-Hungarian Empire (now Austria). In 1890, he began studying botany at the University of Wien, where he earned his doctorate in 1895 for a plant physiological study investigating the influence of light on chlorophyll. He initially served as an assistant at the university's botanical garden before being appointed as an assistant at the *Naturhistorisches Museum Wien* in 1899. Influenced by Alexander Zahlbruckner, he turned his attention to the study of lichens and, above all, lichen parasites (lichenicolous fungi), which became his primary field of expertise. In 1923, he succeeded Zahlbruckner as the director of the museum's Botanical Department, a role he maintained until his retirement in 1938. Keissler authored several major volumes for the new edition of *Rabenhorst's Kryptogamen-Flora von Deutschland, Oesterreich und der Schweiz*, with his most significant contribution being the comprehensive volume dedicated entirely to lichen parasites (*Die Flechtenparasiten*, 1928). He also studied certain non-lichenised fungal groups, producing a key monograph on the family *Moriolaceae.* Throughout his career, Keissler described numerous new lichens and parasitic taxa. He also contributed to fascicles 28–32 of the prestigious *Kryptogamae exsiccatae editae a Museo Palatino Vindobonensi*. The lichenicolous fungal genus *Keissleriomyces* D.Hawksw., alongside many species, were named in his honour. His herbarium is housed at W. Ref.: Petrak (1967).



Kershaw, Kenneth ('Ken') Andrew **(1930–2019)** – Born in Morecambe, Lancashire, England, UK, he grew up in Ashbourne, Derbyshire. He read botany at the University of Manchester, graduating in 1952. Following his National Service, he pursued postgraduate studies at the University College of North Wales, Bangor. There, he completed a doctoral thesis examining patterns in plant communities under the supervision of the renowned Peter Greig-Smith (1922–2003). It was during these years that he developed a keen interest in lichens whilst walking in Snowdonia, often accompanied by his friend and fellow lichen enthusiast, John H. Tallis (1933–). Kershaw was awarded his PhD in 1957 and was subsequently appointed Lecturer at Imperial College, London. During his tenure there, he established close contact with Peter W. James at the British Museum (Natural History) and was instrumental in the foundation of the British Lichen Society. In 1963, alongside his colleague, the palaeobotanist Kenneth L. Alvin (1927–2010), he published the popular volume *The Observer's Book of Lichens*. He also revised and published papers on several lichen genera in the British Isles, including *Stereocaulon* (1963), a genus to which he

would later return in his physiological studies. Concurrently, he maintained his phytosociological research, notably during a period of secondment to Ahmadu Bello University in Nigeria. In 1969, frustrated by limited promotion prospects at Imperial despite receiving his DSc in 1968, he accepted an appointment as Professor of Plant Ecology at McMaster University in Hamilton, Ontario, Canada. There, he expanded upon the interest in lichen ecophysiology that he had begun to cultivate in London. His earlier collaboration at Imperial College with the bacteriologist John W. Millbank had introduced him to the mechanics of nitrogen fixation by cephalodia in lichens. Upon moving to Canada, he was captivated by the research opportunities for lichen ecophysiology presented by the boreal subarctic vegetation. In this field, he pioneered cutting-edge studies, developing innovative experimental techniques and field equipment. The majority of these findings were published in his prominent papers under the serial title *Physiological-environmental interactions in lichens*. He was an inspiring educator whose students actively continued his line of research. He did not describe any new taxa and is not known to have had a herbarium. Ref.: Crittenden (2020); Sheard, *pers. comm.*

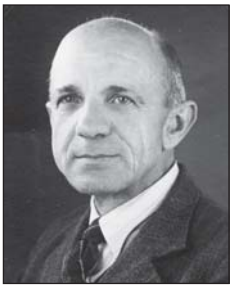


Kickx, Jean Jr. (1803–1864) – Born in Brussels, Belgium, his mother, Jeanne-Catherine (nèe van Merstraeten) came from a family whose immediate social environment consisted of prominent magistrates, lawyers, and elite medical professionals; Jean inherited a profound interest in botany from his father, Jean Kickx Sr. (1775–1831), a pharmacist and mineralogist. The younger Kickx studied natural sciences and pharmacy at the University of Leuven from 1825 to 1830. In 1831, he was appointed Professor of Botany at the *École de Médecine* in Brussels, and in 1834, he accepted a professorship in botany and mineralogy at the newly established Free University of Brussels. From 1835 until his death, he held the same chair at the University of Ghent. Kickx dedicated a significant portion of his career to the study of cryptogams, publishing a comprehensive cryptogamic flora of Leuven and its surrounding districts in 1835. Following his move to Ghent, he embarked on a monumental parallel project documenting the wider region of Flanders; however, his sudden death left this important work unfinished. The manuscript was ultimately finalised and published in 1867 by his son and academic successor, Jean-Jacques Kickx (1842–1887). Entitled *Flore cryptogamique des Flandres*, the two-volume work contains an impressively detailed account of the region's lichens. He did not describe any new lichen taxa. His herbarium is housed at GENT. Ref.: Crépin (1878).

Kilias, Harald (1949–) – Born in Karlsruhe, Baden-Württemberg, Germany. Following his local education, he studied biology at the University of Erlangen-Nürnberg in Bayern, where his Diplom thesis on the epiphytic lichen vegetation of Erlangen was supervised by Adalbert Hohenester. He completed his postgraduate education at the University of München as a pupil of Hannes Hertel, earning his doctorate in 1980 with a thesis revising the rock-inhabiting European lineages of the genus *Catillaria*. In 1982, he was appointed research assistant in the botany department at

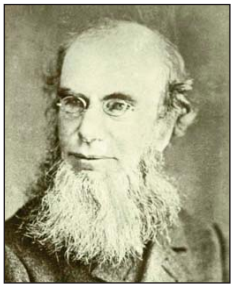


the University of Bayreuth, Bayern. Upon receiving a scholarship in 1985, he moved to Clark University in Worcester, Massachusetts, where he investigated the isolation and cultural behaviour of lichen symbionts under the supervision of Vernon Ahmadjian, earning a Master of Arts degree. Following his return to Germany, his career shifted from lichenology toward zoology and environmental quality management. Kilias described several new taxa during his active botanical career, and the genus *Kiliasia* Hafellner was named in his honour. His herbarium is housed at M. Ref.: *Pers comm.*; Hertel (2012).



Klement, Oscar Anton Carl **(1897–1980)** – Born in Komotau, Bohemia, then part of the Austro-Hungarian Empire (now Chomutov, Czech Republic). The son of a hardware merchant, family circumstances obliged him to enter his father's business. In his youth, he rose to become a director of the *Mannesmann-Röhren-Werke* tube-manufacturing plant, a position he held until 1945. Following the post-war expulsion of the Sudeten Germans, he was forced to flee his hometown, abandoning all his possessions, including his personal library and initial herbarium. Klement had been an active amateur botanist since his youth, initially focusing solely on flowering plants. He began studying lichens seriously around 1930 after meeting Josef Anders, who lived in nearby Leipa (Česká Lípa). Upon arriving in post-war Germany, Klement initially found work as a lumberjack. However, in 1947 he was appointed assistant at the *Zentralstelle für Vegetationskartierung* in Stolzenau, Niedersachsen. There, he met the renowned phytosociologist Reinhold Tüxen (1899–1980), who inspired him to focus on lichen phytosociology. In 1950, Klement settled in Hanover, where he returned to commercial business until his retirement in 1962, while concurrently pursuing his lichenological research. His monumental 1955 monograph on Central European saxicolous lichen communities earned him an honorary doctorate from the University of Bonn in 1959, establishing him as a pioneer in the field. His research eventually extended beyond Germany; he published extensively on the lichen flora of the Canary Islands and Hawaii. He also evaluated the lichen collections gathered during the 1964 Mongolian-German Biological Expedition, co-publishing the results with Rudolf Schubert in 1971. Klement collaborated widely with contemporary German lichenologists and generously completed two major works left unfinished by their deceased authors: C.F.E. Erichsen's lichen flora of Northwest Germany (1957) and Vitus Grummann's biographical catalogue of lichenologists (1974). He described numerous new taxa and lichen syntaxa. His herbarium from before 1945 was taken as war booty and is now housed at PR; later collections are at GOET, GZU and M. Ref.: Dörr (1977); Kärnefelt & al. (2012); Lange (1983).

Knight, Charles (1808–1891) – Born in Rye, Sussex, England, UK. His father died a few months after his birth, prompting his mother to move to Hawkhurst, Kent, where she remarried Thomas Godfrey. In 1828, Knight began studying medicine and botany at



University College London and Guy's Hospital. He emigrated to North America in 1830, practising as a surgeon in Canada and the United States until his return to London in 1840, where he was admitted as a Member of the Royal College of Surgeons that same year. He left England the following year, serving as ship's surgeon on the *Lord Glenelg*, which was bound for Adelaide, Australia. The vessel carried passengers including the incoming Governor of South Australia, Sir George Grey (1812–1898), and his wife. During the voyage, the captain's escalating drunkenness led to a mutiny at Cape Town, whereupon Knight successfully assumed command and navigated the ship safely to its destination. Impressed by his capability, Grey appointed Knight as his private secretary. When Grey became Governor of New Zealand in 1845, Knight accompanied him to Auckland aboard HMS *Elphinstone*. In February 1846, Grey appointed him Auditor-General, a prestigious position providing immense administrative influence, a secure income, and stable hours. Despite his demanding domestic responsibilities, having married Caroline Symes in 1844 and raised two sons and three daughters, Knight found ample time to pursue his botanical interests. He initially focused on bryophytes, studying local mosses microscopically and producing intricate drawings. Grey dispatched these illustrations to Sir William Jackson Hooker (1785–1865) at Kew, initiating a close botanical association between Hooker and Knight from 1852 onwards. By 1860, Knight had shifted his primary focus to lichens, undertaking pioneering work within New Zealand while also supporting Australian lichenology by assisting the research of F. Wilson. Through a series of papers published between 1860 and 1884, Knight added 170 new names to the region's mycobiota. Knight also oversaw the local production and compilation of data for Joseph Dalton Hooker's *Handbook of the New Zealand Flora* (published 1864–1867). He also contributed material to Lojka's exsiccatae. In recognition of his work, Jean Müller (Argoviensis) named the genus *Knightiella* in his honour. He assembled a large private herbarium, which is now housed at WELT, with many duplicates at BM (ex K), and further specimens at G, H and UPS. Ref.: Galloway (1990, 1998, 2013c).



Knowles, Matilda Cullen **(1864–1933)** – Born in Cullybackey, near Ballymena, County Antrim, Ireland. From an early age, she was encouraged to study natural history by her father, William James Knowles (1832-1927), a land agent and noted amateur archaeologist who took her to meetings and field trips of the Belfast Naturalists' Field Club. There, she met the botanist Robert Lloyd Praeger (1865–1953), who exerted a lifelong botanical and personal influence on her. Between 1869 and 1900, she and her sister, Catherine, attended natural science classes at the Royal College of Science for Ireland in Dublin. Though registering as an occasional student and not sitting formal examinations, she successfully published a preliminary survey of the flowering plants of County Tyrone in 1897. In 1902, she was appointed temporary assistant in the Botanical Section of the Science and Art Museum in Dublin (later the National Museum of Ireland), working closely with Professor Thomas Johnson (1863–1954). Together, they curated the herbarium and co-authored the *Hand List*

of Irish Flowering Plants and Ferns (1910). Knowles's research focus shifted towards lichens during the landmark Clare Island Survey, an ambitious multidisciplinary project organised by Praeger, for which fieldwork was conducted between 1909 and 1911, while the results were published by the Royal Irish Academy between 1911 and 1915. During this initiative, she collaborated with the prominent English lichenologist Annie Lorrain Smith and subsequently published a seminal paper on the maritime lichens of Clare Island in 1914. When Johnson retired in 1923, Knowles was appointed Botanical Assistant; despite institutional gender bias delaying her official promotion to Assistant Keeper until shortly before her death, she took full charge of the national collections. Her monumental work, *The Lichens of Ireland*, was published in 1929. This immense undertaking mapped the distribution of over 800 species and remained the definitive reference on Irish lichen flora for decades. Through her extensive fieldwork and correspondence, she added over 100 species to the Irish list, several of which were entirely new to science. Her herbarium is housed at DBN. Ref.: Praeger (1949).



Körber, Gustav Wilhelm **(1817–1885)** – Born in Hirschberg, Silesia, then part of the Kingdom of Prussia (now Jelenia Góra, Poland), where he received his early education. During his youth, he became acquainted with the prominent lichenologist Julius von Flotow, who had settled in the region after being wounded in the Napoleonic Wars. Körber's exuberant obituary of von Flotow underscores the deep admiration he held for his mentor. In 1835, Körber moved to Breslau (Wrocław) to pursue further studies, where he was profoundly influenced by his teachers Christian Gottfried Daniel Nees von Esenbeck and Heinrich Robert Goeppert (1800-1884). He subsequently relocated to Berlin in 1838, where his mentors included Franz Julius Ferdinand Meyen and Eilhard Mitscherlich, and earned his PhD in 1839. His doctoral dissertation, *De gonidiis lichenum*, focused on the gonidia (photobionts) within the lichen thallus, though he remains far better known for his extensive taxonomic and floristic monographs. In later years, Körber actively participated in the fierce scientific debate surrounding the "dual nature" of lichens. He occupied a pivotal position in the mid-19th-century restructuring of lichen taxonomy, serving as a leading figure in what became known as the Italian-Silesian school. Within this framework, microscopic spore characters were deployed as primary diagnostic features. Körber frequently moderated the more radical taxonomic splitting proposed by his Italian contemporaries and, alongside his friend Thore Magnus Fries, presented a restructured systematic framework for lichens. Unlike that of Abramo Massalongo, Körber's system achieved widespread international acceptance. However, he steadfastly rejected Simon Schwendener's theory regarding the composite dual nature of lichens. Körber spent the majority of his career working as a high school teacher at the Elisabethanum in Breslau, later working as a private tutor from 1862 to sustain his intensive research on cryptogams. In recognition of his contributions, he was appointed Titular Professor at the University of Breslau in 1873. His two monumental volumes on German lichens, *Systema Lichenum Germaniae* (1855) and *Parerga Lichenologica* (1859–1865), remain foundational reference works for the region. He described numerous new genera, including several lineages of lichen parasites (licheni-

colous fungi); among his generic names are *Anaptychia*, *Biatoridium*, *Cercidospora*, *Karschia*, *Lecanactis*, *Lecidella*, *Lempholemma*, *Lopadium*, *Orphnispora*, *Pleopsidium*, *Polycoccum*, *Porpidia*, *Pyrrhospora*, *Schaereria*, and *Staurolemma*. Between 1856 and 1873, he issued an influential exsiccatae series titled *Lichenes Selecti Germanici Exsiccati*. The genera *Koerberia* Massal. and *Koerberiella* Stein, alongside numerous species, were named after him. Körber's lichen herbarium is housed at L. Ref.: Cohn (1885); Scholz (2001); Stein (1885).

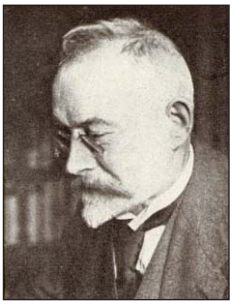


Kofler, Lucie Noël **(1910–2004)** – Born in Villiers-sur-Marne, Seine-et-Oise (now Val-de-Marne), France. Having suffered from intestinal tuberculosis during a childhood marked by fragile health, she completed her early education late before gaining admission to the prestigious *École Normale Supérieure* in 1931. She pursued university studies in natural history, culminating in an *agrégation* in natural sciences in 1939. Her early scientific career was severely disrupted by the Second World War and her 1937 marriage to Julien-Edgar Kofler (1917–1945), a Romanian-born Jew who tragically perished while imprisoned in Germany. In 1947, she relocated to the University of Grenoble, initially serving as an assistant to Professor René de Litardière at the botanical laboratory. There, she initially specialised in the *in vitro* tissue culture of plants under the guidance of Pierre Nobécourt (1895–1962), studying the growth physiology of moss gametophytes from spores. She earned her doctorate from Grenoble in 1958. The arrival of Paul Ozenda at the university in 1955 proved highly influential, steering her toward innovative research on lichens. She famously became the first plant physiologist to study the deleterious effects of atmospheric pollution, specifically fluorine, on the germination of lichen spores. In 1965, Kofler was appointed Professor of Plant Physiology and director of the laboratory. Alongside her physiological work, she actively engaged in Alpine floristics and taxonomy, collecting specimens worldwide. She was deeply fascinated by how lichens disperse and establish themselves in extreme alpine zones, a subject she investigated firsthand in the Drakensberg mountains during a two-year teaching stint in Lesotho (1962–1963). She collaborated closely on this African material with the Swedish lichenologist Ove Almborn, who published her collections. While she published no new taxa herself, several species were named in her honour, including *Peltula koflerae* Henssen & Büdel. She was also instrumental in reviving the Lautaret Alpine Botanical Garden after the war. Her collections are scattered between GRM, GZU and LD (African material). Ref.: Aubert (2007); Moffett (2014).

Kondratyuk, Sergiy (Sergey) Yakovych **(1959–)** – Born in Ulanyovka, Soviet Union (now part of Blahovishchenske in the Kirovohrad Oblast of Ukraine). His parents worked as technicians in a sugar factory, and his passion for botany was nurtured by his maternal grandfather, Ivan K. Rusavsky (1907–1996), who worked in fruit orchards and regularly introduced his grandson to the natural environment. During his secondary schooling, he won a national biology olympiad, which cemented his decision to pursue botanical studies at Kyiv State University. In 1981, he earned his Diplom degree for an investigation into

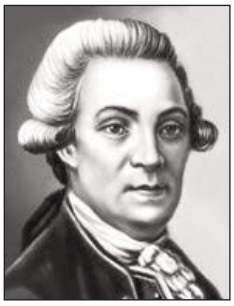


the lichen flora of the Kaniv Nature Reserve. He was tutored by the noted phycologist Nadiya P. Masyuk (1930–2009), who maintained close professional links with the prominent lichenologist Maryna Makarevych. Kondratyuk continued his postgraduate training at the M.G. Kholodny Institute of Botany of the National Academy of Sciences of Ukraine under the guidance of Oleg Blum. In 1985, he defended his Candidate of Sciences dissertation (*Cand. Sci.*, equivalent to a PhD) on the lichen flora of the Dnieper Upland. In 1993, he was appointed head curator of the institute's herbarium (KW). He later rose to become the head of its Department of Bryology and Lichenology in 2002, and was awarded the title of Professor in 2006. A formative academic encounter with Josef Poelt inspired him to commence research on the Eurasian representatives of the genus *Xanthoria*. This work subsequently expanded into a global evaluation of the family *Teloschistaceae*, undertaken largely in collaboration with Ingvar Kärnefelt at Lund University. During the mid-1990s and 2000s, Kondratyuk spent a productive period in Israel as a visiting scientist, collaborating with researchers at the Institute of Evolution at the University of Haifa, including Solomon P. Wasser and Eviatar Nevo. Alongside various colleagues, Kondratyuk completed and published Alfred Oxner's tragically unfinished, multi-volume *Lichen Flora of Ukraine* (2010) and established an updated national checklist. He has described numerous new taxa, including the genus *Xanthomendoza* (co-authored with Kärnefelt), the genus *Rusavskia*, which he named in honour of his grandfather, and many other genera and species. His herbarium is housed at KW. Ref.: *Pers. comm.*; Hertel & al. (2017).



Kovář, Filip (1863–1925) – Born in Žďár (now Žďár nad Sázavou), Moravia (Mähren), Austrian Empire (now Czech Republic). The youngest of several children born to an impoverished shoemaker, he was forced to cut short his formal education due to family poverty. However, his schoolmaster, recognizing the boy's natural talent, managed to secure him a position in the castle gardens at Dolní Rožínka. He worked there for two years, developing a lifelong passion for botany, before returning to Žďár to qualify as a shoemaker and take up grueling employment as an ordinary worker in a local shoe factory. As a completely self-taught layman, Kovář faced extraordinary hardships while pursuing his scientific passion after long factory shifts. For decades, he lacked even basic equipment; until around 1901, he did not own a commercial magnifying glass, instead using a makeshift lens intricately crafted from a bent loop of wire holding a single water droplet. His entry into rigorous academic lichenology was later facilitated by Filip Veselský, an emeritus professor of the Vienna Technical University, who granted him vital access to a comprehensive botanical library, while a microscope gifted by Carl Senft around 1908 finally allowed him to embark on advanced microscopic studies. Driven by determination, he mastered foreign languages in his spare time to read international literature and correspond with overseas experts. While initially supported by Czech botanists, most notably Václav Spitzner and Emanuel Senft, he later sought taxonomic advice from foreign spe-

cialists, including the prominent Bavarian lichenologist Ferdinand Arnold. Despite chronically failing health, Kovář undertook extensive field collection across Moravia. He published a series of foundational papers on the region's lichen flora, the most significant being his 1912 monograph on Moravian *Cladonia* species. In 1907, at the initiative of the bryologist Josef Podpěra (1878–1954), Kovář was appointed assistant curator of the herbarium at the Museum of National History in Olmütz (Olomouc). Tragically, severe inflammation in his left eye during his factory years eventually spread, leaving him completely blind in his final years. Undeterred, he continued to mentor the next generation of Czech lichenologists, identifying specimens entirely by touch and memory, and guiding young scholars such as Miroslav Servít and Jindřich Suza. He described several new taxa, and three lichen species were subsequently named in his honour. His herbarium is housed at OLM. Ref.: Halda (2009); Suza (1925).



Krasheninnikov, Stepan Petrovich **(1711–1755)** – Born in Moskva (Moscow), Russia, Krasheninnikov was educated at the Slavic-Greek-Latin Academy in his native city from 1724. In 1732, recognised as one of the institution's most talented students, he was transferred to the St Petersburg Academy of Sciences to continue his education. There, he attended lectures delivered by the German naturalist Johann Georg Gmelin (1709–1755). Gmelin selected several promising students, including Krasheninnikov, to accompany him on the famous Second Kamchatka Expedition (the Great Northern Expedition, 1733–1743). Krasheninnikov conducted extensive, independent fieldwork across the Kamchatka Peninsula, recording pioneering data on geography, ethnography, linguistics, zoology, and botany. Among his botanical collections, Krasheninnikov demonstrated a keen interest in cryptogams. He drafted a comprehensive treatise on Siberian non-vascular plants intended for inclusion in Gmelin's multi-volume *Flora Sibirica*. Although Gmelin's permanent departure from Russia and subsequent death left this specific cryptogamic project unpublished, the surviving manuscript, written in Krasheninnikov's own hand, documents his foundational contributions. In 1745, Krasheninnikov was appointed as an Adjunct in Natural History and Botany at the St Petersburg Academy, and in 1750, he was promoted to Professor of Botany and elected a full member of the Imperial Academy of Sciences. During his final years, he embarked on a systematic flora of the St Petersburg (Ingrian) region, which remained unfinished at his early death. The manuscript was subsequently edited, expanded, and published by the Dutch physician David de Gorter (1717–1783) as *Flora Ingrica* in 1761. This work contains descriptions of numerous local lichens observed and documented by Krasheninnikov, establishing him historically as the first native-born Russian lichenologist. His surviving historical specimens are preserved at LE (the Komarov Botanical Institute), though a significant portion of his earliest expedition material was lost over the centuries. Ref.: Lipschitz (1950); Soczava (1955).

Krawiec, Feliks Jozef (1906–1939) – Born in Granowiec, near Odolanów, Kingdom of Prussia (now Poland). The son of a local primary school teacher, he showed great scholas-

tic promise early on. However, In 1923, tragedy struck the family when his father passed away prematurely. Following his death, his mother Weronika and her eldest son, Feliks (who was only 17 at the time), jointly shouldered the immense burden of managing the household finances and providing for the education of the younger siblings. To support his mother, Feliks took up tutoring and worked as an administrative assistant in the Żegrze municipality, until he managed to complete his secondary education at the St. Mary Magdalene Gymnasium in Poznań in 1926. He subsequently commenced his university studies in natural sciences at the University of Poznań, earning his doctorate there in 1933. In April 1929, while still an undergraduate, he was appointed as a junior research assistant to Professor Józef Paczoski (1864–1942), the renowned pioneer of phytosociology. Following Paczoski's retirement, Krawiec worked under the cryptogamist Adam Wodziczko (1886–1949), who steered his academic focus toward non-vascular plants, specifically lichens. Krawiec possessed broad botanical interests, contributing extensively to the floristic mapping of the Wielkopolska (Greater Poland) region. Within lichenology, he demonstrated a particular fascination with saxicolous communities, notably those colonising glacial erratic boulders across western Poland. His most enduring legacy, however, was his distributed specimen series, *Lichenotheca Polonica*. Initiated in 1930, it was the first national lichen exsiccatae of its kind in Poland; he was preparing its third fascicle just before the outbreak of the Second World War. Mobilised as a second lieutenant in the Polish Army (56th Infantry Regiment), Krawiec was tragically killed in action on 9 September 1939 during the Battle of the Bzura. His premature death was a great loss to Polish botany, though he left behind a highly organised and rich personal collection that provided a firm foundation for postwar research at the University of Poznań (POZ). Ref.: Czubiński (1953).



Krempelhuber, August von (1813–1882) – Born in München, Königreich Bayern (now Germany), Krempelhuber was the son of a *Triftmeister* (master of timber rafting) within the state forestry administration of Bayern, which was then an independent kingdom. Following his early education in München, culminating at the *Wilhelmsgymnasium* in 1832, he initially studied philosophy at the University of München. In 1834, however, he turned his attention to forestry sciences, which became his lifelong profession. In 1847, he was advanced to the position of *Revierförster* (district forester) based in Mittenwald within the Bavarian Alps. This alpine deployment afforded him exceptional opportunities for field collecting, allowing him to cultivate a deep passion for lichens alongside his close friend and fellow researcher Ferdinand Arnold. These intensive field studies culminated in the publication of the first comprehensive regional lichen flora of Bayern, *Die Lichenen-Flora Bayerns* (1861). In his taxonomic interpretations, Krempelhuber was significantly influenced by Abramo Massalongo and Gustav Wilhelm Körber, though he steadfastly rejected Simon Schwendener's emerging theory regarding the composite, dual nature of lichens. His research interests soon extended far beyond Europe, leading him to evaluate and revise exotic cryptogamic collections shipped from abroad, particularly from South America. His true masterpiece, however, is the monumental three-olume monograph *Geschichte und*

Litteratur der Lichenologie (1867–1872). In this work, he meticulously catalogued the historical evolution of lichenology from antiquity to his contemporary era, providing an exhaustive bibliography alongside a comprehensive overview of systematic taxonomy, within which he proposed an original classification system. This immense work is a stunning scholarly achievement, particularly given that he compiled it while concurrently fulfilling his demanding duties within the Bavarian forestry service, where he was promoted to *Kreisforstrat* (district forestry councillor) in 1855. In recognition of his contributions to botany, the University of München awarded him an honorary doctorate (*Doctor honoris causa*) in 1872. He described numerous new species and established several genera, including *Hymenelia* and *Phlyctella*. His herbarium is housed at M and WU. Ref.: Arnold (1883); Hertel & al. (2013); Kärnefelt & al. (2012).



Kristinsson, Hörður (1937–2023) – Born at Arnarhóll near Akureyri, Iceland, where his parents were farmers, Hörður developed an early interest in botany through his younger brother, who had been gifted a copy of the Icelandic flora, which the two boys studied closely together. Following his local secondary education, he graduated from the *Menntaskólinn á Akureyri* in 1958. As advanced botanical training was unavailable in Iceland at the time, he moved to Germany later that year to commence his higher education at the universities of Freiburg and Göttingen, choosing the latter as the most economically viable option. After returning to Iceland to work as a schoolteacher for a year, he resumed his studies in Germany, earning his doctorate (*Dr. rer. nat.*) from the University of Göttingen in 1966. His early academic research focused on plant pathology, including a study on *Pseudopeziza medicaginis* supervised by Hans Fuchs. It was during his time in Germany that he turned his attention to lichens, realising that no contemporary researchers were actively studying the group in Iceland. This prompted him to establish contact with Aino Henssen at the University of Marburg, resulting in his first lichenological publication. Upon returning home, he was briefly employed by the Icelandic Institute of Natural History. Following a period of short-term academic appointments, he was awarded a postgraduate research scholarship by the American National Science Foundation from 1967 to 1970. This funding took him to Duke University in Durham, North Carolina, to work alongside William L. Culberson and Chicita F. Culberson. There, he specialised in lichen taxonomy and played a key role in developing standardised Thin-Layer Chromatography (TLC) methodologies for identifying secondary lichen metabolites, co-authoring a highly cited paper on the subject with Chicita Culberson in 1970. In 1977, Kristinsson was appointed Professor of Botany at the University of Iceland, a position he held until 1987. He then relocated to Akureyri to become the director of the newly established branch of the Icelandic Institute of Natural History, serving in this role until his retirement. Alongside his authoritative textbooks on the vascular plants of Iceland, which became popular national field guides, he published extensively on the regional lichen flora and described several new taxa. His herbarium is housed at AKU. Ref.: *Pers. comm.;* Heiðmarsson (2023).

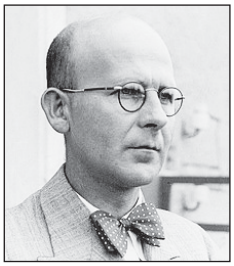


Krog, Hildur (1922–2014) – Born in Simostranda, Modum, Buskerud, Norway, Krog was the daughter of two local schoolteachers tied to the agrarian culture of the region. Her mother, Marta Nygård (née Eksted) (1885-1974) insisted that her two daughters got the best possible education. Following her secondary education in Voss, which she completed in 1941, she commenced her university studies in natural history at the University of Oslo. After the Second World War, she established contact with the prominent botanist Eilif Dahl, who steered her academic focus towards lichens. At the time, Dahl was deeply fascinated by lichen chemistry, particularly the pioneering microcrystallisation methods developed by Yasuhiko Asahina, and he persuaded Krog to apply these techniques to a taxonomic evaluation of Norwegian *Parmelia* species. After completing her degree, she accompanied her husband, the physiologist Jon Olav Krog (1918–2007), to Alaska, living there from 1950 to 1954. During this period, she amassed extensive lichen collections that subsequently formed the basis of her landmark 1968 doctoral thesis on Alaskan macrolichens, continuing the Arctic research tradition of the Oslo school. In 1971, Krog was appointed head curator of the lichen herbarium at the University of Oslo Herbarium (O), and she was promoted to the rank of Professor in 1987. At Oslo, she established a state-of-the-art laboratory for lichen chemistry, which became her primary scientific domain. She introduced the standardised Culberson method of Thin-Layer Chromatography to Norway, significantly advancing the role of chemotaxonomy in lichen systematics. Alongside her former mentor Eilif Dahl, she co-authored the influential field guide *The Macrolichens of Denmark, Finland, Norway and Sweden* (1973). In 1980, she published the *Norsk lavflora*, alongside her postgraduate students Tor Tønsberg and Haavard Østhagen. Her most celebrated international contribution, however, is centred on East Africa. Collaborating with the British physician and amateur lichenologist Thomas Douglas ("Dougal") Swinscow (1917–1992), she produced *Macrolichens of East Africa* (1988), the first comprehensive flora of its kind for the region. Important is also her revision of the genus *Ramalina* in the Canary Islands. Throughout her career, Krog described numerous new taxa, including two highly significant and widely accepted genera: *Lethariella* and *Punctelia*. She served as the secretary of the International Association for Lichenology from 1969 to 1975 and was awarded the Acharius Medal in 2006. The monotypic genus *Krogia* Timdal and the genus *Kroswia* P.M.Jørg. (combining elements of her name and Swinscow's) were named in her honour. Her herbarium is housed at O. Ref.: Hestmark & al. (2002); Jørgensen (2016).

Kurokawa, Syo (1926–2010) – Born in Toyama City, in the Chūbu region of Honshu, Japan, Kurokawa completed his early education locally before commencing his higher education at the Tokyo University of Literature and Science (later the Tokyo University of Education), graduating in 1951. In 1954, he was appointed as a researcher at the Research Institute of Natural Resources, which was directed by Yasuhiko Asahina, who became his primary academic teacher and mentor. Under Asahina's guidance, Kurokawa undertook a comprehensive systematic evaluation of the genus *Anaptychia*, which earned him his doctorate in 1961 and was published the following year as a landmark global monograph of



the genus. In 1969, Kurokawa was appointed senior curator of the cryptogamic herbarium at the National Science Museum, Tokyo (TNS). He dedicated decades to dramatically expanding and organising the institution's national lichen collections, serving as the Director of the Department of Botany from 1974 until his formal retirement. Kurokawa published prolifically on the lichen flora of Japan and neighbouring East Asian territories. Internationally, he is celebrated for his extensive monographic and chemotaxonomic studies on parmelioid lichens, collaborating closely with Mason E. Hale in a major coordinated effort to restructure the taxonomy of this vast family. Throughout his career, Kurokawa described hundreds of new taxa and issued an influential series of exiccatae, *Lichenes Japonici Exsiccati*. He was awarded the Acharius Medal by the International Association for Lichenology (IAL) in 1994. The genus *Kurokawia* S.Y. Kondr. *et al.* is named after him. His herbarium is housed at TNS. Ref.: Kashiwadani (2011).



Kušan, Fran (1902–1972) – Born in Vučja Luka, near Sarajevo, Bosnia, then part of the Austro-Hungarian Empire, Kušan completed his primary and secondary education in Sarajevo before studying natural history at the University of Zagreb. There, he joined the highly active research group led by the professor of botany Valerijan (Vale) Vouk (1886–1962), who had been educated in Vienna. Kušan majored in botany, drafting a preliminary synopsis of the lichens of Croatia for his thesis. During this period, he spent time in Vienna studying under the eminent lichenologist Alexander Zahlbruckner (1860–1938). Upon graduating, Kušan was appointed in 1928 to a research position at the Faculty of Pharmacy of the University of Zagreb, where he was promoted to Full Professor in 1942. Although his professional duties subsequently shifted towards the study of poisonous and medicinal flora, a passion reflected in the university pharmaceutical botanical garden he established in Zagreb, he continued to undertake extensive field collecting of lichens across the country. In 1953, he published *Prodromus flore lišaja Jugoslavije*, which served as a foundational checklist for the region's lichen flora. A devoted mountaineer, he also founded two separate alpine botanical gardens (on Mount Velebit and Mount Biokovo) dedicated to the preservation of mountain plants. Kušan described several new lichen taxa. His herbarium is housed at ZA. Ref.: Martinis (1973).

Kuťák, Václav (1876–1956) – Born in Jaroměř, Bohemia, Austro-Hungarian Empire (now Czech Republic), Kuťák completed his early education locally before attending a teacher-training college. He subsequently taught at several schools across the Chrudim and Trutnov districts between 1909 and 1923, concluding his pedagogical career as the headmaster of the secondary school in Vrchlabí. Kuťák had possessed a keen passion for botany since his youth. Although it is often noted that his retirement in 1935 allowed him to pursue the discipline full-time, he had already established himself as an active researcher decades prior, publishing major papers on the lichen flora of the Krkonoše (Giant)



Mountains in the 1920s. He amassed extensive collections across the northeastern regions of the Czech Republic. In his early taxonomic efforts, he was assisted by the Silesian lichenologist Eugen Eitner (1839–1921) in Breslau (Wrocław), and he eventually built a network of correspondence with many of the leading European specialists of his era. His closest academic ally was the German lichenologist Christian F. E. Erichsen. Through a steady exchange of specimens and scientific literature, Kuťák compiled a remarkably comprehensive personal library and private herbarium, which he later generously made available to mentor the young, emerging lichenologist Antonín Vězda. Kuťák was also a deeply committed environmentalist; from 1938 until his death, he served as a regional curator for the state nature conservation authority. He also distributed an important specimen series, *Lichenes Bohemiae Exsiccati*. His herbarium is housed at PRM. Ref.: Halda (2008); Hendrych (1955); Maršáková (1956).

Kylling, Peder Lauridsen (1640–1696) – Born in Assens on the island of Funen (Fyn), Denmark, Kylling began studying theology at the University of København in 1660, graduating in 1666. Although subsequently ordained, he never actively practised as a parish minister, choosing instead to dedicate himself to the study of botany under the guidance of the eminent polymath and physician Ole Borch (1626–1690). Kylling assisted Borch with the maintenance of the university's early botanical garden, and in 1682, his botanical expertise earned him the prestigious title of Royal Botanist (*Botanicus Regius*) to King Christian V. His most celebrated work, *Viridarium Danicum* (published in 1688), was a groundbreaking catalogue of the Danish flora. It included descriptions of no fewer than 21 distinct lichens, a remarkable achievement for a group of organisms that was poorly understood and largely ignored by naturalists during the seventeenth century. Kylling's pioneering inventory helped lay the early foundations for cryptogamic studies across Scandinavia. The exact whereabouts of his historical personal herbarium remain unknown. Ref.: Christensen (1924–1926).



Labillardière (de la Billardière, Hotou), **Jacques-Julien (1755–1834)** – Born in Alençon, Normandie, France, Labillardière was the son of a lace merchant from a devoutly Roman Catholic, non-noble family (his grandfather had irregularly appended *de la Billardière*, the name of their estate, to the family surname, Houtou), whilst his mother was a professional lacemaker. As a boy, he attended the *Collège Royal d'Alençon*, where he excelled in natural history. In 1772, he began studying medicine at the University of Montpellier under Antoine Gouan (1733–1821), one of the earliest French followers of Linnaeus, though he took no examinations there. Following Gouan's departure, Labillardière transferred to the University of Reims, graduating in 1779. He subsequently moved to Paris, where he came under the influence of the royal physician Louis-Guillaume Le Monnier (1717–1759) and frequented the Jardin du Roi. There, he met the botanists René Desfontaines and Antoine-Laurent de

Jussieu. Inspired by them, he decided to abandon medicine for natural history. He began collecting specimens for Le Monnier and developed a passion for foreign travel. During a visit to England, he befriended Sir Joseph Banks and James Edward Smith, connections that would later prove invaluable. Upon returning to France, he undertook a collecting expedition to the Alps, where he was joined by Dominique Villars, who likely introduced him to the study of lichens. Shortly after completing his first major expedition to the Levant in 1787, he embarked on another to several Mediterranean islands. He remains best known, however, for serving as a naturalist on the 1791 d'Entrecasteaux expedition to the Pacific in search of the lost explorer, the Count of La Pérouse. Following a perilous journey back to Paris, he spent years studying his findings. His collections had initially been seized by the Dutch in Java and were later taken to England as a British Royal Navy prize of war. However, through the personal intervention of Sir Joseph Banks, the material was safely returned to Paris, enabling Labillardière to complete his scientific work. In his landmark publication *Novae Hollandiae Plantarum Specimen* (1804–1806), he described *Baeomyces retiporus* (now *Pulchrocladia retipora*, long known as *Cladia retipora*), which he had collected in Tasmania in 1792. Although he erroneously classified it as an alga at the time, it holds historical distinction as the first Australian lichen ever to be scientifically documented. This milestone secures his place in the history of lichenology. It was the only such organism included in the flora, accompanied by an exquisite illustration by Pierre Jean François Turpin (1775–1840). Labillardière did, however, collect around twenty other lichen specimens that were subsequently identified by other botanists. One was named in his honour, *Sticta billardierei*, by Delise (1825). A staunch republican, Labillardière dropped the Houtou patronymic, opting for the single, consolidated surname by which he is known. He was regarded as an austere but remarkably sharp observer possessing immense stamina. Though sometimes characterised as "pig-headed" due to his difficult temperament, his deep reverence for science allowed him to maintain warm friendships with English botanical experts, even whilst their respective nations were at war. His herbarium is housed at FI-Webb and PC. Ref.: Duyker (2003); Flourens (1837); Galloway (1988).



Lai, Ming-Jou (1949–2007) – Born in Keelung, Taiwan, where his father worked as a teacher, Lai completed his primary and secondary education before studying in the Department of Forestry at the National Taiwan University in Taipei. He graduated with a bachelor's degree in 1971, focusing his research on the seed-plant genus *Begonia* in Taiwan. He subsequently worked as a departmental assistant until 1973, when he entered military service in the navy, returning to the department from 1975 to 1978. In 1970, the Finnish bryologist Timo Koponen (1939–), then working at the Hattori Botanical Laboratory in Japan, visited Taiwan; Lai's assistance with his fieldwork sparked a lifelong interest in mosses and lichens. This encounter led to a close, enduring collaboration with Finnish cryptogamists, notably Teuvo Ahti, who became his primary lichenological mentor. Financial constraints later prompted Lai to spend a year at the Smithsonian Institution in Washington, DC, conducting research alongside Mason Hale. During this period, he commenced his milestone research into the

cetrarioid lichens of East Asia. He then moved to Helsinki, where the university accepted his composite dissertation, *Taxonomic and floristic studies on the mosses and lichens of Taiwan*. Comprising seven of his recent papers alongside a synthesis on plant geography, a subject of growing interest to him, the work earned him his doctorate in 1981. Upon returning to Taiwan, he held various academic and curatorial roles, initially working in the herbaria of the Taiwan Museum while continuing his bryological and lichenological research. From 1983, however, he became involved in the "Window of China" landscape project, leading to an appointment as an assistant professor in the Institute of Landscape Architecture at Tunghai University. Between 1989 and 1992, he served as a professor in the same discipline at Fu Jen Catholic University in Taipei, and in 1996, he was appointed director of the Department of Ecology at the National Institute for Sustainable Development. His most significant lichenological publications include his co-authored landmark paper, *A Checklist of the Lichens of Taiwan* (with Jen-Rong Wang Yang, 1973), and his later *Illustrated Macrolichen Flora of Taiwan* (2001). Lai described several new taxa, including the genera *Cetreliopsis* and *Ahtia*. His herbarium is housed at H, TAIM. Ref.: Koponen & al. (2010).



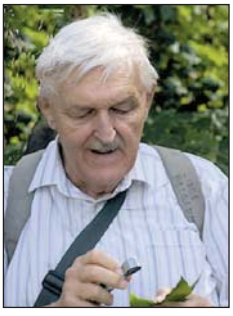
Lamarck, Jean-Baptiste Pierre Antoine de Monet de **(1744–1829)** – Born in Bazentin-le-Petit, Picardy, France, Lamarck was the youngest son in a noble family where male members traditionally joined the military. Because his eldest brother had been killed in combat, his father enrolled him in a Jesuit college in Amiens during the 1750s, an environment where he was deeply unhappy. Following his father's death in 1760, he immediately left the college to join the army, serving with distinction during the Seven Years' War. He was promoted to lieutenant while stationed in peacetime Monaco, but his military career was cut short by a severe neck injury caused when a fellow soldier playfully lifted him by his head. The injury resulted in chronic glandular inflammation, and after unsuccessful surgery exacerbated the condition, he was formally decommissioned in 1768. Unable to subsist on his meagre pension, he took a position as a bank clerk and, around 1770, began studying medicine. This demanding double life proved overwhelming, and he abandoned his medical studies after four years without taking any examinations. However, this period brought him into contact with the eminent botanist Bernard de Jussieu (1699–1777) at the *Jardin du Roi*, under whose tutelage he spent nearly a decade collecting and studying plants. The fruition of this work was his impressive, three-volume *Flore françoise* (1778), which rapidly became the standard flora of France. Extensive new editions appeared later, heavily revised and expanded by Augustin Pyramus de Candolle, which treated the regional lichens in thorough detail. Backed by the highly influential naturalist the Comte de Buffon (1715–1786), Lamarck was appointed Botanist to the King in 1781, and eventually Keeper of the Royal Herbarium. During the French Revolution, the royal gardens were reconstituted as the *Muséum National d'Histoire Naturelle* (*Jardin des Plantes*), where in 1793 Lamarck was appointed professor of zoology. He specifically oversaw insects and worms, coining the term "invertebrates" to classify them. He is globally celebrated for his early theory of evolution, known as Lamarckism, which he first presented in an 1800 lecture.

Though his mechanism of the inheritance of acquired characteristics was later discredited by modern genetics, it stood as a vital precursor to Charles Darwin's work. Lamarck was also an exceptionally gifted botanist; he initiated and contributed heavily to the early volumes of the monumental botanical section of the *Encyclopédie méthodique* (1782–1832). His work was tragically cut short as his eyesight rapidly degenerated, leaving him blind by 1818, after which he spent his final decade dictating texts to his daughters. His herbarium is housed at P. Ref.: Delange (1984); Landrieu (1909); Lecomte & Léandri (1930).



Lamb, Ivan ('Mac') Mackenzie/ Mackenzie, Elke **(1911–1990)** – Born in Clapham, London, England, UK, Lamb grew up in Leith, near Edinburgh, Scotland. He earned a Bachelor of Science degree in botany at the University of Edinburgh under Sir William Wright Smith (1875–1956). After graduating in 1933, Lamb was awarded a scholarship by the German Academic Exchange Service, enabling him to study in Germany, first in Würzburg, Bayern, under Hans Burgeff, and later in München under Friedrich von Wettstein (1895– 1945). Throughout his life, Lamb's research reflected the rigorous German scientific method, and he retained a deep affinity for German culture (which was occasionally, and erroneously, misconstrued as Nazi sympathy during and immediately after the war years). His appointment as Assistant Keeper in the Botany Department of the British Museum (Natural History) in 1935 proved pivotal for his career. Here, he worked closely with Annie Lorrain Smith, whom he considered his mentor in lichenology. She directed his attention to the museum's extensive, unstudied collections from Antarctica, a region that became his lifelong passion. He visited Paris and Turku to examine Antarctic material, and in 1942 he was awarded a Doctor of Science degree by the University of Edinburgh for a revision of the genus *Placopsis*. Resigning from the British Museum, Lamb joined the top-secret wartime expedition "Operation Tabarin" (1943–1946), which was organised to establish a permanent British presence and assert sovereignty in Antarctica. He served with distinction as a base botanist before returning to Europe, making a final visit to Finland (his wife's home country) in 1947, followed by a prolonged research sojourn in Uppsala, Sweden. He subsequently relocated to Argentina, accepting a professorship at the *Instituto Miguel Lillo* in Tucumán. This role provided exceptional opportunities to investigate the rich but poorly documented lichen flora of Patagonia. Although the challenging living conditions proved difficult for him and his wife, Lamb collected extensively. This fieldwork yielded several foundational papers, most notably a comprehensive study on the lichens of Patagonia's national parks, published in Spanish in 1950. That same year, Lamb moved to North America, serving as Curator of Cryptogams at the National Museum of Canada in Ottawa (1950–1953). It was here that he began his meticulous work on the taxonomically challenging genus *Stereocaulon*, eventually becoming the world's foremost authority on the group. His bipolar research resulted in major monographs on the crustose genus *Placopsis*, the species-rich Antarctic genus *Buellia*, and various pyrenocarpous lichens. Notably, he had previously described *Verrucaria serpuloides*, a unique lichen that grows permanently submerged in marine environments. He later became the first to study it in situ, scuba diving through sea ice to record its growth at depths of up to 10 metres below sea level. In

1953, Lamb was appointed Director of the Farlow Herbarium of Cryptogamic Botany at Harvard University. A 1955 summer course in marine phycology at Woods Hole initiated a new avenue of research. He visited numerous marine biological stations and pioneered underwater botanical research in the polar regions, culminating in his participation in "Operation Gooseflesh" under the US Antarctic Biological Program, directed by George Llano. In 1971, health and deeply personal reasons prompted an early retirement. Lamb successfully underwent gender-reassignment surgery, transitioning to live as Elke Mackenzie (see that entry). Elke took with her the massive manuscript and illustrations for the *Stereocaulon* monograph. Although the accompanying reference collection unfortunately succumbed to tropical mould and had to be discarded, the monumental work, *A Conspectus of the Lichen Genus Stereocaulon*, was published in 1977. Among the unpublished manuscripts was a comprehensive flora of Antarctic lichens, now preserved in the British Antarctic Survey library. This manuscript remains a vastly more reliable and meticulously observed account than C. W. Dodge's flawed 1973 volume. Despite Lamb's unrivalled polar field experience, Llano had politically favoured Dodge as the official US Antarctic lichen expert. However, Lamb's diaries from Operation Tabarin were published posthumously in 2018, revealing a remarkably brave, physically resilient, and adventurous individual. Beyond taxonomy, Lamb was deeply fascinated by lichen biology, particularly cephalodia formation and the mechanisms regulating photobiont selection. His insights inspired his doctoral student, Vernon Ahmadjian, to undertake pioneering experimental work on lichen synthesis. In a notable 1967 paper, he also discussed chemical variation within taxa, coining the widely adopted term 'chemotype' to describe distinct chemical strains within a species. His most enduring contribution to botanical nomenclature remains the *Index Nominum Lichenum* (1963), a remarkably precise supplement to Alexander Zahlbruckner's *Catalogus Lichenum Universalis*, complete with a scholarly Latin preface. Lamb described hundreds of new taxa, including the New Guinea genus *Compsocladium*. The lichen genus *Lambiella* Hertel is dedicated to him. His herbarium is housed at BM, CANL and FH. Ref.: Ahmadjian (1991); Lamb (2018); Llano (1991); Haddelsey & Lewis-Smith (2018).



Lambinon, Jacques Ernest Joseph **(1936–2015)** – Born in Namur, Belgium, Lambinon was the son of Alphonse Lambinon, a travelling salesman for a tobacco manufacturer, and Léona Radelet. After a classical education at the *Athénée royal de Namur*, he studied biological sciences at the the University *Notre-Dame de la Paix* in Namur (1953–1955), then completed a degree in botanical sciences at the *Université catholique de Louvain* (1955–1957) under the botanist Pierre Martens, obtaining a secondary-school teaching qualification in the same year. He was then taken on as a trainee at the State Botanical Garden of Brussels in the team working on the flora of Central Africa, where he attracted the attention of the mycologist Fredie Darimont (1917–1966), who secured a scholarship for him from the University of Liège and arranged his appointment as assistant there in 1959. He earned his doctoral degree in 1966 with a thesis on the distribution and taxonomy of the macrolichens of Belgium; his official supervisor was the mycologist

Darimont, although in reality, he was supervised by the lichenologist Jacques Duvigneaud. Lambinon subsequently went on to build a long career at the University of Liège as a professor of systematic botany and phytogeography until he attained emeritus status in 2001. In addition to his extensive work on the macrolichens of Belgium, Luxembourg, and northern France, which culminated in his landmark synthesis *Les Lichens* (1969), he contributed significantly to the knowledge of African lichens. His most important African contributions relate to the lichens of East and Central Africa, where he conducted several field expeditions to Zaire (now the Democratic Republic of the Congo), Rwanda, and Burundi. He was instrumental in rejuvenating lichenology in Belgium. Because his work was predominantly ecological and floristic, he described relatively few new taxa. The lichenicolous hyphomycete genus *Lambinonia* Sérus. & Diederich, alongside many species, was named in his honour. His herbarium is housed at LG. Ref.: Magain *pers. comm*.; Fabri (2025); Fabri & Demoulin (2016); Heywood (2016); Schneider (2016); Verloove (2016).



Lambley, Peter William **(1946–2022)** – Born in Birmingham, England, UK, Lambley moved with his parents to Ifield, Sussex, at the age of ten. It was here, while walking through the Sussex woods and downs, that he developed a lifelong passion for the natural environment. He went on to study botany at the University of Leicester, writing a thesis on heathland vegetation under the formal supervision of Tom G. Tutin (1908–1987). During this research, he realised the ecological importance of lichens and became closely associated with Francis Rose, who actively nurtured his interest. Lambley subsequently dedicated much of his life to investigating the lichen flora and vegetation of Norfolk, Sussex, and Essex. Professionally, he joined the Castle Museum in Norwich in 1970 as Assistant Keeper of Botany, eventually rising to become Keeper of Natural History. In 1984, he relocated to Papua New Guinea for three years to serve as Senior Technical Officer at the Natural Sciences Resource Centre of the University of Papua New Guinea. His extensive field expeditions and collections laid the foundations for their national lichen repository. Though his primary focus remained broad-scale vegetation patterns, his expertise directly advanced the island's botanical literature. He described only one new species himself, but his collections have been widely utilised by subsequent taxonomists. Upon his return to Norfolk in 1987, Lambley joined English Nature (now Natural England) as a Conservation Officer. He worked untiringly on habitat management, particularly along the North Norfolk coast, a dedication for which he was appointed MBE in 2007. He made return trips to New Guinea in 1992 and 1995, and remained a pillar of the British Lichen Society, serving in numerous capacities including Treasurer and President (2008–2010). The lichen species *Parmotrema lambley* Elix and the trap-door spider *Nihoa lambley* Raven were both named in his honour. His herbarium is housed at BM, NWH and UPNG. Ref.: Aptroot, *pers. comm.*; Fletcher (2022).

Lamy de la Chapelle, Pierre Marie **Edouard (1804–1886)** – Born in Limoges in the Limousin region of France, Lamy began his formal education at a Jesuit school in Morillon. In 1824, he was sent to convalesce and recuperate in the Pyrenees and at Mont-

Dore, where he developed a keen interest in plants, particularly cryptogams. To secure his livelihood, he established a bank in Limoges in 1844. Following his retirement from banking in 1864, he devoted his newfound leisure to pursuing his cryptogamic interests. This culminated in several significant publications, including his comprehensive *Catalogue raisonné des lichens du Mont-Dore et de la Haute-Vienne*, first published in 1878 and issued as a standalone volume in 1880. Throughout his botanical career, Lamy maintained close associations and correspondences with many of the pre-eminent lichenologists and cryptogamists of his era, including William Nylander, Jean Baptiste Henri Joseph Desmazières, Jean Étienne Duby, Jean-Baptiste Mougeot, and Jean Pierre François Camille Montagne. Influenced heavily by his close alignment with Nylander, Lamy initially resisted Simon Schwendener's revolutionary dual-hypothesis theory of lichen symbiosis. His principal personal lichen herbarium is housed at CLF, with significant historical collections and types at PC and smaller fascicles at BOUM. Ref.: Malinvaud (1886).



Lange, Otto Ludwig **(1927–2017)** – Born in Dortmund, Germany, Lange attended school in Göttingen, Niedersachsen, following his family's relocation to the city. In 1946, after a period as a prisoner of war, he commenced his natural history studies at the University of Göttingen, alongside a brief period of study in Freiburg, Baden-Württemberg. He earned his doctorate at Göttingen in 1952 with a pioneering dissertation on the heat and drought resistance of lichens, completed under the supervision of Franz Firbas (1902–1964). From 1961 to 1963, he worked as a lecturer at the Technical University of Darmstadt, before being appointed to the chair of Forest Botany and Mycology at Göttingen. In 1967, he accepted the newly established Chair of Botany at the Julius Maximilian University of Würzburg, Bayern, where he remained until his retirement in 1992. It was during his decades in Würzburg that Lange became a world leader in lichen ecophysiology. By combining laboratory experimentation with innovative fieldwork using a mobile gas-exchange laboratory, he demonstrated how lichens survive under extreme environmental conditions. His broad ecological perspective allowed him to place lichen survival strategies into a wider macro-climatic context. In 1966, he travelled to Antarctica's Cape Hallett station to conduct the first field-based gas-exchange measurements on polar lichens. Although he only undertook this single polar expedition, his research was so profound that the United States Board on Geographical Names named a 2,435-metre mountain in the Lyttelton Range *Lange Peak* in his honour in 1967. He was also awarded the Antarctica Service Medal by the United States Government in 1974. Lange received the Acharius Medal from the IAL in 1992. The genus *Langeottia* S.Y.Kondr. *et al.* was dedicated to him. His herbarium is housed at WB. Ref.: Büdel (2007), Green (2019); Kärnefelt & al. (2012).

Larbalestier, Charles Du Bois **(1838–1911)** – Born in St Brelade, Jersey, in the Channel Islands, Larbalestier was the son of a sea captain who played a minimal role in his upbringing, whilst his mother belonged to the property-owning merchant and landholding class of the island. Following his early education in Jersey, where he manifested a profound interest in the natural environment, he matriculated at the University of

Cambridge. Studying at St John's College, he read botany under Charles Cardale Babington (1808–1895), a scientist with a particular interest in the flora of the Channel Islands, including its lichens. Larbalestier graduated with a Bachelor of Arts in 1862, subsequently spending several years in Brighton working as a private tutor, during which time he continued to collect and study plants, particularly lichens. On the advice of Churchill Babington (his professor's cousin), he established his first scientific correspondence with William Nylander. In 1867, he returned to Jersey and opened a small boarding school at his mother's residence, *'Roche Vue'*, in St Aubin. However, following the severe Jersey bank crashes of 1873, he suffered financial ruin. To secure an income, he accepted a position as a tutor to the family of the wealthy merchant and politician Mitchell Henry, MP (1826–1910). The following year, he accompanied the family on a tour of Egypt, collecting lichens while they visited historic landmarks such as the Pyramids of Giza. Upon their return, he spent much of his time at the family's Irish estate, Kylemore Castle in Connemara, tutoring Alexander George Vaughan Henry whilst amassing a vast collection of Irish lichens. He also completed his Master of Arts degree at Cambridge during this period. Larbalestier moved back to Jersey in the early 1880s following his mother's death in 1881, though failing health and isolation prevented him from settling permanently or collecting extensively on the islands until around 1893. He resigned his membership of the Linnean Society in 1894 due to his inability to attend meetings. Despite his illness, his field discoveries remained highly influential. He maintained a close collaboration with James Morrison Crombie, who relied heavily on Larbalestier's material to update the British lichen flora. This contribution was warmly praised by William Allport Leighton, who dedicated the third edition of his *Lichen Flora of Great Britain, Ireland, and the Channel Islands* (1879) to Larbalestier, underscoring his monumental importance to British lichenology. Larbalestier issued at least three formal series of exsiccatae. He also prepared custom, numbered distribution sets that lacked wide-scale commercial replication, such as his *Lichenes aegyptiaci* (purchased by the Natural History Museum) and *Lichens of Ireland*. His herbarium should be housed at BIRM (his private herbarium bought at his death and presented to the University there), but his most important lichen collections are now housed at BM, CGE, DBN. Ref.: Davey & Davey (2015); Knowles (1929); Smith (1912).



Laundon, Jack Rodney **(1934–2016)** – Born in Kettering, Northamptonshire, England, UK, Laundon was the son of an industrial worker. A bookish pupil, he developed an early passion for natural history and aspired to study the subject at university, though he was ultimately unable to secure the necessary scholarship. After completing his A-levels at Kettering Grammar School, he initially took a position at the local post office at the age of 18. However, in 1952, he successfully gained employment as an assistant in the Botany Department of the Natural History Museum, London, working initially within the Mycological Section. He published his first lichenological paper in 1954. Following a brief period in the General Herbarium, he transferred to the Lichen Herbarium in 1961, where he was mentored by Peter W. James, with whom he collaborated closely. Laundon played an active role in the expansion of the museum's

lichen collections and was a pillar of the British Lichen Society. He served the society in numerous capacities, most notably as its dedicated Secretary from 1964 to 1983. Taxonomically, Laundon specialised in notoriously difficult sterile crustose lichens. He was also a pioneer in urban lichen ecology, monitoring air pollution levels by mapping lichen distributions in urban areas, particularly London. His final publication in 2012 documented the return of specific species to the capital as air quality improved. Laundon developed a keen interest in historical collections, conducting meticulous nomenclatural studies on early British lichenologists. His most famous and influential paper, which focused on William Withering's herbarium (1984), introduced numerous necessary yet controversial name changes based on strict nomenclatural priority. He described several new taxa himself, and the species *Lepraria jackii* Tønsberg was named in his honour. This species was later found to contain a unique secondary metabolite, which was named jackinic acid in 1995. The genus *Laundonia* S. Y. Kondr. *et al.* is named after him. His herbarium is housed at BM. Ref.: Seaward & Hawksworth (2017).



Laurer, Johann Friedrich **(1798–1873)** – Born in Bindlach near Bayreuth, Kingdom of Prussia (now Bayern, Germany), Laurer completed his local education before training as an apprentice in several pharmacies, most notably under Heinrich Christian Funck in Gefrees, Bayern. He subsequently pursued further pharmaceutical and botanical studies under David Heinrich Hoppe (1760–1846) in Regensburg, who actively nurtured his burgeoning interest in cryptogams. Upon an invitation from the bryologist Christian Friedrich Hornschuch (1793–1850), Laurer relocated to Greifswald in Western Pomerania (Vorpommern), where he left pharmacy to read medicine and natural sciences at the university. He earned his medical doctorate there in 1830. Shortly after graduating, he was appointed prosector at the Anatomical Institute and obtained his habilitation in anatomy. He was named an associate professor of anatomy and physiology in 1836, became an associate professor of pharmacology in 1849, and was ultimately promoted to full professor in 1863. Alongside his botanical pursuits, Laurer is widely known in zoology for his 1830 discovery of a reproductive duct in trematodes, now known as Laurer's canal. Laurer conducted extensive lichenological field studies across Western Pomerania and on several Baltic Sea islands, including Gotland in Sweden. His primary contribution to lichenology was his authoritative treatment of lichens in Jacob Sturm's monumental illustrated series, *Deutschlands Flora in Abbildungen nach der Natur* (1832–1835). He described several new species, and the tropical crustose lichen genus *Laurera* Reichenb. was named in his honour. His primary herbarium was housed at B, but was among those destroyed at the end of the Second World War, though duplicate material is preserved in GFW, S, and W. Ref.: Familler (1911); Minks (1873).

Lawrey, James ('Jim') Donald **(1949–)** – Born in Arlington, Virginia, USA, Lawrey grew up in Rockville, Maryland, where he developed an early interest in the natural world. He read biology at Wake Forest University, graduating with a Bachelor of Science in 1971, before moving to the University of South Dakota to complete a Master of Arts in 1973. In



1977, he earned his PhD in botany from Ohio State University under the supervision of Emanuel David Rudolph (1927–1992), focusing on lichen and fungal community dynamics in abandoned coal strip mines. Immediately after completing his doctorate, he joined the faculty of George Mason University in Fairfax, Virginia, where he spent his entire academic career, achieving a full professorship in 1993. His research has focused on fungal diversity, chemobiotaxonomy, and ecological systems. In 1984, he published an important textbook, *Biology of Lichenized Fungi*. Lawrey collaborated extensively with Mason Hale on groundbreaking, long-term environmental monitoring of lichens, most notably tracking growth rates and pollution responses on Plummers Island, Maryland. Lawrey was also among the early pioneers to apply molecular phylogenetics and DNA sequencing to macrolichen evolutionary studies. He is internationally recognised for completely reshaping the taxonomy of the enigmatic, tropical basidiolichens (particularly within the *Dictyonema* clade) and diverse groups of lichenicolous fungi. Throughout his career, he has co-authored descriptions of two fungal orders, two families, and eight genera. He served as President of the American Bryological and Lichenological Society from 1996 to 1999 and was a long-time editor of their flagship journal, *The Bryologist*. He was awarded the Acharius Medal by the IAL in 2021. The genera *Lawreya* Ertz *et al.*, *Lawreyella* Etayo *et al., Lawreymyces* Lücking & B. Moncada, and *Lawrynomyces* Karasiński, were named in his honour. His herbarium is housed at US. Ref.: Lücking & al. (2019).

Leers, Johannes Georg Daniel **(1727–1774)** – Born in Wunsiedel, Principality of Bayreuth (now Bayern, Germany), his mother belonged to an affluent, established bourgeois familywhile his father was a grocer. He began his training as an apprentice at a pharmacy in Nürnberg in 1740, later moving to Strasbourg to attend lectures in anatomy and medical sciences. In 1755, he relocated to Herborn in Nassau, where he took over the local academic pharmacy and married the widow of its former proprietor. Following her death in 1764, he became the sole owner of the establishment. Leers was a passionate student of local botany, culminating in his meticulously prepared work, *Flora Herbornensis*, which was structured around the Linnaean sexual system. Published in 1775 shortly after his death, the volume records numerous cryptogams, including several newly identified lichen species, confirming his status as a highly perceptive field observer. His personal herbarium was subsequently purchased by Georg Franz Hoffmann and transferred to the University of Moscow (MW), where the majority of his material was unfortunately destroyed in the great fire of 1812 during the Napoleonic occupation of the city. Ref.: Roth (1910).

Leighton, William Allport **(1805–1889)** – Born in Shrewsbury, Shropshire, England, UK, the son of the keeper of the ‘Talbot Hotel’; his mother’s family held property and a reputable standing among the Shropshire gentry, and her inheritance provided both the middle name and financial foundation for her only son. Leighton went to school at the Unitarian Manse with Charles Darwin (1809–1882) who awakened his interest in plants. He later studied at Wolverhampton Grammar School and was articled to a Shrewsbury solicitor in 1822. Following his father’s death, he abandoned the law to pursue a career in

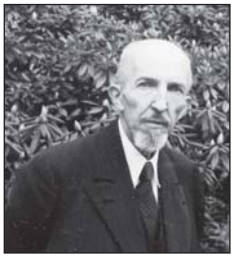


the Church. He matriculated at St John's College, Cambridge, graduating with a BA in 1833. At Cambridge, he studied under John Stevens Henslow (1796–1861), who inspired him to compile *A Flora of Shropshire*. Published in parts between 1838 and 1840, this highly acclaimed work was completed prior to his ecclesiastical ordination. He had already produced a catalogue of British flowerless plants in 1837. Leighton was ordained as a deacon and a priest in 1843, subsequently serving as curate of Holy Trinity and St Giles' Church in Shrewsbury. It was only after resigning his formal clerical charges in 1848 that he gained the necessary leisure to devote himself fully to advanced cryptogamic studies. These investigations yielded several seminal publications, beginning with an 1851 treatise on the historically problematic angiocarpous lichens, which featured exceptionally detailed colour plates. His magnum opus, *The Lichen-Flora of Great Britain, Ireland, and the Channel Islands*, was published in three editions between 1871 and 1879. In this masterwork, he described numerous new taxa. Leighton also issued an acclaimed series of British lichen exsiccatae. His contributions to the field are commemorated in the generic names *Leightoniella* Henssen and *Leightoniomyces* D. Hawksw. & B. Sutton. His primary herbarium was presented to the Royal Botanic Gardens, Kew (K), with additional regional collections housed at the Shrewsbury Museum and in other British herbaria. Ref.: Jackson (1893); Phillips (1889).

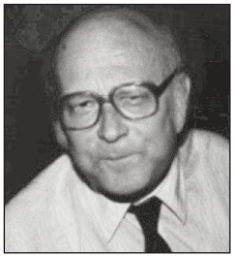


Letrouit-Galinou, Marie-Agnès (1931–) – Born in Mayenne, Pays de la Loire, France, Letrouit-Galinou studied natural history at the University of Rennes. There, she was mentored by Henri des Abbayes, who introduced her to the diverse facets of lichenology. She initially focused on taxonomic revisions, producing important work on the genus *Laurera* between 1957 and 1958. After relocating to Paris, she became a close associate of Marius Chadefaud (1900–1984), prompting her to pivot towards the ontogenetic development of fungal fruitbodies. In 1966, she successfully defended her doctoral thesis on apothecial development. Following her doctorate, she collaborated closely with Chadefaud and his research group to establish a pioneering taxonomy of ascomycetes based on the anatomical characteristics of their reproductive structures. She later applied this expertise to study these identical structures in lichenised fungi using electron microscopy, publishing several groundbreaking papers in the field. Letrouit-Galinou ultimately served as a *directeur de recherche* for the *Centre National de la Recherche Scientifique* (CNRS) at the University of Paris (later the *Université Pierre et Marie Curie*). The lichen genus *Letrouitia* Hafellner & Bellem. was named in her honour, and she was awarded the Acharius Medal by the IAL in 2004. Upon her retirement in 1999, her personal herbarium was deposited at PC. Ref.: Hawksworth (2004).

Lettau, Georg (1878–1951) – Born in Weißenfels, Kingdom of Prussia (now Sachsen-Anhalt, Germany), Lettau grew up and attended school in Königsberg (now Kaliningrad). He read natural sciences from 1896, attending several German universities including Halle, Freiburg, Königsberg, and Leipzig. In 1900, he pivoted to medicine, completing his



studies at Freiburg, München, and finally Heidelberg, Baden-Württemberg, where he earned his medical doctorate in 1904. After working as an assistant physician in Dresden, Sachsen, he established his own ophthalmology practice, operating first in Arnstadt, Thuringia (1906–1910), and later in Lörrach, Baden-Württemberg. Throughout his medical career, he periodically studied lichens, a passion kindled in his youth and further nurtured during a period spent in Vienna in 1909 alongside Alexander Zahlbruckner and Julius Steiner. After 1931, enjoying more favourable conditions for scientific research, Lettau systematically catalogued his extensive collections. This culminated in his monumental, 14-part publication series on Central European lichens, *Beiträge zur Lichenenflora von Mitteleuropa*. Through this meticulous genus-by-genus review, he made numerous significant discoveries and proposed several new taxa, including the genus *Gyalidea* (later validated as *Gyalidea* Lettau ex Vězda). His contributions are commemorated in the genus *Lettauia* Hawksw. & R. Sant. Following his death, his personal herbarium was purchased by the Berlin Botanical Museum (B). This acquisition proved highly valuable, replacing parts of the collection lost during the Second World War; several specimens on loan to Lettau from Berlin during the war completely escaped the destruction of the museum. Ref.: Kärnefelt & al. (2012); Lettau (1940); Mattick (1954).



Leuckert, Christian (1930–2011) – Born in Radeberg, Sachsen, Germany, Leuckert was the son of Alftred, a master plumber, whilst his mother, Louise (née Friedrich) came from a family belonging to the urban working-and-artisan class. He began his education locally before moving in 1939 to the Waldorf school (*Waldorfschule*) in Dresden, from which he matriculated in 1948 following an interruption caused by the Second World War. He initially studied pedagogy in Halle and worked as an elementary school teacher for several years before deciding to return to university to pursue the natural sciences. He commenced his studies at the University of Leipzig, but later fled East Germany to settle in West Berlin, where he read biology and chemistry. During this period, under the influence of Professor Theo Eckardt (1910–1977), Leuckert developed a profound interest in biochemistry and chemotaxonomy. This culminated in a doctoral thesis in 1965 exploring the chemotaxonomy of the *Asteraceae* family, focusing primarily on flavonoids, lignans, and triterpenes. Coincidentally, Josef Poelt was appointed to a chair in systematic botany at the Free University of Berlin (*Freie Universität Berlin*) in 1965. Keen to establish a dedicated chemotaxonomic laboratory, an approach that was proving revolutionary in lichenology, Poelt approached Leuckert to initiate a collaboration. After completing his habilitation in 1970, Leuckert was appointed professor at the Free University, where he remained until his retirement in 1995. He became a pivotal figure in lichen chemotaxonomy across Central Europe and internationally, establishing himself as a leading global authority on xanthones. He published approximately 100 scientific papers, frequently collaborating with students and international specialists across various genera to significantly advance modern lichen taxonomy. Leuckert was

awarded the Acharius Medal by IAL in 1996. His extensive herbarium is now preserved partly in the private collection of his former student, Johannes-Günther Knoph, and partly at B. Ref.: Hertel (2011); Kärnefelt & al. (2012).



Libert, Marie-Anne (1782–1865) – Born in Malmedy, Principauté de Stavelot-Malmedy (now Wallonia, Belgium), Libert was the daughter of Henri-Joseph, a tannery owner who also served as the town's mayor, whilst her mother, Marie-Jeanne Bernadine (née Dubois) who gave birth to thirteen children, belonged to an educated, wealthy family from the upper-middle class. Marie-Anne demonstrated remarkable intellectual capacity from an early age, prompting her parents to enrol her at the Sepulcrine convent in Malmedy. At the age of eleven, she was sent to Prüm in Germany to advance her education, a period during which she mastered both the German language and the violin. Upon her return, her profound interest in the natural sciences began to emerge. Her father taught her the fundamentals of algebra and geometry to prepare her for commercial life; she subsequently assumed management of the family enterprise, successfully expanding it with her brothers. However, her true passion lay in botany, which she pursued during extensive field excursions across the Malmedy region. To read the primary scientific literature of her era, she independently mastered Latin. She eventually established contact with prominent Belgian botanists, most notably Alexandre Louis Simon Lejeune (1779–1858), who shared her fascination with cryptogams. Her cryptogamic research received its greatest impetus in August 1810 following a visit from the celebrated Swiss botanist Augustin Pyramus de Candolle (1778–1841). Recognising her expertise, he accompanied her on field excursions through the Ardennes, highlighting the region's cryptogamic richness. Libert is internationally renowned for being one of the first researchers to identify the devastating organism responsible for potato late blight, which she named *Botrytis vastator* Lib. in a detailed report in August 1845. Beyond plant pathology, she made highly significant lichenological discoveries and described several hundred new cryptogamic taxa. She is widely recognised as one of the true founding female pioneers in the history of systematic mycology and lichenology. Her scientific achievements are commemorated in the ascomycete genus *Libertiella* Speg. & Roum. She also issued an influential collection of cryptogamic exsiccatae. Her extensive herbarium is now housed at BR. Ref.: DuMortier (1865); Lawalrée & al. (1965); Maroske & May (2018).



Lightfoot, John (1735–1788) – Born in Newent, Gloucestershire, England, UK, Lightfoot was the son of Stephen, a yeoman farmer, whilst his mother, Nancy Maria (née Allport) belonged to the comfortable, independent land-holding and merchant class. He received his early education at the Crypt School in Gloucester before studying at Pembroke College, Oxford, from which he graduated with an MA in 1766. Upon leaving university, he took Holy Orders and was appointed perpetual curate of Colnbrook, Middlesex. He established his primary residence in

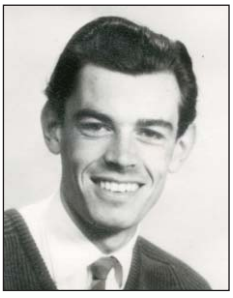
nearby Uxbridge, where he remained until his death, though from 1765 to 1777 he also resided periodically in Salden, Buckinghamshire. In 1767, he was appointed chaplain and librarian to Margaret Cavendish Bentinck, the Dowager Duchess of Portland (1715–1785). In this role, he curated her celebrated "Cabinet of Curiosities" at Bulstrode Park, which brought him into close contact with eminent British naturalists, including Joseph Banks, James Dickson, William Hudson, Daniel Solander, and James Edward Smith. Possessing an amiable disposition, he formed an especially close friendship with Banks, the pre-eminent figure in contemporary British botany. In 1772, Lightfoot embarked on a botanical tour of Scotland and the Hebrides in the company of his friend, the Welsh naturalist and author Thomas Pennant (1726–1798). This expedition resulted in his seminal two-volume work, *Flora Scotica*, published at Pennant's expense in 1777. The volume treated lichens and their allies extensively, cataloguing 117 cryptogamic taxa, of which 109 were placed under the broad Linnaean genus *Lichen*. Nineteen of these were described as new to science with exceptional taxonomic skill. Within this work, he also described *Fucus pygmaeus* (now the marine lichen *Lichina pygmaea*). Although his observations of this seashore organism prompted him to evaluate its unusual morphology, he ultimately classified it alongside seaweeds. Following Lightfoot's death in 1788, his comprehensive herbarium was purchased for 100 guineas by King George III as a gift for Queen Charlotte. Though parts of the collection sustained damage due to early neglect, the surviving material was later transferred to Kew (K), where his historic cryptogamic specimens are preserved. Ref.: Bowden (1989); Galloway (2014b); Pennant (1789).



Lindau, Gustav (1866–1923) – Born in Dessau, Herzogtum Anhalt (now Saxen-Anhalt, Germany), Lindau was the son of a cigar manufacturer. In 1885, he began studying mathematics and natural history, initially at the University of Heidelberg under the guidance of the botanist Ernst Pfitzer (1846–1906), and subsequently at the University of Berlin. In Berlin, he became a pupil of several prominent scholars, including Simon Schwendener, who exerted a profound influence on his scientific trajectory. In 1888, he earned his doctorate with a thesis investigating the apothecial development of lichens, followed by an influential paper on the attachment organs of lichen thalli. From 1890 to 1892, he relocated to Münster, Nordrhein-Westfalen, where he served as an assistant to the eminent mycologist Julius Oscar Brefeld (1839–1925) while simultaneously directing the Münster Botanical Garden. Lindau returned to Berlin in 1892 to work with Ignaz Urban (1848–1931) on exotic phanerogams, principally from South America, while occasionally classifying lichen collections, such as those from East Africa in 1908. Following his habilitation in 1894, he was appointed *Privatdozent* and was promoted to a full professorship in 1902. Although primarily a mycologist who contributed heavily to the taxonomy of higher plants (notably within Engler & Prantl's system), he remains vital to lichenology. Alongside Paul von Sydow (1851–1925), he compiled the monumental five-volume bibliography, *Thesaurus Literaturae Mycologicae et Lichenologicae* (1906–1917). His most practical lichenological contribution, however, was his accessible, masterfully structured lichen volume in the multi-part field handbook, *Kryptogamenflora für Anfänger* (1911–1914). This introductory

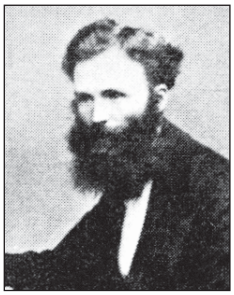
series achieved pan-European significance, mirroring the widespread utility that Josef Poelt's keys achieved in the 1970s, albeit in a less exhaustive format. The fungal genus *Lindauella* Rehm was named in his honour. Tragically, his herbarium was destroyed at the Berlin Botanical Museum (B) during an air raid in the Second World War. Ref.: Kärnefelt & al. (2012); Loesener (1923); Wagenitz (2009).

Lindig, Alexander (Alejandro) (1815–1882?) – Born in Germany (possibly Bremen), Lindig was a prolific naturalist and plant collector who focused extensively on the rich cryptogamic flora of New Granada (modern-day Colombia). He arrived in South America around 1842 in the company of his brother, Heinrich, a physician. Highly artistic as well as scientific, Lindig quickly integrated into the cultural elite of Bogotá, where he was recorded as an accomplished violinist and an active member of both the *Sociedad Filarmónica de Bogotá* in 1847 and the *Unión Musical* in 1858. Professionally, he worked as an engineer, topographer, and palaeontologist. In 1859, he served as a co-founder of the *Sociedad de Naturalistas Neogranadinos*, within which he was officially appointed to spearhead the institutional departments of palaeontology and cryptogamic botany. Although he resided in South America for nearly three decades, Lindig's most intensive biological collecting occurred between 1859 and 1863. His remarkable Andean collections, which exceeded several hundred meticulously prepared numbers, proved important to lichen taxonomy. His lichen specimens were sent to William Nylander, who used them as the foundational backbone for his contribution to Triana & Planchon's seminal *Prodromus Florae Novo-Granatensis* (1863). Lindig returned to his native Germany in 1870, resettling in Dresden, where he spent his remaining years. The moss genus *Lindigia* Hampe is named after him. His primary collections are held at H and PC. His widely distributed set of exsiccatae, *Lichenes Novo-Granatenses*, can be found across several major European herbaria, including BM, M, and UPS. Ref.: Diaz Piedrahita (2005); Meagher (2010).



Lindsay, Denis Christopher **(1943/1944–?)** – Born in England, UK, Lindsay studied biology at the University of Exeter, Devon, where his academic trajectory was deeply influenced by the newly appointed botany lecturer, Michael Charles Faraday Proctor (1929–2017). In 1965, while still an undergraduate, he successfully applied for the post of observer and biologist on Signy Island with the British Antarctic Survey (BAS). He spent two years (1965–1967) conducting fieldwork in the South Shetland Islands and visiting the South Orkneys to study local vegetation patterns. Upon returning to Britain, he was formally retained by BAS as a research biologist and stationed at the University of Birmingham under the guidance of Stanley Wilson Greene (1928–1989) and Ronald Ian Lewis Smith (1939–) to process his data. He was awarded his doctorate in 1971 for a thesis investigating the vegetation of the South Shetland Islands. During his postgraduate studies, he collaborated closely with Peter James and Ivan Mackenzie Lamb, both of whom encouraged him to deepen his focus on lichenology. Following his dissertation, Lindsay's engagement with BAS was extended so he could curate their substantial Antarctic lichen collections. He

undertook a subsequent field season (1972–1973) in South Georgia and maritime Antarctica. This work yielded his seminal monograph, *The Macrolichens of South Georgia* (1974), along with a series of highly regarded papers on regional lichen taxonomy, concluding with an influential 1978 study on the ecological role of lichens in Antarctic ecosystems. Between 1974 and 1975, he worked as a curator at the Leicester Museum. He emigrated to Canada in 1976 to take up a post at the University of Alberta, but returned to Britain the following year to pursue a career in teaching within the Birmingham area. He published a small number of papers on the local lichen flora of the Midlands between 1977 and 1987, after which he appears to have moved away from active lichenological research. He described several new taxa, including the species *Rinodina convoluta* D. C. Lindsay. His herbarium is housed at BAS. Ref.: Seaward *pers. comm.* and Archives of BAS.



Lindsay, William Lauder **(1829–1880)** – Born in Edinburgh, Scotland, UK, Lindsay was the son of a registrar, whilst his mother was the daughter of Captain Lauder, an officer whose rank added to the family's reputable standing. He excelled academically at The Royal High School, where he was a distinguished medallist in both 1844 and 1845, demonstrating an early aptitude for writing, illustration, and natural science. During his medical studies at the University of Edinburgh, he secured numerous academic accolades, particularly in botany. He graduated with his medical degree in 1852, submitting a seminal thesis entitled *The lichens: comprising, I. their anatomy, organography, and physiology; II. taxonomy or classification; III. geographical distribution; IV. utility*. It was during his university tenure that the Regius Keeper John Hutton Balfour (1808–1884) established a state-of-the-art botanical laboratory equipped with a dedicated microscopy suite. Balfour successfully redirected Lindsay's early inclinations toward geology, channelling his energy into microscopic cryptogamic research instead. Lindsay subsequently built a distinguished career as a physician. From 1854 to 1879, he served as the medical superintendent of Murray's Royal Asylum in Perth. In this role, he became a progressive advocate for "non-restraint" psychiatric care, pioneering the use of natural history studies as a form of patient therapy. Despite his demanding medical duties, he dedicated his leisure hours to his botanical passion, focusing primarily on lichens. In 1856, he published *A Popular History of British Lichens*, the first introductory book of its kind in Great Britain. His cutting-edge scientific papers on reproductive structures earned him the prestigious Neill Prize and medal from the Royal Society of Edinburgh for the 1856–1859 triennium. Throughout his life, Lindsay remained an energetic and prolific author across both medical and botanical fields. In the 1860s, he journeyed through Iceland, the Faroe Islands, and Norway, publishing detailed reports on their respective floras. During an 1861–1862 sabbatical in New Zealand, he also made enduring contributions to southern hemisphere botany. His botanical magnum opus is widely considered to be his 1870 treatise, *Memoirs on the Spermogones and Pycnides of Lichens*, which featured dozens of intricate anatomical plates drafted by his own hand. A highly independent theorist, he opposed William Nylander's prevailing views on classification and emerged as a rare British voice open to viewing lichens as composite fungal systems. He was a true pioneer in the study of lichen

parasites, coining the foundational term *lichenicolous fungi* and publishing a seminal monograph on the genus *Abrothallus*. He also investigated the chemistry of lichen dyes and spearheaded early research into chemical reagents for taxonomy. The genus *Lauderlindsaya* J.C. David & Hawksw., as well as several New Zealand plant species, are named after him. His herbarium is housed at E. Ref.: Balfour (1913); Hawksworth (2007).



Link, Johann Heinrich **Friedrich (1767–1851)** – Born in the Prince-Bishopric of Hildesheim (now Niedersachsen, Germany), Link was the son of the minister August Heinrich Link (1738–1783), whilst his mother, Elisabeth Sophia (1736-1814), belonged to the von Wulfen family, an ancient and aristocratic German noble lineage. His father nurtured his early interest in the natural world by introducing him to the collection of biological specimens. From 1786, Link studied medicine and natural sciences at the University of Göttingen, where he graduated as an MD in 1789 with a thesis on the flora of local calcareous rock formations. He initially remained at Göttingen as a *Privatdozent* in pharmacy, heavily influenced by his principal mentor, the celebrated anthropologist and naturalist Johann Friedrich Blumenbach (1752–1840). In 1792, Link was appointed as the inaugural professor of chemistry and natural history at the University of Rostock. During his tenure there, he established the university's first chemical laboratory in 1806 and published diverse treatises spanning natural history, philosophy, and historical science. Between 1797 and 1799, Link accompanied the distinguished botanist Count Johann Centurius von Hoffmannsegg (1766–1849) on a major scientific expedition to Portugal, contributing significantly to early descriptions of the Iberian flora. In 1811, he moved to the University of Breslau (now Wrocław, Poland) as professor of chemistry and botany. Following the death of Carl Ludwig Willdenow, Link was selected in 1815 to succeed him as professor of natural history at the University of Berlin and director of the Berlin Botanical Garden. In Berlin, his research focused almost exclusively on plant systematics, anatomy, and physiology, and he amassed an extraordinarily large personal herbarium. Recognised by contemporaries as one of the last universal polymaths capable of mastering the entirety of the natural sciences, Link trained many of the most influential botanists of the next generation. Between 1829 and 1833, he published a popular and highly authoritative three-volume handbook on common useful plants. His primary taxonomic passion lay in mycology; he established and described several fundamentally important fungal genera, including *Penicillium*, as well as lichen genera such as *Bryopogon* and *Coelocaulon*. The fungal genus *Linkosia* A. Hern.-Gut. & B. Sutton is named after him. His herbarium was mostly destroyed in B during the Second World War. Ref.: Jahn & al. (1985); Kärnefelt & al. (2012); Martins (1866).

Linné (Linnaeus) *filius*, Carl von (1741–1783) – Born in Falun, Dalarna, Sweden, the home city of his mother Sara Lisa (née Moraea) (1716-1806), and named after his illustrious father, the younger Linnaeus was enrolled as a student at Uppsala University in 1750 at the exceptionally young age of nine. He was tutored by several of his father's most prominent students, including Pehr Löfling and Daniel Solander. Linnaeus senior ultima-



tely groomed his son to be his academic successor, a path the young man reportedly accepted with considerable reluctance. He was appointed demonstrator of the Uppsala Botanic Garden in 1759 and was officially designated as his father's future successor in 1762. Following his father's death in 1778, he assumed the university's chair of practical medicine and botany. Because he gained these prestigious positions before completing a traditional doctoral thesis, his rapid advancement provoked widespread envy and resentment within the academic community, though he was awarded an honorary Doctorate of Medicine in 1765 by royal decree. While much of his career was spent editing and revising his father's monumental publications, Linnaeus filius possessed a noticeably keener interest in cryptogams than his father. This inclination is reflected in his surviving collections, which include the type material for *Lichen fasciculatis* (now in *Gabura*). Historians have frequently asserted that his brilliant pupil, Olof Swartz, authored his doctoral thesis entirely independently, a highly unusual occurrence under the academic system of the era. However, contemporary correspondence, including Erik Acharius's papers and the younger Linnaeus's own letters to the royal physician Abraham Bäck (1713–1795), indicates that Linnaeus filius took an active, collaborative role in drafting Swartz's dissertation, which described several new lichen taxa. Furthermore, he independently integrated various new lichen species into posthumous editions of his father's botanical works. Most of his specimens are found at LINN, but some are in S. Ref.: Franzén (1980); Hedin (1808); Jørgensen (2014b).



Linné (Linnaeus), Carl von (1707–1778) – Born in Råshult, Småland, Sweden, Linnaeus was the son of the local vicar of Stenbrohult, whilst his mother was the daughter of Samuel Brodersonius (1658?-1707), the Lutheran rector of Stenbrohult. Nurtured by his father's passion for gardening, he developed a profound interest in plants during his early childhood. Following his schooling in Växjö, he enrolled as a medical student at the University of Lund, Skåne, in 1727. He transferred to Uppsala University the following year to pursue botany, a discipline previously elevated there by Olof Rudbeck the Elder (1630–1702), though the university's botanical garden had fallen into severe decline. Linnaeus befriended Rudbeck's son, Olof Rudbeck the Younger (1660–1740), as well as Olof Celsius (1670–1756), a botanically minded dean of the cathedral who recognised Linnaeus's genius and provided vital financial backing. By 1730, Linnaeus was appointed deputy demonstrator of the Uppsala Botanical Garden. In 1735, he travelled to the Netherlands to complete his medical doctorate at the University of Harderwijk. He was subsequently employed by the wealthy banker George Clifford (1685–1760) to curate the magnificent gardens and herbarium at Hartekamp, near Haarlem. During this formative period abroad, his only major international journey, Linnaeus also undertook scientific excursions to London and Paris. He returned to Sweden in 1738 to fulfil the financial conditions set by his future father-in-law, Johan Moraeus (1672–1742), allowing him to marry Sara Elisabeth Moraea (1716–1806). Following their marriage, Linnaeus practised medicine in Stockholm, where he achieved

considerable court popularity through his successful treatments for venereal diseases, including gonorrhoea and syphilis. In 1741, he was appointed professor of medicine at Uppsala University, assuming full directorship of the botanical garden the following year. Linnaeus achieved monumental global fame with the publication of *Species Plantarum* (1753), a masterwork that established the foundations of modern botanical taxonomy and standardised the use of binomial nomenclature. Because his sexual system of classification relied entirely on floral reproductive organs, he demonstrated very little interest in the taxonomy of lichens, famously dismissing them along with other cryptogams. Nevertheless, because modern botanical nomenclature officially begins with the publication date of *Species Plantarum*, a vast number of lichen species bear his author abbreviation, "L." Following the death of his son, his primary collections were sold by his widow to the English botanist James Edward Smith (1759–1828), who subsequently founded the Linnean Society of London, where the historic Linnaean Herbarium (LINN) is preserved today. Ref.: Blunt (1971); Broberg (2019); Fries (1903); Jørgensen & al. (1994); Jørgensen & Lücking (2018); Stafleu (1971); Stearn (1957).



Liou, Tchen-Ngo (pinyin: **Liu Chen-ngo) (1897–1975)** – Born in Xiahe village, Shandong Province, China, Liou was the son of impoverished peasants. Despite a difficult childhood, he completed his basic education locally and, with his brother's financial assistance, attended middle school in Jinan. In 1920, he travelled to France under the work-study programme to pursue higher education. He eventually enrolled at the University of Nancy, where he studied plant pathology under the mycologist Fernand Moreau (1886–1980). Moreau, who also researched lichens, introduced Liou to these organisms. When Moreau was appointed director of the botanical laboratory at Clermont-Ferrand, Liou followed his mentor there. In 1929, Liou defended his doctoral thesis at the University of Lyon. His dissertation focused on phytosociology and was co-supervised by the eminent Swiss ecologist Josias Braun-Blanquet (1884–1980). Despite his primary focus on ecology, Liou published a significant paper on French lichens in 1928. After a brief research stint at Gaston Bonnier's laboratory in Paris, Liou returned to China in 1930. He was appointed director of the Botanical Institute of the National Academy of Peiping (Beijing), where he modernised scientific botany in China and initiated the country's first systematic lichen flora survey. At the time, he was unaware of Alexander Zahlbruckner's concurrent 1930 regional overview. Liou brought a reference collection of French lichens back to China and integrated French botanical literature into his laboratory, requiring his research staff to master the language. The macrolichen specimens gathered by Liou and his team were compiled and published in 1935 by his student, Tchou Yen-Tcheng (Zhu Yancheng), in the landmark paper *Note Préliminaire sur les Lichens de Chine*. This publication omitted crustose lichens, though field notes and collections sent to Moreau before the Second World War confirm that crustose species had indeed been extensively sampled. The survey project was disrupted when Tchou left for France to study under Braun-Blanquet in Montpellier, and geopolitical turmoil forced the institute to relocate to Wumeng in 1936, and later to Kunming in 1941. During these displacements, Liou pivoted

towards the biogeography of higher plants. He edited a seminal phanerogamic flora of northern Xinjiang, building on data he had gathered during the Sino-French Expedition of 1931 and subsequent extensive excursions. IIn 1953, he joined the Institute of Forestry and Soil Science of the Chinese Academy of Sciences. Although he had largely abandoned personal research in lichenology by this time, his institutional leadership directly inspired a younger generation of Chinese researchers to revive the discipline. Liou is widely regarded as the father of modern Chinese lichenology. His herbarium is housed at IFP; the set sent to Moreau ought to be at PC (ex CN). Ref.: Guo & Kashiwadani (2016).

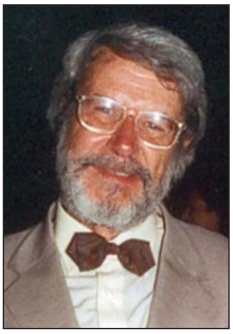


Lisická (née Jelínková)**, Eva (1947–)** – Born in Bratislava, Czechoslovak Republic (now Slovakia), Lisická completed her early education in her native city before enrolling at Comenius University in 1965 to study botany. She graduated in 1970, completing a master's thesis focused on the severe impact of industrial air pollution surrounding a major aluminium smelting plant in central Slovakia, supervised by Ivan Pišút. She expanded this research through postgraduate fellowships at Comenius University, gaining her professional doctorate (RNDr.) in 1972 and her candidate of sciences degree (CSc.) in 1980 with further authoritative work examining industrial emissions and their destructive effects on regional epiphytic lichen communities. Alongside her ecological studies, Lisická published influential floristic and taxonomic treatises within the former Czechoslovakia. Her most definitive monographic contributions include a comprehensive systematic treatment of the family *Umbilicariaceae* in Czechoslovakia, as well as extensive, long-term cataloguing of the lichen biota of the Tatra and Veľká Fatra mountain ranges. She began her professional career as a botanist at the Slovak National Museum in Bratislava from 1970 to 1971. She later returned to the university sector, serving in various research and academic positions at Comenius University between 1791 and 1989. In November 1989, she returned to the Slovak National Museum to take up the post of head curator of lichens and bryophytes, subsequently serving as the deputy head of the Department of Botany until 2000. From 1999 until her retirement, she was engaged as a senior scientific researcher at the Institute of Botany of the Slovak Academy of Sciences. Her herbarium is housed at BRA. Ref.: Hertel & al. (2017); Liška & Lackovičová (2007).



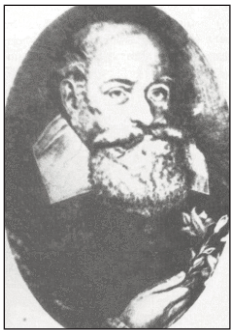
Llano, George Albert (orig. Jorge Alberto Cecilio Perez y Llano) **(1911–2003)** – Born in Havana, Cuba, Llano emigrated to the United States in 1918 when his mother fled the island to escape a severe influenza epidemic. He and his brother experienced a somewhat transient childhood, growing up across various locations along the American East Coast. Llano initially pursued natural history at Columbia University and later at Cornell University, graduating with a Bachelor of Science in 1935. Although his earliest biological interest was ichthyology, he chose a career in education, completing a master's degree at Columbia University Teachers College in 1939. One of his first professional roles was as a seasonal naturalist at Acadia

National Park in Maine, where he became captivated by the local lichen flora. The prominent Norwegian physiologist and lichenologist Per Scholander, who had recently settled in the United States, assisted him with specimen identifications and kindled Llano's lifelong fascination with Arctic biology. In 1941, Llano joined Harvard University as a research fellow, spending considerable time in the Farlow Cryptogamic Herbarium. During the Second World War, he compiled influential reports on the survival applications of lichens, a subject of critical importance for military survival guides. He was subsequently commissioned by the US Army Air Forces to design survival protocols for stranded aviators. Following the war, he secured a fellowship to travel to Sweden to advance his comprehensive doctoral research on *Umbilicaria*, a critical arctic-alpine lichen genus. Scholander had posited that the genus could be systematically segregated based on apothecial characters, a hypothesis that required exhaustive investigation. Llano resided in Uppsala from 1946 to 1947, conducting research at the *Växtbiologiska Institutionen* under the guidance of G. Einar Du Rietz, whilst benefiting from the vibrant community of Swedish lichenologists active at the time. Upon his return to the United States, Llano completed his postgraduate research under C. W. Dodge at Washington University in St. Louis, earning his Ph.D. in 1949 with his landmark monograph on the *Umbilicariaceae* of the Western Hemisphere. He briefly served as an associate curator at the Smithsonian Institution in Washington, D.C., before transitioning into high-level administrative positions managing polar research. In 1961, he was appointed Program Manager for Polar Biology within the Office of Antarctic Programs at the National Science Foundation (NSF). In this influential capacity, he systematically channeled federal funding to support Antarctic lichenological expeditions, most notably those undertaken by I. M. Lamb and C. W. Dodge. After his retirement, Llano continued to visit the Arctic and the Antarctic as an engaging guide on tourist ships. He died from influenza in 2003 whilst aboard a vessel bound for the Falkland Islands, and he was subsequently buried in Stanley. The genera *Llanoa* C. W. Dodge and *Llanorella* Alstrup & Olech were named in his homour. His collections are found in several herbaria. Ref.: Brodo (2004).



Llimona, Xavier (1943–) – Born in Barcelona, Catalonia, Spain, Llimona studied natural history at the University of Barcelona, where he successfully defended his doctoral thesis in botany in 1973. Following his graduation, he was appointed to the academic staff at the University of Murcia, subsequently securing a professorship there in 1976. In 1982, he returned to his *alma mater*, the University of Barcelona, where he was appointed Full Professor (*Catedrático*) of Botany, a position he held until achieving emeritus status. Llimona is widely celebrated for revitalising the discipline of lichenology across Spain, transforming it into a vibrant, modern field of research through his mentorship of numerous prominent Spanish scientists and his extensive contributions to regional floristics. One of his most monumental scientific achievements was the publication of a comprehensive inventory compiled in collaboration with Néstor Hladun in 2001: the Checklist of the Lichens and Lichenicolous Fungi of the Iberian Peninsula and Balearic Islands. This milestone work effectively synthesised centuries of scattered bibli-

ographical records and established a modern baseline for southwestern European biogeography. Throughout his career, Llimona has described numerous new taxa, with a particular expertise in arid-zone crustose lichens and highly specialised lichen parasites. His profound impact on Mediterranean lichenology is commemorated in the generic names *Llimonea* Egea and *Llimoniella* Hafellner & Nav.-Ros., while several species were named after him. His herbarium is housed at BCC. Ref.: Hertel (2012).



L'Obel(ius), Mathias (Mathaeus) de (1538–1616) – Born in Lille, Flanders (now France), where his father worked as an attorney, L'Obel completed his medical training in Louvain (Leuven) and Montpellier, studying under Guillaume Rondelet (1507–1566) from 1565. Following Rondelet's death, L'Obel left Montpellier and later commenced medical practice in the Low Countries. By 1574, he was practising medicine in Antwerp and Delft, whilst simultaneously serving as the personal physician to Prince William of Orange. Following the prince's assassination in 1584, L'Obel fled to England, where he was eventually appointed as physician and Royal Botanist to King James I. His seminal work, co-authored with Pierre Pena (1535–1605), was *Stirpium adversaria nova* (1571), which represents a landmark in pre-Linnaean botany by attempting to classify plants based on their natural affinities (primarily leaf morphology) rather than their traditional medical uses. The illustrations from this system were later compiled into his celebrated visual atlas, *Icones stirpium seu Plantarum tam exoticarum* (1591), which includes several early, finely illustrated descriptions of lichens. His personal herbarium was tragically lost in a fire. Ref.: Legré (1899); Morren (1875).



Lőkös, László Sándor **(1959–)** – Born in Siófok, Hungary, Lőkös grew up in the countryside of Balatonvilágos near Lake Balaton before attending grammar school in Veszprém. Raised by his father, an architect, and his mother, a homemaker, he developed a passion for the natural sciences during his youth, which inspired him to pursue higher education in biology. In 1983, he graduated with a Master's degree from Eötvös Loránd University in Budapest. His master's thesis, completed under the supervision of Klára Verseghy, focused on the atomic absorption analysis of heavy metals in transplanted urban lichens. He later advanced his academic standing by earning a doctoral degree from the University of Pécs in 2005. Lőkös spent the bulk of his professional career at the Hungarian Natural History Museum (*Magyar Természettudományi Múzeum*) in Budapest, where he served as a dedicated research fellow and curator within the Department of Botany. His scientific interests encompass a broad range of topics, including urban lichen ecology, environmental bioindication, historical collections, and regional floristics. He is particularly well-known for his extensive work on the distribution, taxonomy, and conservation of Central and Eastern European lichens, and he co-authored the definitive checklist of lichens for the Western Carpathians. Beyond his regional research, Lőkös participated in landmark international

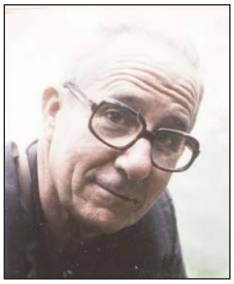
research expeditions, including scientific fieldwork in North Korea during the late 1980s to sample mountain lichens. In collaboration with international experts, his recent research has focused heavily on the molecular phylogeny of the family *Teloschistaceae*. He is married to fellow lichenologist Edit Farkas, with whom he frequently collaborates on major scientific projects. The genera *Loekoesia* S. Y. Kondr. *et al.* and *Loekoeslaszloa* S. Y. Kondr. *et al.* were named in his honour. His herbarium is housed at BP. Ref.: *Pers. comm.*

Loesel(ius), Johann(es) (1607–1655) – Born in Brandenburg an der Havel, Mark Brandenburg (now Germany), Loesel pursued medical and natural science studies across several prominent German universities. He initially completed a degree in philosophy at the University of Königsberg (now Kaliningrad, Russia) in 1632. He subsequently gained employment as a private tutor within the household of the celebrated Scottish royalist officer, General Patrick Ruthven, based in Memel (now Klaipėda, Lithuania). Over several years, Loesel accompanied Ruthven on extensive travels through Western Europe, visiting England, France, and the Netherlands. This period abroad enabled him to advance his medical knowledge, culminating in a medical doctorate awarded by Leiden University in 1639. Upon his return to Prussia, he was appointed Professor of Medicine at the University of Königsberg, a chair he held until his death. Loesel dedicated his research to systematically cataloguing the regional vegetation of East Prussia. Although he managed to print a preliminary species index in 1654, deteriorating health prevented him from preparing a comprehensive illustrated flora before his death in 1655. His unfinished manuscripts and extensive field notes were later meticulously expanded, annotated, and prepared for press by the Prussian physician and botanist Johannes Gottsched (1668–1704). The final masterwork was published posthumously in 1703 under the definitive title *Flora Prussica, sive Plantae in Regno Prussiae sponte nascentes*. This landmark volume provides an important historical record of regional biodiversity, offering some of the earliest descriptive classifications of local cryptogams and macrolichens. Loesel's contributions to botany are commemorated in the scientific names of several plants, including the fen orchid *Liparis loeselii*. The whereabouts of his herbarium are not known. Ref.: Engelhardt (2003); Klinggräf (1854).



Lojka, Hugo (1845–1887) – Born in Gelsendorf, Galicia, Austrian Empire (now Zahirne, Ukraine), Lojka was the son of an Evangelical pastor, whilst his mother belonged to the ethnically German, property-owning bourgeois class of Prussian Silesia (Schlesien). He began his education in Lemberg (now Lviv, Ukraine) before relocating in 1858 to Eperjes (now Prešov, Slovakia), where he studied under the distinguished botanist Frigyes Ágost Hazslinszky (1818–1896), who firmly directed his interests towards lichenology. In 1862, Lojka moved to Vienna to read medicine; however, chronic financial difficulties prevented him from completing his degree. In 1869, he resettled in Budapest, Hungary, where he qualified as a secondary school instructor. He subsequently secured a position teaching natural sciences and mathematics at a prestigious municipal girls' high school, eventually rising to the rank of professor. By the time he established his teaching career, Lojka was already an exceptionally active field collector. He initiated a lifelong correspondence and

close friendship with the pre-eminent German lichenologist Ferdinand Arnold, with whom he undertook numerous field excursions. He maintained robust professional networks with other leading European specialists, including G. W. Körber, who integrated many of Lojka's novel findings into his own distributed sets. Lojka rapidly established himself as the most influential and accomplished Hungarian lichenologist of his era. Contemporary sources widely praised his extraordinary intuition as a field botanist, particularly his ability to identify obscure microhabitats, which yielded a continuous stream of remarkable regional discoveries. To fund his extensive fieldwork across Central Europe and the Carpathian region, Lojka prepared and distributed highly successful sets of printed exsiccatae (most notably *Lichenotheca Regni Hungarici* and *Lichenes Regni Hungarici exsiccati*), which he sold by international subscription or exchanged with foreign correspondents to enrich his research. Tragically, he contracted severe pleurisy following an exhausting, high-altitude collecting expedition in the Southern Carpathian mountains of Transylvania, dying in Budapest at the age of forty-two. The fungal genus *Lojkania* Rehm was named after him. His herbarium is housed at W. Ref.: Degen (1932); Galloway (2014c); Lojka (1869).



López-Figueiras, Manuel (1915–2012) – Born in Jobabo, Las Tunas Province, Cuba, López-Figueiras relocated to Spain with his Galician parents during his childhood, completing his early education in Lugo. He subsequently read pharmacy at the *Universidad Central de Madrid*, where he studied under the prominent botanist José Cuatrecasas (1903–1996), a mentorship that would later prove pivotal to his career in South America. In 1937, amidst the turmoil of the Spanish Civil War, López-Figueiras was taken prisoner. Following his release, he returned to Cuba and successfully earned his doctorate in pharmacy from the University of Havana in 1944. He then secured employment as a pharmaceutical chemist for an American firm operating in Santiago de Cuba. Following the 1959 Cuban Revolution, he chose exile once more, fleeing to New York in 1960. There, a fortuitous reunion with Cuatrecasas enabled him to secure an assistant professorship at the *Universidad del Valle* in Cali, Colombia. Between 1966 and 1986, López-Figueiras held a similar academic appointment at the *Universidad de Los Andes* in Mérida, Venezuela. His scientific trajectory underwent a profound shift in 1974 when he met the American lichenologist Mason Hale during Hale's collecting expedition in the Venezuelan Andes. Inspired by this encounter, López-Figueiras dedicated the remainder of his long career to lichenology, conducting exhaustive and hazardous fieldwork across high-altitude páramo ecosystems. He compiled a highly authoritative catalogue of the macrolichens of the Mérida region and its neighbouring northern Andean states. Furthermore, he established a vibrant research hub in Mérida, generously assisting, guiding, and supporting international visiting lichenologists, which significantly advanced the contemporary understanding of Neotropical cryptogamic biogeography. The genus *Lopezaria* Kalb & Hafellner is named after him. While his biochemical and phytochemical research notes were closely integrated into the laboratory projects of his esteemed colleague and collaborator, Professor Antonio Morales Méndez, his herbarium of approximately 40,000 lichen specimens is housed at MERF. Ref.: Pannier (2013).



Lowe, Josiah ('Josh') Lincoln **(1905–1997)** – Born in Hopewell, New Jersey, USA, Lowe completed his early education locally before pursuing forestry studies at Syracuse University, New York, graduating in 1927. Specialising in forest mycology, he was initially employed as a research assistant at the university from 1933 to 1938. During this period, his academic focus expanded into lichenology, sparked by an invitation from the prominent mycologist Edwin Butterworth Mains (1890–1968) to join him at his summer field station on Isle Royale in Lake Superior. Lowe studied the lichen specimens gathered during this expedition with the assistance of Joyce Hedrick, who curated the collections of the late Bruce Fink at the University of Michigan Herbarium. The director of the herbarium, Professor Calvin Henry Kauffman (1869–1931), was deeply invested in maintaining Michigan's strong lichenological tradition, which led Mains to recommend that Lowe undertake a formal, intensive study of the lichens in his preferred research grounds within the Adirondack Mountains. Lowe selected the taxonomically challenging and historically poorly understood crustose genus *Lecidea* as the subject of his doctoral research. Under Mains's formal supervision, he successfully defended his dissertation and earned his Ph.D. from the University of Michigan in 1938. Although Lowe occasionally described species that were subsequently found to have older, priority names under European literature of which he was unaware, his monograph remains an exceptional milestone in early American cryptogamic literature. In 1938, Lowe was appointed instructor at Syracuse University, where he spent the remaining four decades of his professional career. He was promoted to Assistant Professor in 1940, Associate Professor in 1947, and attained the rank of Full Professor in 1951. His lichens are mostly at MICH. Ref.: Ginns & Worrall (2003).



Lücking, Robert (1964–) – Born in Ulm, Baden-Württemberg, Germany, the son of an electrical engineer and a manager, he developed an early interest in the natural environment, particularly animals. Whilst studying biology at the University of Ulm, he volunteered during a botany course to join a student exchange programme with Costa Rica organised by Professor Sieghard Winkler (1935–1992). Winkler had previously studied foliicolous lichens in other Central and South American rainforests and inspired Lücking to pursue similar research in Costa Rica. He completed his master's degree in 1990 and his doctoral thesis on foliicolous lichens in 1994, building on three years of field studies in Costa Rica. Following a postdoctoral period in Ulm (1995–1998), he served as a visiting professor in Recife, Brazil, in 1998, further expanding his expertise in this highly specialised group of lichens. He subsequently pursued his habilitation at the University of Bayreuth under the supervision of Gerhard Rambold. In 2001, Lücking was appointed Collections Manager and Adjunct Curator of Lichens and Fungi at the Field Museum in Chicago, USA. He managed the mycological collections there until 2015, when he returned to Germany to succeed Harrie Sipman as Curator at the Botanical Garden Berlin (B). In 2023, he was appointed Head of the Department of Evolution and Biodiversity at this institution. As a pre-eminent

authority on tropical lichen biodiversity, he has fundamentally advanced both the taxonomy of foliicolous lichens and that of *Graphidaceae*, as well as the wider understanding of their biology and distribution. He has described a vast number of taxa, including several new genera in the *Gomphillaceae* and *Graphidaceae*. The genus *Lueckingia* Aptroot & Umaña, alongside numerous species, was named in his honour. His herbarium collections are housed at F and B. Ref.: P*ers. comm.;* Kärnefelt (2009); Kärnefelt & al. (2012).



Lumbsch, Helge **Thorsten (1964–)** – Born in Frankfurt am Main, Germany, where his parents had fled from the DDR. His father was a commercial clerk. As a schoolboy, Thorsten cheaply acquired a copy of the newly published book by Henssen & Jahns, *Flechten: eine Einführung in die Flechtenkunde*, and began collecting and identifying lichens at the age of 14. During an open day at the Philipps University of Marburg, he met Aino Henssen, who marvelled at the young boy's deep interest in lichens; he eventually became her favourite student. He earned his master's degree at the Philipps University of Marburg in 1989, writing a thesis on the taxonomy of the *Trapeliaceae* and related families. Following Henssen's retirement, he moved to the University of Essen in 1990, where he completed a doctorate in 1993 with a thesis on the *Lecanora subfusca* group in Australasia. He continued there as a postdoctoral researcher, working alongside Benno Feige, who held a keen interest in chemotaxonomy. In 1998, Lumbsch was appointed assistant professor at Essen, remaining there until 2003, when he became assistant curator of the herbarium at the Field Museum in Chicago, USA. He has remained at the Field Museum throughout his career, holding several positions and ultimately becoming Chief Scientific Officer. Having served as vice-president of the International Association for Lichenology (IAL) since 2008, he was elected its president in 2012. He has travelled extensively, collecting specimens and publishing on lichens worldwide, and has been active in numerous fields. Most prominent is his contribution to the development of the molecular taxonomy of lichens. He has described numerous taxa, including the genera *Ainoa* (with Schmidt), *Coppinsia* (with Heibel), *Feigeana* (with Mies and Tehler), *Gregorella* (with Prado & Kantvilas), *Ingvariella* (with Guderley & Feige), and *Ramalinora* (with Elix & Rambold). While in Essen, he also contributed to issuing lichen exsiccatae. Several lichen species are named after him. He was awarded the Acharius Medal by IAL in 2026. His herbarium is housed at F and HAL. Ref.: P*ers. comm*.; Hertel & al. (2017); Kärnefelt & al. (2012).



Lutzoni, François (1959–) – Born in Montréal, Québec, Canada, to a French-Canadian teacher and an Italian nurse, he developed an early fascination with the natural world. Eager for field experience, Lutzoni completed a three-year technical training program in wildlife management at Cégep de La Pocatière at age 20. The following summer, while working at the Port-au-Saumon Ecological Centre, he was introduced to lichen and bryophyte identification. This brought him into contact with Professor Miroslav Grandtner (1928–2013), a plant community

ecologist at Laval University, who hired Lutzoni as a technician. In this role, Lutzoni assisted Canadian lichenologist Irwin Brodo during an intensive graduate course (1979), an encounter that permanently redirected his research trajectory towards lichenology. Mentored by Grandtner and financially supported by Laval University, Lutzoni completed his B.Sc. in agronomy (1982–1987) whilst continuing his technician duties. He subsequently earned a postgraduate scholarship to the University of Ottawa, completing his master's thesis under Brodo's supervision on the taxonomically challenging *Ionaspis/Hymenelia* complex in the Canadian Arctic (1987–1990). Recognising the limitations of purely morphological taxonomy, Lutzoni embraced molecular systematics. In 1990, he moved to Duke University to pursue a Ph.D. under molecular mycologist Rytas Vilgalys, resigning from his Laval technician post after eleven years. He earned his Ph.D. in Botany/Genetics in 1995 with an award-winning dissertation on the macroevolutionary transitions and molecular phylogeny of arctic-alpine basidiolichen-forming fungi. Before assuming a role as Assistant Curator of lichens at the Field Museum of Natural History in Chicago, where he established the institution's first lichenology research program, Lutzoni completed a year of postdoctoral research at Indiana University under Miriam Zolan and Jeff Palmer. During this period (1996), a chance encounter with bacteriologist Norman Pace led Lutzoni to become aware of the lichen microbiome when he observed that antibiotic treatments caused growing thallus edges to bleach. At the Field Museum, Lutzoni also had appointments at the University of Chicago and the University of Illinois, Chicago, whilst helping establish a dedicated molecular evolutionary laboratory. In 2001, Lutzoni returned to Duke University as an Assistant Professor, later becoming a Full Professor. He established the globally renowned Lutzoni Lab, a premier international hub for studying the evolution, ecology, genomics, and symbioses of lichens and their microbiomes, as well as fungal endophytes. Collaborating with evolutionary biologist Mark Pagel, Lutzoni published a key dissertation chapter in PNAS (1997), followed by a landmark Nature paper (2001) that introduced a Bayesian approach to inferring ancestral states while accounting for phylogenetic uncertainty. As a principal investigator, Lutzoni played a foundational role in the NSF's Assembling the Fungal Tree of Life (AFTOL) project, uniting the global lichenological community to produce large-scale, multi-authored publications from 2004 onwards. A more than two-decade collaboration with mycologist A. Elizabeth Arnold significantly advanced the understanding of endophytic and endolichenic mycobiomes. Additionally, his work with Polish researcher Jolanta Miadlikowska established the genus Peltigera and its Nostoc cyanobionts as a model system for eco-evolutionary and genomic studies. Lutzoni has received several awards from the Mycological Society of America, including the C. J. Alexopoulos Award (2005) and the MSA Fellow Award (2016). At Duke, he remains highly committed to mentoring underrepresented undergraduates, particularly First Nations American students. He served as President of the International Association for Lichenology from 2021 to 2026, and his lab remains fully active today. Since 2010 he has been the curator of the W. L. & C. F. Culberson Lichen Herbarium & Library. His lichen collections are housed at CANL and DUKE. Ref.: Brodo and Lutzoni, *pers. comm.*

Luyken, Johan **Albert (1785–1867)** – Born in Wesel, Kingdom of Prussia (now Nordrhein-Westfalen, Germany), Luyken was the son of a merchant, whilst his mother



belonged to the influential, property-owning bourgeois class. He commenced his medical studies at the University of Halle and subsequently transferred to the University of Göttingen, where he earned his medical doctorate in 1809 under the supervision of the prominent botanist Heinrich Adolf Schrader. Between 1811 and 1813, he undertook extensive scientific and cultural travels across Europe. However, due to severe and progressive hearing loss, he was eventually forced to abandon his peripatetic lifestyle and settled in Amsterdam in 1823, where he established a successful practice as an ophthalmologist. From 1834 until his death, he lived as a wealthy country proprietor at his historic estate, Gut Landfort, located in Megchelen near the German border. Luyken's enduring significance in the history of cryptogamic botany rests entirely upon a single, exceptional publication: his 1809 doctoral dissertation titled *Tentamen Historiae Lichenum in genere cui accedunt primae lineae distributionis novae*. This treatise represents one of the earliest and most systematic attempts to dismantle the broad, unmanageable Linnaean genus *Lichen* into smaller, distinct generic units. Following the theoretical framework established by his mentor Schrader, Luyken partitioned the group into two fundamental structural divisions: I. *Angiocarpi* (lichens featuring closed fruiting bodies) and II. *Gymnocarpi* (lichens featuring open fruiting bodies). Within this system, he formally recognised and adopted several emerging genera, including *Borrera* and *Dufourea*, utilizing taxonomic diagnoses provided by Erik Acharius. The genus *Luykenia* Trev. was named in his honour. His herbarium, mostly phanerogams, is housed at MSTR. Ref.: Wagenitz (1988).



Lynge (orig. Olsen)**, Bernt** Arne **(1884–1942)** – Born in Dypvåg, near the island community of Lyngør (from which he later derived his family name), Agder, Norway, Lynge was the son of Anders Bernt Olsen, a grocer, whilst his mother, Julie, belonged to the Smedal family, an established Norwegian lineage connected to the coastal and merchant communities of southern Norway. Lynge developed a passionate interest in plants during his childhood. After completing his secondary education in 1902, he commenced his botanical studies at the University of Oslo. The prominent professor of botany and algologist Johan Nordal Wille (1858–1924) proposed a formidable *cand.real*. thesis topic: a comprehensive systematic revision of the macrolichens of Norway. Despite having little prior experience with cryptogamic taxonomy, Lynge accepted the challenge. He was appointed as Wille's research assistant in 1905 and successfully concluded the revision in 1909. In 1917, while working as curator of the university herbarium, he earned his doctorate with a highly detailed monograph on the Norwegian *Physciaceae*. Lynge was promoted to assistant professor in 1918, briefly pivoting to the study of subtropical South American lichens. However, following a field excursion to Finnmark in 1920, he permanently redirected his research focus toward the polar regions. Arctic lichenology quickly became his definitive life's work. He undertook hazardous, extensive collecting expeditions across Bear Island, Greenland, Iceland, Jan Mayen, Novaya Zemlya, and Svalbard, whilst also

systematically indexing vast collections gathered by other researchers, most notably those from the historical Swedish Arctic Expeditions. Publishing a prolific stream of monographs covering the entire circumpolar zone, Lynge established himself as the world's leading authority on Arctic lichens. Beyond his polar work, and recognising his meticulous taxonomic skill, the Finnish botanical community subsequently requested that Lynge edit, annotate, and complete the final, unfinished fourth volume of Edvard August Vainio's masterwork, *Lichenographia Fennica* (1934), which treated the challenging family *Lecideaceae*. Additionally, he compiled an exhaustive global inventory of printed exsiccatae, an immense bibliographic undertaking that remains a standard reference tool for modern herbaria. In 1935, Lynge was appointed Full Professor of Botany at the University of Oslo, where he remained an exceptionally popular and dedicated educator until his sudden death. He described many taxa, among them the genus *Pseudoparmelia.* Many species are named after him. His numerous collections, mainly from the Arctic, are at O. Ref.: Holmboe (1943); Jørgensen (2007).

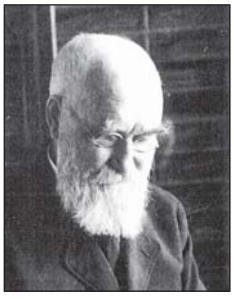


Maas Geesteranus, Rudolf Arnold **(1911–2003)** – Born in 's-Gravenhage (The Hague), the Netherlands, he spent much of his childhood in the Dutch East Indies (now Indonesia), where his father, Adrien Henri, served in the colonial administration, whilst his mother Maria (née van Houten) (1875-1945) belonged to a highly prominent Dutch patrician and mercantile lineage. It was during the East Indies formative period that Rudolf developed a lifelong fascination with the region's rich natural environment. After completing his secondary education upon returning to The Hague, he began studying biology at Leiden University in 1931. He initially focused on ornithology and entomology, while also becoming a highly skilled nature photographer. While still a student, he joined the staff of the *Rijksherbarium* (the National Herbarium of the Netherlands) as a volunteer assistant. In 1939, he was appointed as an assistant, and Simon Jan van Ooststroom (1907–1982) encouraged him to take up the study of lichens. In 1942, he was appointed curator of the mycological herbarium of the Netherlands Mycological Society. Following liberation in 1945, he received the title of Curator of the mycological and lichenological collections at the *Rijksherbarium*, a year before successfully defending his doctoral thesis on the *Parmeliaceae* of the Netherlands. His work revitalised the field, making him the country's first dedicated modern lichenologist after a prolonged period of stagnation. Following a major field expedition to South and East Africa (1949–1950), during which he amassed vital collections of lichens and phanerogams, his institutional mandate required him to shift his taxonomic focus towards macrofungi native to Dutch territories. Consequently, his later contributions to lichenology were primarily channelled into mentoring students, most notably Jan Barkman. He remained at the *Rijksherbarium* until his retirement in 1976, publishing extensive research on non-lichenised macromycetes, particularly within the genus *Mycena*. His herbarium is housed at L. Ref.: van Brummelen & Bas (1976).

Mackenzie, Elke (1911–1990) – This is the name adopted by Ivan Mackenzie Lamb (see that entry) after the successful gender-reassignment surgery carried out in 1971. The



bound at Harvard had problems with this identity change and forced her to take early retirement. Displaced from the academic world and stripped of her research funding, a situation hardly conductive to scientific research, she preferred manual work at the time, such as baking bread and woodcarving, which explains why there are so few lichenological papers bearing her name as sole author. Most of later publications stem from the lifelong project on the genus *Stereocaulon*; these usually credit I. M. Lamb as the author, though they occasionally acknowledge the assistance of Elke Mackenzie, and only rarely feature both as co-authors. It was manifestly an unusual and difficult situation to navigate, yet she continued to sign her letters to P.M.J. as 'Mack', her former nickname. In 1976, Elke purchased a farm in Costa Rica, where she briefly attempted to catalogue the local lichen flora. She eventually left lichenology entirely, supporting herself by translating German botanical textbooks into English. Plagued by failing health and financial hardship, she returned to the United States in 1980 to live with her daughter. For further details see under "Lamb". The photograph was provided by herself.



Macoun, John (1831–1920) – Born in Magheralin, County Down, Ireland, he was the son of a soldier who died when Macoun was only six years old. His mother, Anne Jane (née Nevin) raised their four young children under tightening economic constraints. Growing up on land inherited by his father, he developed an early, enduring passion for the countryside. He became highly independent at a young age, forging a self-confident and remarkably stubborn character. This fierce determination to succeed proved invaluable when, in 1850, his widowed mother and her children emigrated to Canada in the wake of the Great Famine. Having received only a basic education at the local parochial school, Macoun worked briefly as a clerk in Belfast before the family finally settled in Seymour Township, Ontario, Canada, near his maternal uncle's farm. Whilst working in the local fields and forests, Macoun became captivated by the Canadian flora and devoted all his leisure time to botany. He accumulated a vast personal herbarium and established contact with several leading botanists of the era, most notably George Lawson (1827–1895), who recognised the vital role of amateurs in the botanical survey of Canada. Macoun gradually established himself as a leading authority on plants. He sent specimens to William Hooker and Asa Gray (1810–1888), and forwarded his lichen collections to Edward Tuckerman. He held teaching posts in several local schools and, in 1868, was awarded an honorary MA degree by Syracuse University, New York. That same year, despite lacking formal academic qualifications, he was appointed to the chair of natural history at Albert College in Belleville, Ontario, having been offered the post by the principal, Albert Carman (1833–1917), later a Methodist bishop. Prior to this academic appointment, Macoun had become involved in surveying the natural resources of the expanding nation's north-western territories. In 1881, he was appointed Dominion Botanist, working as a naturalist for the Geological Survey of Canada, where he rose to the position of assis-

tant director in 1887. In this capacity, he undertook adventurous and challenging expeditions across the country, collecting extensively and making numerous major discoveries, particularly among cryptogams. From 1882, he resided in the capital, Ottawa, but a severe stroke in 1912 forced his retirement at the age of 81. He and his family then relocated to Sidney on Vancouver Island, British Columbia, where his daughter lived. Despite his physical limitations - his right hand remained permanently paralysed - he managed to continue his scientific work until his death, ably assisted by his eldest son, James Melville Macoun (1862–1920). During his final years on the west coast, he focused more intensively on lichens. Macoun was a brilliant 'jack of all trades' who excelled in the field at discovering new species, though he occasionally neglected the meticulous curation of his specimens and restricted his publications largely to general reports. He was not primarily a lichenologist, favouring bryophytes instead, and published only three noteworthy papers on lichens (the first in 1877); nonetheless, he possessed a keen eye for small, easily overlooked taxa. He is rightly remembered as a pioneer of Canadian lichenology, and his monumental collections formed the bedrock of the National Herbarium of Canada (CAN) upon its foundation. His rich lichen collections were also distributed as an exsiccatae, a project in which he was largely assisted by George Knox Merrill. However, these sets were issued with less care than was standard for the time, occasionally resulting in entirely different species being distributed under an identical number. His legacy is honoured geographically by the village of Macoun in Saskatchewan, as well as Mount Macoun in the Selkirk Mountains of British Columbia. Ref.: Andrews (1921); Macoun (1922); Waiser (1989).



Magnusson, Adolf **Hugo (1885–1964)** – Born in Gottröra, Uppland, Sweden, where his father was a strict schoolmaster, whilst his mother belonged to an established family of independent farmers and local rural craftsmen. Magnusson began his botanical studies at Uppsala University in 1904. Financial difficulties, however, soon forced him to withdraw and transfer to a teacher training college, from which he graduated in Uppsala in 1906. After short teaching spells near Stockholm and in Onsala, Halland, he secured a position in Göteborg in 1908. This marked the beginning of a long and distinguished career as a schoolteacher in the city, punctuated only by periods of advanced botanical research or curatorial work at the Göteborg Botanical Garden and its herbarium. Alongside his conscientious commitment to teaching, Magnusson was a devoted student of lichenology, dedicating nearly all his leisure time and holidays to the discipline. He routinely woke early to study specimens before the school day began and resumed his research late into the evening. Magnusson initially collected within Sweden, achieving an unparalleled expertise in Scandinavian lichens, particularly the crustose forms whose morphological variations he could observe firsthand in the field. During this formative period, his primary mentors were G. O. A. Malme and G. E. Du Rietz. He successfully undertook major taxonomic revisions of several notoriously difficult crustose genera, including *Acarospora*, *Aspicilia*, *Caloplaca*, *Lecidea*, and *Stereocaulon*. In recognition of these monumental contributions, he was awarded an honorary doctorate by Uppsala University in 1932. His expertise soon extended globally as he revised extensive material from international expe-

ditions, including Sven Hedin's Central Asian expeditions to China, Adolf Erik Nordenskiöld's Siberian expeditions, and collections from Hawaii, the latter chiefly gathered during a 1938 expedition by the paleobotanist Olof Hugo Selling (1917–2012). In 1958, Magnusson travelled to the United States to collect specimens independently, where, to his astonishment, he was shot at after inadvertently trespassing on private property. He subsequently published papers on his American discoveries alongside treatments of material sent to him by foreign correspondents. Magnusson maintained an extensive correspondence with the leading lichenologists of his era and mentored numerous emerging talents in the field. Throughout his career, he described nearly 1,000 new taxa, primarily at the species level, despite paradoxically remaining highly critical of unwarranted "species-making". Many species are named after him. His herbarium (and library) is housed at UPS. Ref.: Almborn (1964); Degelius (1965).

Maingay, Alexander **Carroll (1836–1869)** – Born in Great Ayton, Yorkshire, England, UK, relatively little is recorded regarding his background and formative years. In 1854, he commenced his medical studies at the University of Edinburgh. According to John Sadler (1870), the assistant secretary of the Botanical Society of Edinburgh, Maingay joined the society in 1855 and quickly demonstrated a keen interest in cryptogams. During this student period, he published a concise paper on the lichens of the Breadalbane Mountains in Scotland and systematically rearranged the algae herbarium at the Royal Botanic Garden Edinburgh, which also housed key lichen specimens. In 1858, Maingay graduated with a doctorate in medicine, presenting an award-winning thesis on the British *Parmeliaceae*. This research earned him a prestigious gold medal; regrettably for British lichenology, however, it remained unpublished. In this work, Maingay adopted the taxonomic concepts of A. L. A. Fée on British lichens, complementing his text with exquisite, highly detailed microscopic drawings. He was notable as one of several students of J. H. Balfour who specialised in lichens, following in the footsteps of W. Lauder Lindsay, with whose work he was intimately familiar, and corresponding with his fellow Yorkshireman W. Mudd. Upon receiving his medical degree, Maingay was appointed assistant surgeon to the British Medical Service in Bengal. In 1860, he was transferred to China during the Second Opium War; yet, despite the military conflict, he managed to collect a substantial number of plants and lichens. He was subsequently stationed in Malacca, where he performed medical and magisterial duties. Finally, from 1868 until 1869, he served as the superintendent of the Rangoon Central Prison in Burma (now Myanmar). Tragically, his life was cut short when he was killed attempting to quell a violent mutiny of the prisoners. Throughout his extensive travels, Maingay collected botanical material indefatigably. His vast general herbarium and extensive manuscripts were eventually acquired by the Royal Botanic Gardens, Kew (K). His important lichen collections from China, Malacca, and Singapore were later revised and published by J. M. Crombie, with assistance from W. Nylander (1883), though unfortunately very few of his Burmese specimens were included. His lichen herbarium is now housed at BM. Ref.: Anonymous (1870); Crombie (1883); Elliot (1873); Sadler (1870).

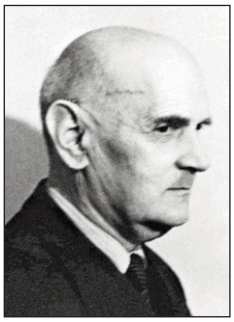
Makarevych (Makarevicz)**, Mariya** (Maria) Florianivna **(1906–1989)** – Born in the village of Moshny in the Cherkasy region, south of Kyiv, Russian Empire (now Ukraine),



where her father, Florian Feliksowych, was a physician and her mother, Maria (née Tychnina) was the daughter of a wealthy merchant, she completed her local basic education before pursuing higher studies in biology. She graduated from Kyiv State University and subsequently undertook postgraduate research at the Institute of Botany of the Ukrainian Academy of Sciences. In 1947, she successfully defended her Candidate of Sciences thesis on the lichen flora of the Eastern Carpathians under the supervision of Alfred Oxner, with whom she remained closely associated throughout her career. Because Leningrad (now St Petersburg) was the undisputed centre of lichenology in the Soviet Union, she later chose to pursue her advanced post-doctoral studies there. In 1964, she was awarded the prestigious degree of Doctor of Biological Sciences for her dissertation on the phytogeography and history of lichens in the Eastern Carpathians. Her official thesis opponent was none other than the doyen of Soviet lichenology, Professor V. P. Savicz (1885–1972); her spirited and vigorous rejection of his critical comments during the defence has since become legendary among Ukrainian botanists. Makarevych returned to Kyiv, where she maintained a tireless research schedule at the M.G. Kholodny Institute of Botany, continuing her work long after her formal retirement as a senior research scientist in 1982. That same year, she published a seminal atlas of the cryptogamic flora of the Eastern Carpathians alongside her former students Lyudmyla Navrotska and Iryna V. Yudina. She authored numerous papers dedicated to the lichens of the Carpathian Mountains, a region that remained the focal point of her scientific devotion, as well as comprehensive studies and distribution maps spanning other territories of Ukraine. She was a widely respected authority on crustose lichens, particularly *Lecanora* and allied genera, contributing major sections to the multi-volume *Handbook of the Lichens of the USSR* (1971, 1977). Throughout her career, she described several new species. Her herbarium is housed at KW. Ref.: Kondratyuk (2007) and *pers. comm.*

Malbranche, Alexandre-François (1818–1888) – Born in Bernay, Haute-Normandie, France, he relocated to Paris after completing his basic education to pursue further studies. There, he worked in various hospitals and trained in pharmacy. In 1843, he moved to Rouen, where he completed his formal qualifications at the local college and subsequently established a successful career as the chief pharmacist at the General Hospital of Rouen. He became a prominent figure in the *Académie des Sciences*, *Belles-Lettres et Arts de Rouen*, specialising in the mycology and lichenology of the region. Malbranche was initially influenced by the antiquarian and naturalist A. Le Prévost (1787–1860), a notable figure from his native Bernay who maintained broader European scientific connections. More significantly, he formed close friendships with the pioneering French lichenologists D. F. Delise and R. Lenormand. His own active research into lichens developed relatively late in life, culminating in his definitive publication, *Catalogue des lichens de la Normandie* (1870–1871, with supplements in 1877). Between 1863 and 1882, he also prepared and distributed a well-regarded exsiccatae series of regional specimens titled *Lichenes Normanniae*. Through his mentorship of the young Abbé A.-M. Hue, Malbranche helped foster a new generation of French lichenologists who championed the taxonomic

system of W. Nylander. His herbarium was scattered in a sale, but some material is preserved in PC. Ref.: Husnot (1888); Niel (1889); Roumeguère (1888).



Malinowski, Edmund (1885–1979) – Born in Dobrzyń nad Wisłą, in the historic Dobrzyń Land of Poland (then part of the Russian Empire), he was the son of Maksymilian Miłguj, a prominent educator and peasant-movement activist who would later serve as a deputy and senator in the parliament of the Second Polish Republic. His mother, Teodora, belonged to the Malinowski family, an established clan of the Polish minor nobility. Following their marriage, the father legally changed his surname to Malinowski to align with her family's social standing and to facilitate his political and publishing career under a more recognizable Polish gentry name. Recognising his son's intellectual gifts, his father ensured he received an excellent education. After completing his primary education locally, Edmund was sent to Genève in 1905 to pursue botanical studies. He specialised in plant systematics and geobotany at the University of Genève's Institute of Botany under the guidance of the versatile Robert Hippolyte Chodat (1865–1934), who maintained a keen interest in the enigmatic nature of cryptogams, particularly lichens. Under Chodat's supervision, Malinowski earned his doctorate in 1909 with a taxonomic revision of the phanerogamic genus *Crucianella*. Upon returning to Poland in 1909, Malinowski was appointed assistant to Józef Rostafiński (1850–1928), a former pupil of Heinrich Anton de Bary, at the Jagiellonian University in Kraków. It was during this period that he initiated his foundational studies on lichens, a research direction likely inspired by his earlier student discussions with Chodat, which he continued during a subsequent tenure at the University of Lwów (now Lviv). From 1913, his academic trajectory shifted as he pursued advanced training in genetics and plant breeding, first at the *Hochschule für Bodenkultur* in Vienna and later at the John Innes Horticultural Institute in London. By 1915, his research focused exclusively on genetics; in 1920, he was appointed professor of plant breeding, and in 1927, he assumed the chair of genetics at the Warsaw University of Life Sciences (SGGW), abandoning lichenology entirely. Despite his brief involvement in the discipline, Malinowski's lichenological papers published between 1911 and 1912 remain highly significant. They offered pioneering insights into the biology and ecology of epilithic lichens, a field of study that the young Jagiellonian student Józef Motyka would famously expand upon in his 1926 doctoral thesis. In a seminal paper, Malinowski demonstrated how the characteristic mosaic patterns on rock surfaces develop as a direct consequence of the structural morphology and specific growth rates of lichen areolae, which was a groundbreaking ecological observation for its time. Furthermore, he meticulously documented the role and behaviour of the algal partners (then referred to as *gonidia*) within this developmental process. His herbarium is housed at KRA. Ref.: Barbacki (1960); Zemanek (1995).

Malme, Gustaf Oskar Andersson **(1864–1937)** – Born at Stora Malm (from which he legally adopted his surname in 1891), Södermanland, Sweden, he was the son of a crofter, whilst his mother's family was rooted in the traditional, hardworking peasant classes. He



commenced his botanical studies at Uppsala University in 1888, earning his doctorate in 1892 with an anatomical and taxonomic dissertation on the tropical phanerogamic family *Xyridaceae*, a research interest sparked by an advanced microscopy course. During his time as a student, however, he was already actively collecting and studying Swedish lichens under the mentorship of Th. M. Fries. Between 1892 and 1894, Malme participated in the First Regnellian Expedition to Brazil and Paraguay alongside Carl Axel Magnus Lindman (1856–1928). Struck by the extraordinary diversity of the tropical lichen flora, he amassed vast and scientifically invaluable collections. Upon his return, he was employed as an *amanuensis* (assistant curator) at the Regnellian Herbarium of the *Naturhistoriska Muséet* in Stockholm, a post he held until 1901, when he embarked on a second Regnellian collecting expedition to Brazil and Argentina. Following his return in 1903, he resumed his curatorial duties at the Regnellian Herbarium until 1905. His academic career took a turn when he was passed over for a professorship at the *Riksmuseum* in favour of Lindman; consequently, Malme accepted a position as a secondary school biology teacher in Stockholm. Although regarded by his pupils as a strict disciplinarian, he was widely respected and celebrated as a deeply inspiring instructor. Malme produced much of his most influential work on South American lichens during his spare time and, most productively, following his early retirement from teaching. His contributions to the taxonomy of Neotropical lichens are exceptionally comprehensive, detailed, and enduring, resulting in the description of hundreds of new taxa. He published the important *Lichenes Suecici Exsiccati* and initiated a major exsiccatae series of South American specimens; the latter project was continued after his death by Rolf Santesson and, much later, into the early 2000s by Anders Tehler and colleagues. The genus *Malmidea* Kalb is named in his honour. His collections are housed at S. Ref.: Arwidsson (1937); Franzén (1984); Krok (1925b); Marcelli & Seaward (1998).



Malpighi, Marcello (1628–1694) – Born in Crevalcore, near Bologna, Papal States (now Italy), into a wealthy family that ensured their gifted son received the finest available education, he enrolled at the University of Bologna in 1645. His initial studies were interrupted by family illnesses and the death of his parents, prompting a temporary return home where he immersed himself in peripatetic philosophy. Following the death of his influential paternal grandmother, he returned to the university, graduating with doctorates in both medicine and philosophy in 1653, after which he dedicated himself to the study of anatomy. It was in this field that he achieved international renown, making numerous seminal discoveries regarding human physiology and organs by pioneering the use of the early compound microscope. In 1656, Malpighi was appointed a lecturer at the University of Bologna, moving later that year to the University of Pisa as professor of theoretical medicine, and subsequently to the University of Messina in 1662. Exasperated by fierce academic disputes with traditionalist colleagues, he left Sicily in 1666 to return to Bologna, where he assumed the prestigious chair of prac-

tical medicine at the university, a position he held with great distinction for the next twenty-five years, whilst simultaneously conducting pioneering experiments in plant anatomy at his villa in Corticella. This research culminated in his monumental work, *Anatome Plantarum* (published in two parts in London, 1675 and 1679), under the auspices of the Royal Society, of which he had been elected a fellow in 1669. As one of the first naturalists to systematically apply microscopy to the natural sciences, Malpighi left a brief but notable mark on the pre-history of lichenology. In *Anatome Plantarum*, this remarkably sharp-eyed observer provided the earliest microscopic descriptions and detailed illustrations of the powdery propagules on lichen thalli (soredia). Interpreting these structures through the lens of higher plant anatomy, he hypothesised that they functioned as reproductive "gemmae" or buds. In 1691, towards the end of his life, he relocated to Rome upon being appointed *archiatrus pontificius* (chief physician) to Pope Innocent XII. He died in the Eternal City three years later. While he did not leave a formal herbarium, his invaluable original anatomical drawings, manuscripts, and correspondence were bequeathed to the Royal Society of London, with further papers preserved at the Bologna University Library. Ref.: Fabroni (1769); Malpighi (1897); Testa (1817).



Mameli-Calvino Giuliana Luigia Evelina **'Eva' (1886–1978)** – Born in Sassari, Sardinia, Italy, into an intellectual family, she graduated in mathematics from the University of Cagliari in 1905, followed by a degree in natural sciences from the University of Pavia in 1907. At Pavia, she joined the *Laboratorio Crittogamico Italiano* under the directorship of Giovanni Briosi (1846–1919). This highly specialised, research-intensive environment firmly shaped her lifelong interest in lower plants, micro-fungi, and lichens. In 1915, at the age of just 29, she secured her *libera docenza* (habilitation) in botany at the University of Pavia, shattering contemporary academic glass ceilings as the first woman in Italy to achieve this status in the discipline. Although frequently remembered by the wider public as the mother of the celebrated writer Italo Calvino (1923-1985), her true legacy resides in her rigorous contributions to plant physiology, phytopathology, and, during the formative phase of her career, lichenology. In her early years, she conducted meticulous regional floristic and taxonomic surveys across various provinces of Italy. However, she soon transitioned towards physiological chemistry. Between 1907 and 1920, she concentrated on the metabolic interactions between the mycobiont and the photobiont, applying rigorous biochemical methods. Her most innovative and widely debated contribution involved experimental work on nitrogen fixation in lichens. Through laboratory trials at Pavia, she controversially argued that not only cyanolichens but also certain green-algal lichens possessed the ability to fix atmospheric nitrogen directly. While her conclusions regarding chlorolichens were later disproven, her pioneering methodology brought international academic focus to lichen physiology. Her interpretation of cephalodia, which she considered a defence mechanism against a foreign invader, gave rise to a ferocious quarrel with Maria Cengia-Sambo, who rightly considered them a form of polysymbiosis. In 1920, she married the renowned agronomist Mario Calvino (1875–1951) and accompanied him to Cuba, where she assumed charge of the Department of Botany at the Santiago de las Vegas experimental station. There, she expanded her applied research into tropical

phytopathology, focusing on sugarcane and tobacco diseases, while continuously collecting the epiphytic lichens and micro-fungi of the neotropical forests. Upon returning to Italy in 1925, she briefly held the chair of botany at the University of Cagliari before settling in Sanremo on the Ligurian coast. At the newly established *Stazione Sperimentale di Floricoltura*, her output shifted towards ornamental plant genetics, acclimatisation, and early environmental conservation. Her herbarium is partly housed at PAV, partly at CAG. Ref.: Dröscher (2011); Macellari (2010, 2017); Pedrotti (2012).

Mann, Wenzeslaus (Wenzel) Blasius (latinised Wenceslaus Blasius) **(1799–1839)** – Born in Daschitz, Bohemia, then part of the Habsburg Monarchy (now Dašice, Czech Republic), he was the son of a physician. Following his primary education, he commenced his medical studies at Charles University in Prague, graduating with a doctorate in medicine in 1825. His doctoral dissertation, titled *Lichenum Bohemiae observatorum dispositio succinctaque descriptio*, represented the first comprehensive floristic treatment of the lichens of Bohemia and stood as the first purely lichenological publication within that region. In this landmark monograph, Mann catalogued and provided detailed morphological descriptions for 362 species. Academically, he belonged to the influential scientific circle revolving around the Presl brothers (Jan Svatopluk and Karel Bořivoj Presl), and in his dissertation, he formally expressed his gratitude to Philipp Maximilian Opiz and the German lichenologist Heinrich Gustav Flörke for their taxonomic assistance. Following graduation, Mann settled as a practicing physician in Reichstadt (now Zákupy) before his premature death at the age of forty in Česká Lípa cut short what promised to be a highly productive scientific career. Nonetheless, his foundational monograph catalysed a surge of intensive lichenological research throughout Bohemia in the subsequent decades. Though he authored only a small number of valid taxa during his short lifetime, his contribution to the field was widely recognised; notably, Opiz honoured him in 1829 by naming the liverwort genus *Mannia* after him. His private herbarium was sold after his death and is lost, but some duplicates are housed at PRC. Ref.: Maiwald (1901); Nádvorník (1946).



Marcelli, Marcelo Pinto **(1955–)** – Born in São Paulo, Brazil, into a family of Italian descent, he became the first in his lineage to pursue higher education, enrolling to study biology at the University of São Paulo in 1975. After specialising in botany, he was introduced to the study of cryptogams by the prominent phycologist Eurico Cabral de Oliveira Filho (1940–), through whom he met the British lichenologist Antony Fletcher, then a visiting post-doctoral researcher. Marcelli became captivated by the rich lichen vegetation of the São Paulo coastal mangroves. Although formally supervised in ecology by Marico Meguro, his definitive training in lichen taxonomy was guided by the German lichenologist Klaus Kalb, who had recently settled in Brazil as a teacher. Marcelli completed his undergraduate degree in 1978, followed by a Master's degree in 1984, and was awarded his doctorate (Ph.D.) in 1987 with a comprehensive dissertation on the lichen vegetation of mangroves and restingas, which was subsequently published as a monograph in 1992. After a brief period teaching biology in private secondary schools, he secured a permanent position as a scientific researcher at the *Instituto de Botânica de São Paulo*. He

remained at this state institution for the duration of his career, establishing a vibrant hub for Neotropical lichenology and mentoring a large generation of graduate students. Through his extensive fieldwork and institutional leadership, he single-handedly revived the discipline in Brazil, where very few native scientists had previously worked, earning him the informal title of 'the father of modern Brazilian lichenology' (though historically, the first major Brazilian lichen flora was authored by the Finnish specialist Edvard August Vainio). Following his retirement from public service due to health considerations, he established an independent research facility, the *Instituto Liquenologico Marcelli*, at his residence outside São Paulo, where he actively continues his taxonomic and ecological investigations. Throughout his career, Marcelli has discovered and described numerous new lichen taxa, particularly within the *Parmeliaceae*. Several lichen species were named in his honour. His herbarium is housed at SP. Ref.: *Pers. comm.*; Marcelli & Seaward (1998).



Martin, William (1886–1975) – Born in Fairfield on the outskirts of Dunedin, in the South Island of New Zealand, he grew up surrounded by a magnificent garden established by his grandfather, a pioneer horticulturist who had emigrated from Scotland. By the age of six, young William was already intimately acquainted with this extensive botanical collection. In 1911, he graduated with a BSc from the University of Otago, subsequently attending the Dunedin Teachers' Training College before embarking on a distinguished career in education. Alongside his professional teaching duties, he cultivated his botanical interests, becoming a leading authority on the flora of the Marlborough province. Upon his retirement from teaching in 1945, Martin donated his substantial herbarium of vascular plants to the National Herbarium of New Zealand (WELT) and began shifting his academic focus toward cryptogams, initially studying bryophytes. It was only after 1956, at the age of seventy, that he turned his attention seriously to collecting lichens. A pivotal moment in his late career was his interaction with a brilliant and enthusiastic young botanist, James Murray (1923–1961), who inspired him to pursue lichenology. The two frequently undertook challenging field excursions together, and Martin began specialising in the large, taxonomically difficult genus *Cladonia*. He sought the guidance of the prominent American botanist Alexander Evans, whose encouragement enabled Martin to publish a milestone account of the genus *Cladonia* in New Zealand in 1958. Following the tragic accidental death of Murray in 1961, Martin was left largely isolated as the sole active lichenologist residing in New Zealand. Despite this, he persevered, publishing the country's first comprehensive census catalogue of lichens. His most enduring and influential achievement, however, was the landmark book *Lichens of New Zealand* (1972), co-authored with John Child (1922–1984), whose rich colour photography illustrated the volume. This text inspired an entire generation of young naturalists, including David Galloway, to undertake detailed research into a group that, despite its extraordinary representation in the New Zealand ecosystems, had been largely neglected for nearly a century. Although he described several new subspecific taxa, Martin considered himself a floristic pioneer rather than a pure taxonomist His lichen herbarium is housed at OTA. Ref.: Galloway (1976).



Martius, Carl Friedrich **Philipp von (1794–1868)** – Born in Erlangen, Kingdom of Prussia (now Bayern, Germany), he was the son of Ernst Wilhelm Martius (1756–1849), the court apothecary (*Hofapotheker*), whilst his mother Susanna Johanna (née von Weinel) (1772-1856) was born into a noble family with substantial social prestige. Martius developed a keen passion for botany during his youth. In 1810, he commenced his medical and natural history studies at the University of Erlangen, where he was deeply influenced by the eminent botanist Johann Christian Daniel von Schreber (1739–1810). In 1814, after defending his doctoral thesis on the history of the Erlangen botanical garden, Martius relocated to München, where he became the assistant to Franz de Paula von Schrank (1747–1835) at the newly established Botanical Garden. In 1817, he published his first major floristic work, *Flora cryptogamica erlangensis*, which included detailed accounts of numerous regional lichens. Later that same year, Martius joined the historic Austrian-Bavarian scientific expedition to Brazil, an ambitious enterprise initiated under the patronage of King Maximilian I Joseph of Bayern. This arduous journey lasted until 1820, during which Martius amassed vast botanical collections in the species-rich Amazon basin. His research extended beyond botany; he conducted pioneering ethnographic and linguistic studies of the indigenous peoples he encountered. In 1826, he was appointed professor of botany at the University of München, and from 1832, he also served as the director of the Botanical Garden. Martius achieved international renown as the 'Father of Palms' (*Vater der Palmen*) due to his monumental monograph *Historia naturalis palmarum*. However, his most enduring scientific legacy is the colossal *Flora Brasiliensis*, published in 15 volumes subdivided into 40 distinct parts, many issued posthumously. While Christian Gottfried Daniel Nees von Esenbeck contributed to early cryptogamic treatments, the definitive account of Brazilian lichens for this project was later elaborated by the Swiss specialist Johannes Müller Argoviensis. Martius also issued an exquisitely illustrated volume on Brazilian cryptogams, *Icones plantarum cryptogamicarum Brasiliensium* (1828–1834). His enduring interest in lichenology is evidenced by a published letter (1853) in which he expressed strong methodological reservations regarding the revolutionary anatomical approach and terminology introduced by Julius Friedrich Wallroth. His lichen herbarium is housed at M, though lichens are reported to be at AWH and BR by Laundon (1979). Ref.: Eichler (1869); Mägdefrau (1966, 1990); Meissner (1869); Wunschmann (1884).



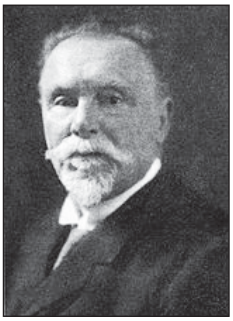
Massalongo, Abramo Bartolomeo **(1824–1860)** – Born in Tregnago, near Verona, Regno Lombardo-Veneto (now Veneto, Italy), to Bortolo**,** a business broker and a rather wealthy landowner, and Teresa Milani, coming from a well-established local family. In 1826, just two years after Abramo's birth, the father bought a secondary home in Verona (on Via Paradiso), which allowed the five children to split their time between the countryside and the city to receive a high-level education. Abramo demonstrated an innate passion for natural history from his childhood, initially enrolling to study medicine at the University of Padova, but an

inability to endure the physical and emotional toll of surgical dissections, combined with his own fragile health and to pressure from his father, prompted him to switch to jurisprudence. He graduated with a doctorate in law in 1850 but never practised the profession. Instead, he spent his student years frequenting the Botanical Garden of Padova, where he formed a close friendship with the director, Roberto Visiani (1800–1878), who was then championing the modernisation of Italian botany. In Padova, he also met Vittore Trevisan, who introduced him to Giuseppe De Notaris's revolutionary concept of utilising spore morphology for the generic classification of cryptogams, a methodology Massalongo adopted with extraordinary vigour. Following a brief tenure as a tutor in Padova, Massalongo returned to Verona in 1851 to teach natural history at the local gymnasium. He quickly became a dynamic and central figure in the *Società dell'Ibis*, a prominent local scientific and literary circle, frequently publishing geological and palaeobotanical papers under the pseudonym *'Reivas'*. He initiated groundbreaking studies into Tertiary fossil flora, making immense contributions to the palaeobotany of the famous Monte Bolca deposits. Simultaneously, he fervently collected and studied extant lichens using a high-quality achromatic microscope designed by Giovanni Battista Amici (1786–1863). Between 1852 and 1860, Massalongo published approximately forty pioneering lichenological treatises, which fundamentally restructured lichen taxonomy by placing microscopic structures, chiefly ascospore ontogeny, colour, and septation, at the core of generic definitions. His most celebrated work, *Ricerche sull'autonomia dei licheni crostosi* (1852), remains a cornerstone of historical cryptogamic literature. His concurrent *Synopsis Lichenum Blasteniosporum* (1852) represented a brilliant, early attempt to classify species with polarilocular spores into natural, phylogenetically related groups. Though many of his proposed genera were ignored or suppressed during the late nineteenth century in favour of artificial macromorphological groupings, modern molecular systematics has vindicated his vision, resurrecting many of his names. Massalongo described over 100 new genera, a remarkable number of which are widely accepted today, such as *Acarospora*, *Acrocordia*, *Arthopyrenia*, *Aspicilia*, *Bactrospora*, *Bagliettoa*, *Blastenia*, *Candelaria*, *Catillaria*, *Cryptolechia*, *Dacampia*, *Diploicia*, *Encephalographa*, *Gyalolechia*, *Haematomma*, *Heppia*, *Koerberia*, *Lecania*, *Loxospora*, *Menegazzia*, *Ochrolechia*, *Pachnolepia*, *Parmotrema*, *Piccolia*, *Placidium*, *Polyblastia*, *Psilolechia*, *Psorotichia*, *Pyrenodesmia*, *Pyrenula*, *Ropalospora*, *Scoliciosporum*, *Solenopsora*, *Sporastatia*, *Thalloidima*, *Thelidium*, *Thelomma*, *Toninia*, *Thyrea*, and *Xanthocarpia*. Together with his close Prussian correspondent Gustav Wilhelm Körber, he established what was called the highly influential *Italian-Silesian school* of lichenology. Despite his premature death from tuberculosis at the age of thirty-six, Massalongo is revered as a founding father of modern microscopic lichenology. He also issued *Lichenes Italici Exsiccati* (1855–1856). Massalongo often signed his name using the initials "D. A. B. P. M." (*Dottore Abramo Bartolomeo Professore Massalongo*). The genus *Massalongia* Körb., alongside several species, is named in his honour. His herbarium is housed at VER. Ref.: Alippi Cappelletti (2008); Arnold (1900a); Nimis (1988, 1993, 2018); Poelt (1991); Visiani (1861).

Mattick, Wilhelm **Fritz (1901–1984)** – Born in Dresden, Sachsen, Germany, he was educated at a teacher training seminar in his native city between 1914 and 1921, subsequently teaching at local primary schools until 1926. From 1924, whilst continuing his



schoolteaching duties, he commenced advanced studies in natural history at the *Technische Hochschule Dresden* under Friedrich Tobler. He earned his doctorate in 1927 with a phytosociological dissertation focused on the vegetation of the Moritzburg pond district (*Moritzburger Teichgebiet*), expanding his early research into extensive studies on the *Cladoniaceae*. In 1932, Mattick accepted a position as a research assistant at the Botanical Garden and Museum Berlin-Dahlem, initially assigned to plant geographical mapping projects under the directorship of Professor Ludwig Diels (1874–1945). His academic career was disrupted between 1941 and 1945 by military service during the Second World War, when he was stationed with the German army in occupied Norway. Immediately following the war, he collaborated briefly with the phytosociologist Reinhold Tüxen (1899–1980) on a regional biogeographical survey. After undergoing formal denazification protocols, Mattick returned to Berlin-Dahlem in 1947, where he was officially appointed senior curator (*Oberkustos*) of cryptogams. He faced the monumental task of rebuilding the world-renowned collection entirely from scratch following its near-total destruction during an Allied bombing raid in March 1943. During this post-war period of reconstruction, Mattick meticulously edited and brought to completion Alexander Zahlbruckner's extensive, posthumous manuscript on the lichens of Java (published in 1947). He was awarded an honorary professorship in plant geography at the Free University of Berlin in 1958. Although he published a relatively modest number of standalone taxonomic papers, his contribution to the infrastructure of international cryptogamic botany was immense. He co-founded the prestigious international journal *Nova Hedwigia* in 1959 alongside Johannes Gerloff (1915–2000). Furthermore, he spent decades compiling a comprehensive global index of lichenological literature published after the historical bibliographies of Krempelhuber. This monumental index was later modernised and published online by Harrie Sipman as *Mattick's Literature Index* under the auspices of the Berlin Herbarium. Because his entire pre-war personal collections and research files perished in the Berlin bombings, his surviving herbarium, preserved at B, consists exclusively of specimens gathered after 1945. Ref.: Gerloff (1984); Kärnefelt & al. (2012); Sipman (1984).



Mattirolo, Oreste (1856–1947) – Born in Torino, Kingdom of Sardinia (now Piemonte, Italy), he enrolled at the local University in 1872, initially studying natural sciences under Giovanni Battista Delponte (1922–1984) and graduating in 1876. Pursuing the contemporary custom for aspiring botanists, he continued his academic training at the same institution, earning a degree in medicine and surgery in 1879. During his student years, he developed a close intellectual relationship with the physician and anatomist Giacomo Gibelli (1832–1898), a passionate field botanist who steered Mattirolo's interests towards cryptogams and Alpine flora. To advance his botanical expertise, Mattirolo relocated to the University of Strasbourg, studying from late 1879 under the supervision of Heinrich Anton de Bary. It was during his tenure in Strasbourg that Mattirolo made a monumental discov-

ery that guaranteed his place in the history of science. Investigating the tropical thallophyte *Cora pavonia*, he published a seminal paper in 1881 (*Contribuzioni allo studio del genere Cora Fr.*) demonstrating for the first time that the fungal partner belonged to the *Basidiomycota* rather than the *Ascomycota*. He is thus celebrated as the discoverer of basidiolichens, providing crucial experimental evidence to support the then-controversial theory of lichen symbiosis. Upon returning to Italy, he published another landmark paper in 1887, presenting the first definitive evidence of truffle mycorrhizae established with higher plants. In 1893, Mattirolo won the Chair of Botany at the University of Bologna, where he also directed the botanical gardens from 1895. Following a brief transfer to the University of Firenze in 1898, he returned triumphantly to his *alma mater* in 1899, as Full Professor of Botany and director of the local Botanical Garden, a position he held until his retirement. Although he did not accompany the expedition physically, Mattirolo was entrusted with the scientific study of the botanical material recovered from the historic Arctic expedition of the ship *Stella Polare* (1899–1900), commanded by Prince Luigi Amedeo, Duke of the Abruzzi. He published his comprehensive findings in a major 1903 report titled *Le raccolte botaniche della Stella Polare*. His enduring fascination with the structural adaptations of lichens also led to a highly original, pioneering study in biodeterioration, *I licheni e la malattia delle vetrate antiche* (1928), which explored how lichen acids damage historic stained-glass windows. His herbarium is housed at TO. Ref.: Negri (1947).

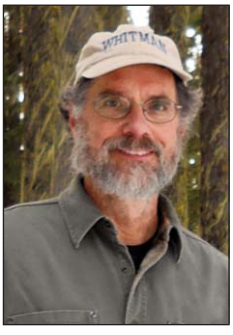


Mayrhofer, Helmut (1953–) – Born in the small rural village of Aich, near the winter sports hub of Schladming, Styria (Steiermark), Austria, he was the son of a gamekeeper and a small-scale farmer. After completing his primary education locally, he undertook an apprenticeship as a logger in the forestry sector before relocating to Graz, where he completed his secondary education. As a high school student, he developed a passionate interest in entomology, specifically beetles, which subsequently led him to study natural sciences and biology at the University of Graz. There, he came under the deeply transformative influence of the charismatic lichenologist Josef Poelt. Although this mentorship initially steered his interest towards bryophytes, Mayrhofer ultimately graduated with his Master's degree in 1976 with a study exploring the lichen biota of the subalpine *Rhododendron ferrugineum* shrublands in his home valley Kleinsölk, Central Eastern Alps. Following graduation, he worked briefly as a high school teacher at the *Stiftsgymnasium Admont*. He returned to the University of Graz as a scientific assistant at the former Institute of Systematic Botany, while concurrently pursuing his advanced post-graduate research. He was awarded his doctoral degree (PhD) for a monumental taxonomic dissertation focused on the Old World saxicolous species of the genera *Rinodina* and *Rinodinella*. He subsequently became a world-renowned authority on the family *Physciaceae*, contributing to comprehensive revisions of *Rinodina* and allied groups on a global scale. Following his habilitation in 1988, Mayrhofer was appointed assistant professor at the University of Graz, later rising to associate professor and serving for many years as the head of the Institute of Plant Sciences. Throughout his prolific career,

he has mentored a large generation of international graduate students and described many new lichen taxa. Notably, he co-described the genus *Amandinea* (with Ch. Scheidegger) and the genus *Hafellia* (with K. Kalb). Now retired professor, he remains highly active in floristic research, particularly focusing on the lichen diversity of the Alps and the Balkan Peninsula. His herbarium is housed at GZU. Ref.: *Pers. comm*.; Bilovitz & al. (2018).



McCarthy, Patrick ('Pat') Martin **(1955–)** – Born in Cork, Ireland, he completed his basic local education before studying natural sciences between 1971 and 1975 at University College Cork, where he majored in botany. In 1975, he became a pioneer volunteer biologist at the newly established Sherkin Island Marine Station in County Cork, an immersive coastal environment that firmly sparked his scientific fascination with intertidal cryptogamic communities. This field research culminated in 1981, when he was awarded his doctorate (PhD) for a thesis exploring the saxicolous marine lichen communities of south-west Ireland. His work advanced the classical littoral surveys initiated by Matilda Cullen Knowles during the landmark Clare Island Survey, which had been subsequently expanded by Lillian Porter (1885–1973). During his post-doctoral tenure at University College Galway, McCarthy turned his attention to island floristics, culminating in a major 1988 publication on the lichen flora of the Aran Islands, co-authored with his mentor, Michael E. Mitchell. In 1989, McCarthy relocated to Australia to accept a curatorial post at the National Herbarium of Victoria in Melbourne, effectively succeeding Rex Filson. Leveraging his deep expertise in the maritime shores of western Europe, he initiated an intensive taxonomic investigation into the poorly understood, overlooked pyrenocarpous lichens of the Southern Hemisphere, massively expanding the known diversity of these and other crustose microlichens across the Australasian region. His academic trajectory subsequently led him to Canberra, where he assumed a central role at the Australian Biological Resources Study. McCarthy served as the principal Editor for the monumental lichen, bryophyte, and pteridophyte volumes of the *Flora of Australia* series, while personally authoring numerous critical generic treatments (such as *Verrucaria*). He also compiled and published the definitive modern checklists and bibliographies of Australian macro- and microlichens, as well as hornworts and liverworts. Throughout his prolific career, he has described hundreds of new taxa. His herbarium is housed at MEL. Ref.*: Pers. comm.*



McCune, Bruce Petite **(1952–)** – Born in Cincinnati, Ohio, USA, where his father worked as an industrial inorganic chemist whilst his mother, Virginia, was celebrated for her intense competitive spark, academic enthusiasm, and a lifelong passion for sports and strategic games. Bruce completed his primary education locally before entering Lawrence University in Appleton, Wisconsin. He later transferred to the University of Montana, Missoula, where between 1971 and 1974 he gained valuable field experience working part-time for the Bureau of Land Management, subsequently graduating in 1974 with a Bachelor of

Science degree in botany. During his time in Missoula, he became deeply fascinated by the bryophyte and lichen epiphytes thriving in the montane forests immediately adjacent to the campus; this fieldwork culminated in 1979 with the completion of his Master's degree focusing on forest stand dynamics and community ecology. During this formative period, he attended a highly influential lichen workshop led by Mason Hale, which firmly solidified his taxonomic trajectory. Seeking to merge his passions for forest ecology and cryptogamic botany, McCune pursued his doctoral studies at the University of Wisconsin-Madison, immersing himself in a vibrant scientific circle influenced by the veteran lichenologist John Walter Thomson. Under the academic supervision of Timothy F. H. Allen (1942–2025), McCune was awarded his doctorate (PhD) in plant ecology in 1982. Shortly thereafter, he became associated with Oregon State University (OSU) in Corvallis, where he rose through the academic ranks to be appointed Full Professor of Botany in 1993. In addition to his numerous papers on temperate forest vegetation dynamics, McCune is widely celebrated for his expertise in the family *Parmeliaceae*, particularly through his extensive taxonomic revisions of the genus *Hypogymnia* across North America and Asia. An avid field collector, he co-authored several benchmark regional field manuals, including *Macrolichens of the Pacific Northwest* and *Microlichens of the Pacific Northwest*. Beyond taxonomic descriptions, his most profound methodological impact on global ecology was his development of PC-ORD, a premier multivariate statistical software package designed for analysing complex ecological community datasets. Now a Professor Emeritus, he actively continues his cryptogamic research. He was awarded the Acharius Medal by IAL in 2016. The genus Bruceomyces Rikkinen is named after him. His herbarium is housed at OSC. Ref.: *Pers. comm.*



Menzies, Archibald (1754–1842) – Born at Easter Stix (or Styx) House, near Aberfeldy, Perthshire, Scotland, UK, he attended the local Weem parish school before gaining employment in the gardens of Castle Menzies, the seat of the clan chief Sir Robert Menzies. It was in this practical horticultural setting, where his father, James, served as the head gardener, that his innate interest in botany was first kindled. Seeking further advancement, he relocated to Edinburgh to work alongside his brother, William, at the Royal Botanic Garden Edinburgh. There, his exceptional botanical aptitude was discovered by John Hope (1725–1786), the Regius Professor of Botany, who took the young man under his wing, introduced him to Sir Joseph Banks (1743–1820), and strongly encouraged him to pursue medical training. After qualifying as a surgeon at the University of Edinburgh, Menzies practised medicine briefly in Caernarvon, Wales. In 1782, he joined the Royal Navy, securing a commission as an assistant surgeon aboard HMS *Nonsuch* and later HMS *Assistance* on the Halifax station in Canada. Whenever stationed ashore, he utilised his leisure time to conduct rigorous floristic surveys, collecting numerous cryptogams. He was appointed ship's surgeon aboard the *Prince of Wales* on a commercial fur-trading voyage that rounded Cape Horn to the Pacific Northwest of North America, reaching as far north as Nootka Sound. Along this pioneering route, he amassed an extensive collection of plants, seeds, and lichens, many of which were subsequently

described by contemporary European taxonomists, including Erik Acharius. Menzies returned to Britain in 1789 and was elected a Fellow of the Linnean Society in 1790. That same year, upon the personal recommendation of Sir Joseph Banks, he was appointed naturalist to accompany Captain George Vancouver (1757–1798) on his historic voyage of circumnavigation aboard HMS *Discovery* (1791–1795). During this epic expedition, Menzies also assumed the responsibilities of ship's surgeon when the presiding medical officer fell ill. He made important botanical discoveries across the Pacific, particularly along the coast of California, the Pacific Northwest, and Hawaii. His immense contribution to science is commemorated by numerous taxa named in his honour, including the spectacular, pendulous lace lichen, *Ramalina menziesii*, which characterises the coastal woodlands of western North America. Following a subsequent naval tour as a surgeon in the West Indies, Menzies retired from active service and established a highly successful private medical practice in London. In 1799, his scientific achievements were recognised with an honorary MD degree from Marischal College, Aberdeen. His profound importance to the history of lichenology lies in his intrepid, pioneering field collections in geographically remote and exotic regions, which greatly expanded the understanding of global cryptogamic diversity. His herbarium is housed at E, with additional material at BM, H, LINN. Ref.: Galloway (1995); Galloway & Groves (1987); Goring (1992).

Mérat de Vaumartoise, François Victor **(1780–1851)** – Born in Paris, France, into a noble family originating from Auxerre, Burgundy, he spent much of his youth in the Auxerrois region where his grandfather, Laurent Germain, had been a respected pharmacist and amateur botanist. Driven by parental expectations to follow this lineage, he was placed as an apprentice at the Paris pharmacy of Louis Nachet (1757–1832). In 1799, he officially commenced his medical studies in Paris, while pursuing advanced botanical instruction under the celebrated anatomist Louis-Claude Richard (1754–1821). This period allowed him to embed himself within a vibrant circle of emerging French naturalists. Mérat was awarded his doctorate in medicine in 1803 and was subsequently appointed to the staff of *L'Hôpital de la Charité*, where he served until 1812, developing into a prominent pathological anatomist. In 1812, he was appointed to the imperial household as a physician for the *Infirmerie de la maison civile de l'Empereur*. Alongside prominent cryptogamists such as Christian Nestler and Jean-Baptiste Mougeot, he botanised extensively throughout the Île-de-France countryside. This field research culminated in his landmark 1812 publication, *Nouvelle Flore des environs de Paris*, an influential manual based on the natural system of classification that treated regional cryptogams in rigorous detail. In the 1821 second edition of this work he described the lichen genus *Lasallia*. His herbarium is housed at BR, G, PC. Ref.: Dayrat (2003b); Langlois (1854).

Merezhkowski, Konstantin Sergeievich **(1855–1921)** – Born in St Petersburg, Russian Empire (now Russia), he was the son of a high-ranking tsarist bureaucrat and privy councillor, and the elder brother of the prominent Silver Age novelist and thinker Dmitry Merezhkovsky. His gentle and artistic mother, Varvara Vasilyevna was the daughter of Vasily Chesnokov, a highly powerful imperial official who served as the Director of the Office of the St. Petersburg Chief of Police. Konstantin studied biology and zoology at the University of St Petersburg under Nikolai P. Wagner (1829–1907), graduating in 1880. A



man of volatile temperament and complex personal life, he temporarily emigrated to the United States in 1898, abandoning his family in Crimea and working under the assumed name William Adler in Los Angeles and at the University of California, Berkeley, where he advanced a novel system for classifying Black Sea diatoms based on internal structures. Upon returning to Russia in 1902, he was appointed curator of the zoological collections at the University of Kazan, rising to the position of professor and director of the botanical laboratory in 1908. It was during this Kazan tenure that he formulated his most revolutionary contribution to science. Expanding upon Andreas Schimper's earlier observations, Merezhkowski formally coined the term and conceptualised the theory of symbiogenesis in a landmark 1905 paper, proposing that eukaryotic cells evolved via symbiotic associations of simpler, prokaryotic organisms. This theoretical framework drew heavily from pioneering laboratory work conducted in St Petersburg by Andrei Famintsyn (1835–1918) and Osip Baranetsky (1843–1905), who had successfully isolated lichen photobionts from *Xanthoria parietina*. Though initially rejected by contemporary Darwinists and fiercely criticised by Russia's leading lichenologist, Alexander Elenkin, with whom Merezhkowski maintained a bitter, lifelong mutual animosity, the endosymbiotic theory was comprehensively vindicated decades later by Lynn Margulis (1938–2011). Alongside his theoretical evolutionary treatises and microalgal studies, Merezhkowski collected lichens extensively across Kazan and the Russian steppes from 1904 onwards, developing a particular expertise in vagrant (nomadic) lichen ecomorphs. In 1913, he published the *Lichenes Rossiae Exsiccati*. His academic and political career, marked by his authorship of utopian novels and his involvement in extreme right-wing, ultranationalist movements, collapsed spectacularly in 1914 when he was exposed and prosecuted for the systemic sexual abuse of dozens of young girls. Fleeing criminal charges, he escaped into exile in Switzerland, adopting the alias Kuno Mower in Genève. Despite living in extreme penury, he secured permission to revise the historical lichen collections housed within the Delessert Herbarium in Genève. Although offered a formal post as a herbarium assistant, his deteriorating mental state and acute financial distress led him to commit suicide via asphyxiation in a Genève hotel room in 1921. During his late Swiss period, he managed to distribute a final exsiccatae series compiled from the lakes of the Italian-Swiss border. He described several new taxa. His herbarium is housed at G and KAZ. Ref.: Cavillier (1940); Sapp & al. (2002).



Merrill, Elmer Drew **(1876–1956)** – Born in East Auburn, Maine, USA, the youngest of six children born to Daniel C. and Mary (Noyes) Merrill, he showed an early interest in natural history, collecting and identifying plants, birds' eggs, rocks, and minerals. Upon entering the Maine State College in 1894, he initially chose to study engineering, following his father's profession, but soon transitioned to the natural sciences. He specialised in biology and embryology, graduating with a Bachelor of Science in 1898. He remained at the institution as an assistant in natural history,

during which time he made notable early collections, including discovering the lichen genus *Thamnolia* in Maine. In 1899, he accepted a post with the U.S. Department of Agriculture in Washington, D.C., serving as an assistant to the prominent agrostologist Frank Lamson-Scribner (1851–1938). Merrill rapidly ascended through the ranks of American botanical administration, later holding some of the most prestigious positions in the country, including director of the Arnold Arboretum and administrator of the botanical collections at Harvard University. Academically, his monumental contributions focused almost exclusively on the vascular flora of East Asia and Malesia. In 1902, he was appointed botanist to the Insular Bureau of Agriculture in Manila, Philippines, with the task of establishing a national herbarium from scratch. Over the next two decades, Merrill organised a massive network of local collectors, launching an unprecedented survey that amassed hundreds of thousands of plant and cryptogamic specimens. While Merrill did not describe any lichen taxa himself, his profound contribution to lichenology lies in this heroic curatorial effort. He forwarded these extensive, meticulously prepared Philippine lichen collections to the pre-eminent Finnish lichenologist Edvard August Vainio, who utilised Merrill's material to publish a masterly treatment of the Philippine lichen flora. Many plant genera were named after him. Tragically, the main body of Merrill's original Philippine collections and types housed at the Bureau of Science in Manila was entirely destroyed by fire in 1945 during the Battle of Manila. Consequently, the duplicate sets he had distributed to European specialists before the war became priceless historical assets; his primary Philippine lichen collections are thus now at TUR, with further material at A/GH and NY. Ref.: Robbins (1958).



Merrill, George Knox **(1864–1927)** – Born in Lewiston, Maine, USA, to John Merrill (a farmer) and Jane Prescott. Following his father's death, he relocated with his mother to Boston, Massachusetts, where he completed his public school education. He subsequently entered Harvard University, and although he did not complete a formal degree, he attended advanced cryptogamic lectures delivered by the eminent mycologist William Gilson Farlow (1844–1919). From his youth, Merrill harboured a passion for journalism, contributing regularly to the *Beverly Citizen*. He maintained this career path after returning to Maine, working as a journalist in Westbrook while concurrently cultivating a deep expertise in painting and natural history photography. In 1919, he established a commercial photography and art studio in Rockland, Maine, where he resided and worked for the remainder of his life. Merrill's serious dedication to lichenology began shortly after 1900, culminating in his first scientific paper on *Cladonia verticillata* in 1905. He joined the Sullivant Moss Society (later the American Bryological and Lichenological Society) in 1903, establishing a strong professional network. In 1905, he succeeded Carolyn Harris as the formal curator of the society's extensive lichen herbarium and was soon elected vice-president of the organisation. Beyond his thorough floristic evaluations of eastern North America, Merrill developed an international reputation as a leading lichen taxonomist, regularly revising challenging material from across the continent, including Arctic Canada, Vancouver Island, and even tropical collections from Java and Peru. Methodologically,

Merrill was an early proponent of utilising microchemical reagents, such as potassium hydroxide and iodine solutions, to facilitate accurate species identification. Conversely, his theoretical views on the structural biology of lichens remained distinctly conservative; he rejected contemporary models of mutualistic symbiosis, viewing lichens as distinct autonomous plants and arguing that their apothecia were merely parasitic fungal infections. Though he never circumscribed a new genus, he described over a hundred new species, varieties, and forms, primarily within the *Cladoniaceae*, drawing occasional academic criticism for publishing new taxa too hastily. Between 1909 and 1927, he prepared and distributed two distinct exsiccatae series totaling more than 400 specimens, titled *Lichenes Exsiccati*, and provided vital taxonomical assistance to John Macoun's Canadian exsiccatae projects. His herbarium is housed at FH. Ref.: Brodo (2000); Plitt (1928).



Meyen, Franz **Julius** Ferdinand **(1804–1840)** – Born in Tilsit, Kingdom of Prussia (now Sovetsk, Kaliningrad Oblast, Russia), he trained as a pharmacy apprentice in Memel in 1819 before relocating to Berlin to attend the prestigious *Joachimsthalsches Gymnasium*. Between 1822 and 1826, he studied medicine at the University of Berlin. Upon earning his medical doctorate, Meyen served as a military surgeon stationed in Berlin, Köln, and Bonn. In 1830, on the personal recommendation of Alexander von Humboldt (1769–1859), he was appointed ship's physician and naturalist aboard the merchant vessel *Prinzess Louise* during its historic circumnavigation of the globe (1830–1832). This expedition allowed Meyen to amass major cryptogamic collections across South America, Hawaii, and South-East Asia. In the extensive botanical reports stemming from this voyage, published posthumously in 1843 in collaboration with Julius von Flotow, several new lichen taxa were established, most notably circumscribing the genus *Megalospora*. Following his return, his botanical output shifted broadly towards phytogeography and plant physiology; in 1834, he was appointed Extraordinary Professor of Botany at the University of Berlin. During his brief academic tenure, he emerged as a frontline pioneer in plant histology and cytology, conducting advanced microscopic investigations into cell division and plant anatomy that directly anticipated and influenced the cell theories of his contemporaries Matthias Jakob Schleiden 1804–1882) and Theodor Schwann (1810–1882). These breakthrough observations were compiled in his monumental three-volume treatise, *Neues System der Pflanzen-Physiologie* (1837–1839). His herbarium was housed at B, but was destroyed in the Second World War, though some surviving samples are at KIEL. Ref.: Querner (1974); Ratzeburg (1843); Wunschmann (1885).

Meyer, Georg Friedrich **Wilhelm (1782–1856)** – Born in Hannover, Electorate of Brunswick-Lüneburg (now Niedersachsen, Germany), he studied natural sciences and forestry in Göttingen from 1802 to 1803, and from 1805 onwards in Dillingen. In 1806, he became a civil servant occupied with mountains and forests for Hannover, and from 1808 onwards he served as a forest inspector in Paderborn. In 1813, he was appointed *Regierungsrat* for Prussia and director of forestry for Paderborn, Corvey, and Höxter. He returned to his studies in Göttingen in 1814 and was awarded his doctorate in 1818. In



1820, he became the physical geographer for the Kingdom of Hannover, and in 1832 he was named Court Councillor and Full Professor of Forestry in Göttingen. Meyer is widely recognised for his regional flora, *Flora des Königreichs Hannover* (Flora of the Kingdom of Hanover), which documents a substantial number of regional cryptogams. However, his most profound methodological and conceptual impact on lichenology occurred in his 1825 treatise, *Nebenstunden meiner Beschäftigungen im Gebiete der Pflanzenkunde*, where he became the first scientist to introduce and define the term *isidium* in its modern morphological sense to describe vegetative lichen propagules. In the same work, he pioneered early models of lichen structural biology, interpreting their diverse morphological life stages through theories of plant metamorphosis and spontaneous generation. He also published extensively on plant geography, contributing significantly to the understanding of vegetation patterns across northern Germany. Although not primarily a lichenologist, his floristic treatments served as vital resources for subsequent workers. His herbarium is housed at GOET. Ref.: Henke (2001); Kärnefelt & al. (2012); Wagenitz (2009).



Michaux, André (1746–1802) – Born at the Ferme de Satory, a royal estate near Versailles, France, which had been managed by his family for generations, he was consequently trained in agriculture. Following the death of his wife in 1770 during the birth of their son, he immersed himself in the natural sciences and had the good fortune to become a student of the eminent botanist Antoine-Laurent de Jussieu (1748–1836) from 1779. In 1782, he was sent on a botanical mission to Persia, officially designated as secretary to the French consul. This expedition was such a success that Louis XVI appointed him botanist under the Director-General of the *Bâtiments du Roi*. In 1785, he was dispatched to North America to investigate useful plants. Accompanied by his son, François André (1770–1855), he travelled extensively across a large portion of the continent over the course of a decade. From these explorations, he compiled material for several works, the most significant being the two-volume *Flora Boreali-Americana* (published posthumously in 1803), which includes a treatment of lichens and descriptions of several new North American species. He thus became a pioneer of North American botany, though during his American sojourn in 1793, he was also famously entangled as a secret agent for the French Republic in a geopolitical conspiracy. By 1796, the upheaval of the French Revolution had stripped him of royal funding, forcing his return to France. In 1800, he joined the expedition of Nicolas Baudin (1754–1803) bound for Australia, but he left the vessel at Mauritius following a dispute with the captain. He eventually made his way to Madagascar, where he succumbed to a tropical fever. His herbarium is housed at PC. Ref.: Deleuze (1804); Duvau (1843); Hoefer (1861).

Micheli(us), Pier Antonio (1679–1737) – Born in Firenze, Grand Duchy of Toscana (now Italy), into a poor working-class family, he demonstrated a passion for botany from childhood, independently studying the historical flora of Pietro Andrea Mattioli and regu-



larly visiting the *Giardino dei Semplici* in his native city. He befriended several learned monks possessing extensive botanical expertise, the most influential being Don Bruno Tozzi (1656–1743) of the Vallombrosan Order, who granted him access to the monastery's fine library. The monastery's abbot, Virgilio Falugi (c.1656–1707), had authored *Prosopopeiae Botanicae*, which evaluated Joseph Pitton de Tournefort's system, a methodology Micheli found superior. Although he never met Tournefort, Micheli corresponded with elite European botanists, including Antoine de Jussieu and Sébastien Vaillant. In collaboration with the Florentine artist Tommaso Chellini (1672 –1742), he produced the richly illustrated 1699 manuscript *Libro di funghi*, which beautifully documented his growing interest in mycology. Despite his monastic associations, Micheli remained a layman, supporting his family through his botanical work. In 1706, he was appointed botanist to the Grand Duke of Tuscany, Cosimo III (1642–1723), and later became the director of the botanical garden he had frequented as a child. His magnum opus, *Nova Plantarum Genera juxta Tournefortii Methodum Disposita* (1729), was a masterpiece far ahead of its time. Being a pre-Linnaean work, it is not recognised in modern nomenclature, yet its historical importance is indisputable. Utilising advanced microscopy from around 1718, Micheli became the first scientist to use spores and reproductive structures systematically in fungal taxonomy. He arranged fungi and lichens into distinct genera, designed analytical keys, and proved through controlled cultivation experiments that spores were essential for reproduction. His beautiful herbarium in bound volumes is housed at FI. Ref.: Jørgensen & Nimis (2019); Negri (1938); Nimis (2016); Targioni-Tozzetti (1858).



Mies, Bruno Adolf **(1958–)** – Born in Köln (Cologne), Nordrhein-Westfalen, Germany, he was the son of a prison officer, and both parents were of rural origin from the Eifel Mountains, where Mies first became fascinated by the natural environment. When he began his studies at the University of Göttingen in 1978, it was a natural choice for him to read botany and zoology. Inspired by influential teachers such as Heinz Ellenberg (1913–1997) and Fritz Overbeck (1898–1983), he majored in botany. During the 1980s, he travelled extensively and developed a strong affinity for the Cape Verde Islands off West Africa. Around this time, Gerhard Follmann arrived as a professor in Köln, and the two established contact. It was agreed that Mies would complete his postgraduate studies on the lichens of Cape Verde. He produced the first in-depth study of the archipelago's lichen flora and defended his doctoral thesis in 1989. He subsequently worked as an assistant to Rainer Lösch (1944–) in the Department of Geobotany at the University of Düsseldorf. He later extended his lichenological research to the island of Socotra (Yemen), eventually publishing a comprehensive checklist of its known lichens with D.G. Brown in 2014. He described several new lichens from these regions. Mies completed his *Habilitation* at the University of Duisburg-Essen under the supervision of Benno Feige and Thorsten Lumbsch, later working as a researcher on various projects before becoming a

high school teacher in 2004. He has described a number of taxa, most notably circumscribing the genus *Feigeana* (with H.T. Lumbsch and A. Tehler). His herbarium is housed at FR and M. Ref.*: Pers. comm.*



Migula, Emil Friedrich August **Walther (1863–1938)** – Born in Żyrowa, Silesia, Kingdom of Prussia (now Poland), he studied at the University of Breslau, earning his doctorate in botany in 1888 with a thesis on algal cells. From 1893, he served as an Extraordinary Professor at the Karlsruhe Institute of Technology, where he also worked within the bacteriology department of the Food Research Institute. In 1904, he moved to the *Forstlehranstalt* in Eisenach, which was elevated to a *Forstakademie* the following year, at which point he was appointed Ordinary Professor. Although primarily a bacteriologist, famed for describing the genus *Pseudomonas* and authoring a definitive handbook on bacteria (1900), Migula possessed a broad interest in cryptogams. This passion culminated in his text for the lichen volumes (1924–1931) of Otto Thomé's beautifully illustrated cryptogamic flora of Germany, Austria, and Switzerland. Contemporary specialists noted that these volumes revealed his limited expertise in lichenology, critiquing his keys for crustose species as unsatisfactory. Despite this, he issued an influential exsiccatae series (*Kryptogamae Germaniae, Austriae et Helvetiae Exsiccatae*) from the same region, which contained a wealth of lichen specimens. His herbarium is housed at JE. Ref.: Kärnefelt & al. (2012); Verdoorn (1939).



Minks, Arthur (1846–1908) – Born in the free Hanseatic city of Hamburg (now Germany), where his father served as a police officer, he completed his primary education before studying natural sciences and medicine at the University of Greifswald, later transferring to the University of Göttingen, where he was awarded his doctoral degree in medicine and surgery in 1874. He practised for many years as a physician in Stettin (now Szczecin, Poland), where he eventually died. Minks possessed a keen interest in microscopy and was deeply fascinated by the biological nature of lichens, a topic of intense contemporary debate. He published several extensive, heavily illustrated volumes on lichen anatomy, introducing a complex, specialised terminology. Most notably, he claimed to have discovered internal structures he termed "microgonidia" within young thalli and fruiting bodies, which he argued subsequently developed into mature green gonidia (algal cells). Through this flawed theory, which attempted to prove that the lichen body generated its own photosynthetic components, he became one of the most vociferous opponents of Simon Schwendener's dual-hypothesis of symbiosis. Despite his theoretical missteps, Minks contributed significantly to lichen taxonomy, revising multiple genera and describing new taxa, including the genus *Cyrtidula*. The genus *Minksia* Müll. Arg. is named in his honour His herbarium was housed at B, but was destroyed during WWII; some duplicates survive in LD and UPS. Ref.: Wittrock (1905).

Mitchell, Michael ('Mike') Edward **(1934–)** – Born in Galway, Ireland, he completed his secondary education locally before studying biology at St Mary's College and University College Galway. After graduating with a Bachelor of Science degree in 1956, he moved to France to study under the renowned lichenologist Henri des Abbayes at the University of Rennes, where he earned his doctorate in 1961 with a thesis on the oceanic lichens of south-western Ireland. Immediately after obtaining his doctorate, he was employed at the Ludwig Maximilian University of München. He returned to Ireland in 1962 to join the academic staff at Galway, where he spent the remainder of his career, ultimately being appointed Professor of Botany. Mitchell published numerous papers on the Irish lichen flora, a definitive bibliography titled *A Bibliography of Books, Pamphlets and Articles Relating to Irish Lichenology, 1727–1770* (1971), and extensive accounts tracking the history of British and Irish cryptogamic botany. He also contributed significantly to broader botanical history by editing and publishing the travel journals and correspondences of early nineteenth-century naturalists. He described several new taxa. His herbarium is housed at GAL. Ref.: Maher (1976).



Miyoshi, Manabu (1862–1939) – Born in the village of Iwamura (now Ena), Mino Province (modern-day Gifu Prefecture), Japan, he was the son of a samurai. In 1872, following a wave of radical domain reforms, his father passed away suddenly, which left his mother, Toyo Nakasina Seizen, entirely alone to navigate severe economic hardship during the collapse of the traditional samurai class. Fascinated by botany from his youth, Manabu chose to break with family tradition to read biology at the Imperial University of Tokyo, receiving his diploma in 1889. His graduation thesis investigated the anatomy of lichens under the supervision of Professor Ryokichi Yatabe (1851–1899), who had been educated in the United States and sought to modernise Japanese botanical science. During this period, Miyoshi began collecting lichens extensively. His mentor forwarded these specimens to Jean Müller Argoviensis in Genève, who subsequently published a paper identifying more than 100 species, including several new to science. Miyoshi then travelled to Europe, where he met Müller before studying plant physiology under Wilhelm Pfeffer (1833–1908) at the University of Leipzig between 1891 and 1894. His doctoral research focused on chemotropism in fungi (1894). He returned to Japan in 1895 following a research stop in Java. That same year, he was awarded the degree of *Rigakuhakushi* (Doctor of Science) after delivering a lecture on plant physiology, and was appointed Professor of Botany at the Imperial University of Tokyo. Miyoshi was a versatile botanist, widely celebrated for his pioneering research on flowering plants, most notably his monumental conservation work on Japanese vegetation types, wild cherries, and irises. Within lichenology, he made history in 1893 as the first Japanese scientist to formally describe a lichen, establishing the basionym *Gyrophora esculenta* (now *Umbilicaria esculenta*), an edible species long revered in traditional Japanese cuisine. His herbarium is housed at TI. Ref.: Miyoshi (1936).

Moberg, Jan **Roland (1939–)** – Born in Näske, Nätra Parish near Örnsköldsvik, Ångermanland, Sweden, he grew up on a family farm. Following his primary education,



he initially considered agricultural studies, but a teacher at his grammar school in Härnösand inspired him to pursue biology instead. Moberg began training at a teachers' training college in 1961 but soon transferred to Uppsala University to read biology, where he was appointed an assistant in the herbarium in 1965. He earned his doctorate under the supervision of Rolf Santesson in 1977, presenting a definitive thesis on *Physcia* and allied genera in Fennoscandia. In 1973, he became the curator of the Uppsala University Herbarium (UPS) and was later appointed its director, a position he held until the museum's institutional reorganisation in 1999. Continuing his specialist work on the family *Physciaceae*, Moberg revised material from every continent and undertook numerous collecting expeditions worldwide. He co-authored a beautifully illustrated, highly popular amateur lichen flora of Sweden with Ingmar Holmåsen (1982) and played a pivotal role in the publication of the multi-volume *Nordic Lichen Flora*. He also curated and issued the widely distributed exsiccatae series *Lichenes Selecti Exsiccati Upsalienses*. Throughout his career, he has described numerous new taxa, most notably the genera *Phaeophyscia* (1977), *Rolfidium* (1986), and *Waynea* (1990). The genus *Mobergia* H. Mayrhofer & Sheard, and several species, were named in his honour. His herbarium is housed at UPS. Ref.: P*ers. comm.*; Mattsson & Wedin (1999).



Möller, Alfred (1860–1922) – Born in Berlin, Kingdom of Prussia (now Germany), he completed his early education at the gymnasium in Charlottenburg in 1879. The following year, he commenced forestry studies at the *Forstakademie Eberswalde* before transferring to the University of Münster, where he became a student of the eminent mycologist Oscar Brefeld (1839–1933). Under Brefeld's guidance, Möller earned his doctorate in 1887 with a seminal thesis on the cultivation of lichen-forming ascomycetes in isolation from their algal partners. In 1898, he joined the academic staff at the Academy, becoming head of its mycological department in 1899. He was appointed director of the institution in 1906, serving in this capacity until his retirement in 1921. As a silviculturist, Möller was deeply invested in mycorrhizae and forest continuity, famously pioneering the concept of the "permanent forest" (*Dauerwald*), an ecologically continuous, near-natural approach to management that provoked intense contemporary controversy. He had a remarkably varied life; alongside his academic pursuits, he served as a reserve lieutenant in the cavalry and was occasionally employed as a courier for the diplomatic service. Between 1890 and 1893, he travelled to Brazil on a research grant, exploring the tropical rainforests of Santa Catarina. This expedition sparked his fascination with basidiolichens, culminating in his highly original monograph contributions published in 1895 under the work *Brasilische Pilzblumen.* His herbarium is partly housed at HBG. Ref.: Hofmann (2010); Lemmel (1939).

Montagne, Jean Pierre François **Camille (1784–1866)** – Born in Vaudoy-en-Brie, Seine-et-Marne, France, he was the son of a surgeon, whilst his mother, Marie-Jeanne (née Brière**)** came from an established, multi-generational clan of notables, landholders, and



local officials in the Île-de-France region. His father's premature death left Marie-Jeanne as a young widow to single-handedly raise her young family during the height of the French Revolution, a period that completely disrupted their legal incomes and caused severe financial distress. The family relocated to Paris, where the young Montagne struggled to adapt and dreamed of travelling. After finishing school at the age of 14, he attempted to join the navy; despite being underage, he succeeded by falsifying his age. He sailed with Napoleon's fleet to Egypt in 1799, serving as an assistant in the military medical corps. Upon returning to Paris in 1802, he commenced his medical studies, qualifying as a doctor in 1804. He subsequently served as a military surgeon in Boulogne-sur-Mer and later held several prominent appointments, eventually rising to become the head of the army medical system. Following an early retirement in 1832, he settled in Paris to focus entirely on cryptogams, working primarily at the *Muséum National d'Histoire Naturelle*. A master of microscopy, he was the first to scientifically describe the potato blight fungus (*Phytophthora infestans*) during the 1845 European epidemic. He identified numerous lichen specimens brought back by French expeditions from Algeria, Brazil, the Canary Islands, Colombia, Chile, Cuba, Guyana, Hawaii, India, Java, the Philippines, Réunion, and Tahiti. Many of these descriptions were published in his seminal series *Plantes cellulaires exotiques nouvelles* (1837–1849). Although initially on friendly terms with William Nylander, the two men later fell out as they competed fiercely for access to foreign collections, particularly after Montagne's election to the *Académie des Sciences* in 1853 granted him significant institutional influence. Montagne described several new genera from exotic material, including *Chrysothrix* and *Thysanothecium*. Several species were named after him. His collections are now at PC. Ref.: Becquerel (1866); Cap (1866).



Moon, Kwang-Hee (1957–) – Born in Anyang, Gyeonggi Province, South Korea, she studied biology at Sookmyung Women's University in Seoul, where she developed an interest in lichens. Due to a lack of local specialists at the time, she became a pupil of Hiroyuki Kashiwadani in Tokyo. In 1999, she earned her doctorate from her home university with a thesis focusing on the lichens of Mt Seorak. She went on to conduct extensive fieldwork across Korea, greatly expanding contemporary knowledge of the national lichen flora, and in 2013, she published a comprehensive checklist for the country. Moon also specialised in the taxonomy of the family *Parmeliaceae*. She eventually served as a prominent curator of the herbarium at Seoul National University (SNU) and later worked as a senior researcher at the National Institute of Biological Resources (NIBR) in Incheon. Throughout her career, she described several new species. Her herbarium is housed at SNU. Ref.*: Pers. comm.*

Moreau, Fernand (1886–1979) – Born in Châteaurenault, Indre-et-Loire, France, he studied at the University of Paris after completing his local education, earning his doctorate in 1913 with a thesis on the reproduction of Mucorinae. Following an appointment at



the University of Nancy in 1921, he became a professor at the University of Clermont-Ferrand, before being appointed Professor of Botany and Director of the Botanical Garden at the University of Caen in 1936. Although a mycologist by training, Moreau maintained a profound interest in lichens, focusing primarily on their biology and development, and authored the highly regarded textbook *Les Lichens: Morphologie, Biologie, Systématique* (1928), which emphasised their structural and biological complexities. Renowned as a popular and inspiring educator, his pupils included the Romanian lichenologist Constanța Moruzi and the Chinese botanical pioneer Chen Jian-zhi. Moreau's research on Asian flora culminated in a joint 1951 paper with his wife, Valentine, which detailed the regional distribution of Chinese lichens and described a newly discovered parasite. His herbarium is housed at PC. Ref.: Létrouit-Galinou (1980).



Moris, Giuseppe Giacinto (1796–1869) – Born in Orbassano, Kingdom of Sardinia, (now Piemonte, Italy) into a family of modest means, Moris was an academically gifted student who entered the prestigious *Collegio delle Province* and studied medicine at the University of Torino, graduating in 1815 at just nineteen years of age. His passion for botanical studies was sparked during his university years by the eminent botanist Giovanni Battista Balbis (1765–1831). After working as an aggregator doctor and teaching in Turin, he moved to Sardinia in 1822 to take up the chair of clinical surgery at the University of Cagliari. On the island, he began exploring and systematically documenting the largely unknown regional flora, which eventually led to him being officially commissioned in 1825 by the government to study the natural history of Sardinia. He returned to Torino in 1829 as a professor of medicine, and in 1831 he was appointed professor of botany and director of the Royal Botanical Garden of Torino (located in Valentino), positions he held for nearly four decades until his death. While primarily famous for his extensive phanerogamic work on the Sardinian flora (*Flora Sardoa*), Moris also laid the foundational brick for the early development of modern Italian lichenology. In 1836, recognizing the great scientific potential of Giuseppe De Notaris, Moris invited him to serve as his assistant at the Valentino botanical garden, a career-defining move that catalyzed De Notaris's monumental work in cryptogamy and future lichenological breakthroughs. Moris's direct contributions to lichenology include early floristic inventories; his first significant lichenological endeavour was a lichen checklist for the island of Capraia published in 1839, which he co-authored in collaboration with De Notaris, where 43 lichens are cited. He also documented several historical lichen specimens from Sardinia in his early *Stirpium sardoarum elenchus* (1829), where 90 taxa are mentioned. His collections would later be critically revised by Francesco Baglietto in his comprehensive *Lichenes insulae Sardiniae* (1879). He described (as *Usnea intricata*) the rare, relict Mediterranean fruticose lichen *Lethariella intricata* (Moris) Krog. His historical lichen herbarium is preserved as an integral subset at TO. Ref.: Isocrono & al. (2013); Nimis (1993, 2016); Nimis & Poelt (1987).



Morison, Robert (1620–1683) – Born in Aberdeen, Scotland, UK, where his family had resided for generations, he entered Marischal College, Aberdeen, in 1635, specialising in mathematics despite his principal interest lying in botany. Although his parents compelled him to study Hebrew in the hope that their gifted son would pursue a clerical career, he graduated with an MA in 1638 at the age of eighteen. Shortly thereafter, he joined the Royalist Cavaliers and was wounded at the Battle of the Bridge of Dee (1644); during his subsequent convalescence, he fled to France, where he resumed his academic pursuits and earned a medical doctorate from the University of Angers in 1648. He dedicated himself fully to botany under the inspiration of his teacher Vespasien Robin (1579–1662), botanist to the French King, who introduced him to the rich continental botanical tradition. Through Robin, he met Gaston, Duke of Orléans, who employed him in 1650 as director of his magnificent royal gardens at Blois, a prestigious post Morison held for a decade. Following the Stuart Restoration, King Charles II summoned him back to England, appointing him Physician and Botanist to the King in 1660, and in 1669, he was elected the first Professor of Botany at Oxford University. He published several monumental botanical works, including the highly influential *Plantarum Historiae Universalis Oxoniensis* (1680), in which he treated lichens extensively. Significantly, Morison was among the earliest systematisers to group lichens separately from true mosses by employing the category *Muscofungus*, an intermediary concept originally introduced by earlier English herbalists. This taxonomic arrangement directly anticipated Joseph Pitton de Tournefort's formal establishment of *Lichen* as a distinct genus, a nomenclature later consolidated by Carl Linnaeus. His species descriptions, being pre-Linnaean, are not valid under modern nomenclature rules. His herbarium is housed at OXF. Ref.: Jørgensen (2025); Vines & Druce (1914); Webster (1974).



Moruzi, Constanța (1899–1990) – Born in Ploiești, Kingdom of Romania, she belonged to an influential, intellectual family who secured her the finest education possible, enabling her to enter the University of Bucharest in 1922 to study natural history. A diligent student, she was employed as an assistant in the botanical laboratory in 1925 before being awarded a prestigious five-year scholarship to study in France, which allowed her to master advanced techniques at the botanical laboratories of the Sorbonne University in Paris between 1926 and 1931. Under the supervision of the eminent mycologist Fernand Moreau, she successfully defended her doctoral thesis in 1932 on the cytology of perithecia formation in Ascomycetes; the widely praised work comprised an initial section devoted to the anatomy of lichens and their fruiting bodies, and a second focusing on experimental research regarding non-lichenised Mucorinae. Upon returning to her native country, she was appointed as an assistant (and later docent) at the Agrobotanical Institute of the University of Bucharest in 1934, where a close association with René Cretzoiu at the forestry department triggered her active, lifelong interest in lichens, alongside her contin-

ued research into non-lichenised fungi of agricultural and economic importance. Following Cretzoiu's untimely death, she became Romania's leading lichenologist for many decades, mentoring numerous students and spearheading research that culminated in the collaborative publication of a comprehensive catalogue of Romanian lichens (1967) and a definitive determination key (1971). Though she described several infraspecific taxa rather than distinct new species, her extensive collections significantly enriched the field. Her herbarium is housed at BUC. Ref.: Mititelu & al. (1993); Toma & Mohan (1970).

Mosig, Karl Gottlob **(1758–1832) –** Born in Görlitz, then part of the Electorate of Sachsen (now in Sachsen, Germany), he was the son of the resident *pastor primarius*, whose high-ranking administrative steps he followed after training in law. He secured prominent regional administrative posts in the Lusatia (Lausitz) region and subsequently served as a judicial director in the neighbouring Silesian district of Greiffenstein. Alongside his legal career, he developed a profound interest in cryptogamic botany, joining the Upper Lusatian Society of Sciences (*Oberlausitzische Gesellschaft für Wissenschaften*) in 1796, at which time he was documented as possessing an extensive *Moosherbarium* that included a vast array of local lichens. In 1804, he began sending his specimens to Erik Acharius, who subsequently described a number of new species based on Mosig's material in his foundational work *Lichenographia Universalis* (1810). These historical specimens are preserved in the herbaria of Helsinki (H) and Uppsala (UPS). Although Mosig did not describe any taxa independently, he amassed an extensive body of mostly unpublished herbarium material, and several of his proposed names were adopted by subsequent authors. The genus *Mosigia* Fr. (now a synonym of *Rimularia*) was established in his honour, as was the lichen *Orphniospora mosigii*. His herbarium is housed at GLM. Ref.: Otte (2002); Stein (1879).



Motyka, Józef (1900–1984) – Born in Kąclowa near Grybów, close to the Slovakian border, Austro-Hungarian Empire (now Poland), he demonstrated exceptional skill in natural history as a schoolboy. He chose to pursue these studies at the Jagiellonian University in Kraków, where he met Władysław Szafer (1886–1970), who inspired him to specialise in botany. Szafer recruited him into a large-scale botanical exploration of the lichen-rich Tatra Mountains. Motyka's specific research into local lichen ecology formed the basis of his doctoral thesis on nitrophilous, saxicolous communities, earning him his doctorate in 1924. He then pivoted to taxonomy, focusing on the large and notoriously difficult genus *Usnea*. This research required extensive travel to major European herbaria and shifted his focus from a regional study to a global revision. His efforts culminated in a monumental two-part world monograph (1936–1938). During this period, he worked as an assistant at the Botanical Garden of Kraków, though his highly conservative, narrow species concept drew criticism from contemporary peers. During the Second World War, he worked primarily as a schoolteacher in Grybów. In 1945, he was appointed professor of phytogeography and director of the Department of Phytogeography and Systematics at the newly founded Maria Skłodowska-Curie University in Lublin. He maintained an affiliation

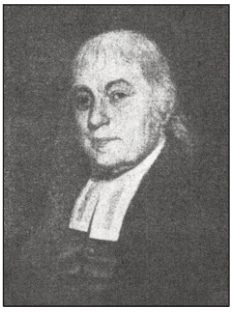
with the Szafer Institute in Kraków and trained numerous students across various branches of lichenology. For a period, departmental duties forced him to focus more heavily on flowering plants. However, he returned to lichenology in 1956 to initiate a comprehensive flora of Polish lichens, producing major works on the genus *Alectoria* and four flora volumes between 1960 and 1964. He did not complete the series during his lifetime. His unfinished draft manuscripts on the family *Lecanoraceae* were published posthumously by his daughter in a four-volume work titled *Porosty (Lichenes). Rodzina Lecanoraceae* (1995–1996). However, due to severe taxonomic and nomenclatural defects, the work was formally proposed and accepted as an *opera utique oppressa* (suppressed work) under Article 34.1 of the International Code of Nomenclature. Consequently, all new taxa and combinations therein are legally treated as invalidly published. Though known for a short-tempered disposition, Motyka was an influential educator who shaped the next generation of Polish lichenologists. He described numerous taxa. His herbarium is housed at LBL. Ref.: Bystrek & Wójciak (1985), Kukwa *pers. comm.*



Mougeot, Jean-Baptiste (1776–1858) – Born in Bruyères, Lorraine (now in the Vosges department), France, he initiated his classical studies in Vieux-Brisach, Freiburg, and Basel, before developing a deep fascination with the natural sciences and botany in 1795. Between 1798 and 1802, he served as a medical officer in the French army stationed in Germany, subsequently moving to Paris to read medicine and defend his doctoral thesis in 1803. Whilst in Paris, he studied under Louis-Claude Richard (1787–1868) and Antoine-Laurent de Jussieu (1746–1836), established close professional ties with Antoine Laurent Apollinaire Fée and Christian Hendrik Persoon, and became an intimate friend of François Victor Mérat, with whom he frequently botanised. Returning to his native Bruyères to practice as a physician at the local civil hospital, where he notably pioneered local smallpox vaccination efforts, he remained an ardent cryptogamic botanist despite his demanding medical career. Together with his close collaborator Chrétien Géofroy Nestler, he compiled and issued the highly influential exsiccatae series *Stirpes cryptogamae Vogeso-Rhenanae* (1811–1854), a monumental project later continued alongside Wilhelm Philipp Schimper and his son Antoine Mougeot. His profound expertise in lower plants attracted many eminent contemporary naturalists, including the Swiss lichenologist Ludwig Schaerer, who visited him in 1848, and his vast correspondence network comprised thousands of letters. His herbarium is housed at PC, MPU. Ref.: Fliche (1880); Jaubert (1858); Müller Argoviensis (1900).

Mudd, William (1829–1879) – Born in Bedale, Yorkshire, England, UK, to Mary (née Purvis) and Christopher Mudd, who worked as a steward at the Clifton Castle Estate, he was obliged to enter employment at an early age, training initially under John Pope in the gardens of Joseph Pease in Darlington, Durham. He subsequently entered the service of T. Richardson in Great Ayton, North Yorkshire, where his introduction to local botanist George Dixon, superintendent of the North of England Agricultural School, provided him with access to microscopes and a deep introduction to the study of cryptogams. Mudd

began collecting and examining local specimens with great enthusiasm, publishing his first paper on the lichens of Cleveland in 1854, before establishing a vital collaborative connection with the lichenologically inclined physician Alexander C. Maingay. Acknowledging Maingay's field contributions, Mudd published his seminal *Manual of British Lichens* in 1861 alongside a renowned accompanying exsiccatae series; this milestone work was highly significant for nineteenth-century British naturalists as it represented the first modern British lichen flora constructed entirely around detailed microscopic characteristics. His burgeoning reputation earned him an appointment as Curator of the Cambridge Botanic Garden in 1864, a career transition that effectively curtailed his active research due to a combination of demanding administrative duties and failing eyesight brought on by years of intensive microscopy. Mudd famously struggled to adapt to the elite, class-conscious academic atmosphere of the university, and while providing private tutorials to undergraduates to supplement his income, one unimpressed student uncharitably described him as "an illiterate Scotsman [*sic!*] who smoked very strong tobacco and smelt strongly of whisky", completely misinterpreting his rustic Yorkshire accent. His herbarium is housed at BM. Ref.: Desmond (1977); Jørgensen (2025); Seaward (1993a).



Mühlenberg (Muhlenberg), Gotthilf **Heinrich (Henry)** Ernst (Ernest) **(1753–1815) –** Born in Trappe, New Providence, Pennsylvania, USA, to Heinrich Melchior Mühlenberg, the German immigrant patriarch of the American Lutheran Church, and Anna Maria (née Weiser), daughter of Conrad Weiser, the celebrated pioneer, diplomat, and Native American interpreter, he attended school in Philadelphia following a family relocation. At the age of ten, he was sent to Germany alongside his brothers to receive a formal academic education preparing him for the ministry; between 1763 and 1769, he resided in Halle (Saale) to attend the grammar school and *Pädagogium* of the famed Francke Foundations (*Franckesche Stiftungen*). He matriculated at the University of Halle in 1769 but returned to America the following year, where he was promptly ordained and appointed assistant minister to his father at Barren Hill, Philadelphia. Following an appointment as third preacher in Philadelphia in 1774, he fled the city in 1777 to escape the American Revolutionary War and, in 1780, became pastor of the Holy Trinity Lutheran Church in Lancaster, Pennsylvania, a post he retained for the rest of his life. During these turbulent years, he began a comprehensive study of local flora using the works of Carl Linnaeus and Jan Frederik Gronovius (1690–1762), whilst establishing a fruitful correspondence with the Hessian army physician Johann David Schöpf (1752–1800). Developing a keen interest in inconspicuous plants, Mühlenberg meticulously catalogued regional cryptogams, grasses, and sedges. Following Olof Swartz's 1783 New World expedition, he forged vital transatlantic connections by dispatching vast quantities of American specimens to Swedish cryptogamists, enabling Erik Acharius to describe several new species, including the lichen *Umbilicaria muhlenbergii*, which was named in his honour. In his landmark *Catalogus Plantarum Americae Septentrionalis* (1813), Mühlenberg systematically listed 184 species of American lichens. Throughout his distinguished career, he maintained an active correspondence with leading European authorities, including Georg Franz

Hoffmann, Christian Hendrik Persoon, Johann Christian Daniel von Schreber, Heinrich Adolf Schrader, and Kurt Sprengel. His herbarium is housed at PH. Ref.: Anonymous (1894); Beck (1938); Harshberger (1899).

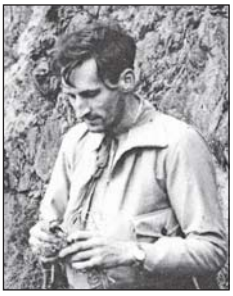


Müller (Argoviensis), Johannes ('Jean') (1828–1896) – Born in Teufenthal in the canton of Aargau, Switzerland, he came from a farming family but harboured a deep ambition to pursue academic studies, assembling a regional herbarium of local flora during his youth with the encouragement of regional naturalists. In 1850 and 1851, he studied mathematics and the natural sciences at the Academy of Genève, where his exceptional botanical acumen caught the attention of Pierre Edmond Boissier (1862–1934) and Alphonse de Candolle (1806–1893). De Candolle subsequently employed him as the curator of his world-renowned herbarium, a prestigious position Müller retained from 1851 until 1874, during which time he travelled extensively through southern France alongside Jean Étienne Duby and conducted numerous alpine collecting expeditions with Boissier. He was later appointed Curator of the Delessert Herbarium following its donation to the city of Genève, ultimately serving as Director of the Genève Botanic Garden from 1870 and holding the Chair of Pharmaceutical and Systematic Botany at the University of Genève from 1871. Having received his doctorate from the University of Zürich in 1867 for his landmark monograph on the phanerogamic family *Resedaceae*, Müller, who adopted the geographic epithet 'Argoviensis' to distinguish himself from contemporary namesakes, established an international reputation as an exceptionally sharp-eyed taxonomist. Alongside his global authority on complex flowering plant families such as the *Euphorbiaceae*, he became a premier nineteenth-century lichenologist, revising massive foreign collections from every continent, describing hundreds of new species, and establishing genera such as *Candelariella*, *Dictyographa*, *Parmeliella*, *Porina*, *Siphulastrum*, and *Tapellaria*. He distributed the significant Cuban *Graphidiaceae* specimens collected by Charles Wright between 1856 and 1858, and following the death of Philipp Hepp, edited and issued numbers 717 to 962, which comprised the final four volumes of Hepp's monumental exsiccatae series *Die Flechten Europas* (1867). He also successfully secured valuable duplicate material from A. L. Apollinaire Fée's herbarium before the collection was shipped to Brazil. His herbarium is housed at G. Ref.: Briquet (1896); Chodat (1896).



Murati, Murat (1940–2026) – Born in Zajas, near Kičevo, in what is now North Macedonia (then part of the Kingdom of Yugoslavia), he completed his primary and secondary education locally before studying biology at the University of Skopje. He subsequently pursued postgraduate research at the University of Zagreb, focusing on cryptogamic botany and earning his doctorate with a dissertation on the diversity and ecology of the lichens of the Šar Mountain range. Recognising the urgent need for a cohesive regional reference, he embarked on the ambitious task of compiling a comprehensive Yugoslav lichen flora, securing vital

academic support from Polish colleagues, most notably the flora writers Zygmunt Tobolewski and Jan Bystrek. Following his graduation, Murati worked as a professor of biology at the Pedagogic High School in Gjakova (Đakovica), Kosovo, but amidst rising regional geopolitical instability, he relocated back to North Macedonia, where he settled between Skopje and Struga to contribute to newly established Albanian-language higher education institutions. Despite severe personal and institutional disruptions caused by conflict, he successfully completed his landmark work, *Flora lišajeva* (*The Lichen Flora*), covering Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Vojvodina, Kosovo, and Macedonia. Volume 1 was published by the University of Pristina in 1992, followed in 1993 by Volume 2, issued under the title *Flora na lisaite* by the Union of the Albanian Intelligentsia in Macedonia; printed in limited numbers, this pioneering two-volume set remains the only comprehensive flora of its kind for the Western Balkan peninsula. In his later years, Murati served as a professor and eventual Dean at the State University of Tetova and the University of Skopje before retiring to Struga. Although he did not publish further major lichenological treatises after the mid-1990s, his early field expeditions greatly enriched Balkan biodiversity records, notably providing the type material for *Usnea balcanica*, a new species described by Bystrek in 1994. While portions of his herbarium faced uncertain conditions due to regional conflict, significant duplicate sets are preserved at LBL and GZU. Ref.: Mayrhofer & al. (2016); Vladimir Randljelovic and Sanja Tibell, *pers. comm.*



Murray, James (Jas) (1923–1961) – Born in Forest Hill, near Winton in Southland, New Zealand, he was the son of Ann (née Jamieson) and James Campbell Murray, a Scottish immigrant farmer. Fascinated by the natural environment from boyhood, he collected and studied any specimens that came his way. He left the remote family farm to attend school in Dunedin, before progressing to Otago Boys' High School and the University of Otago. There, he studied mathematics, physics, and chemistry, eventually specialising in organic chemistry. For his research thesis, he investigated plant extracts from the golden akeake (*Olearia paniculata*), a project supervised by Frederick George Soper (1898–1982) and supported by Stanley N. Slater. He was subsequently employed by the Otago chemistry department, first as a lecturer in 1946 and later as an Associate Professor in 1959. From 1950 to 1952, Murray held a postgraduate scholarship at the University of Cambridge, where he worked in the prestigious laboratory of Sir Alexander Todd (1907–1997). He used this period to advance his research into the chemical structures of lichen substances, a subject that became his lifelong academic passion. Upon his return to New Zealand, he found the local lichenological field virtually empty, save for the efforts of the retired teacher William Martin. Undeterred, Murray began collecting extensively across the lichen-rich islands, travelling as far south as Campbell Island. Identifying his findings proved challenging, which led him to meticulously gather widely scattered literature on New Zealand botany and seek assistance from leading international experts. Murray published extensively on his discoveries and described several new taxa. His field collections also yielded novelties for foreign specialists, who named many species in his honour, such

as *Cladonia murrayi* W. Martin. His brilliant career was cut tragically short by a fatal car crash in 1961. He left behind a magnificent collection of approximately 6,000 specimens, rich with detailed chemical annotations. Recognising its great scientific value, the University of Otago arranged for its formal curation at OTA, inviting Peter W. James from the British Museum (Natural History) to Dunedin during 1962–1963. This crucial intervention sparked a profound renaissance in New Zealand lichenology, culminating decades later in David Galloway's monumental *Lichen Flora of New Zealand*. Ref.: Galloway (2015).



Nádvorník, Josef (1906–1977) – Born in Plánavy, Austro-Hungarian Empire (now Czech Republic). Following his primary education, he entered the teacher training college in Chrudim, graduating as a teacher of natural sciences and mathematics in 1925. He taught at a variety of schools before the Second World War, and in 1946, he began studying pedagogy at Charles University in Prague, where he earned his doctorate in the didactics of biology in 1952. It was during his earlier teaching years in the 1930s that he established a close friendship with the lichenologist Miroslav Servít, who inspired his lifelong fascination with lichens. Nádvorník focused his research specialising in the family *Physciaceae* and the historically poorly understood order *Caliciales*. He compiled and issued three important exsiccatae series, two of which focused directly on these groups. Throughout his career, he described several new taxa. The genus *Nadvornikia* Tibell was named in his honour. His herbarium is housed at BRA. Ref.: Černohorský (1978).



Nascimbene, Juri (1966–) – Born in Feltre, in the Veneto region of Italy, he was the son of a building surveyor who later taught technical applications at a lower secondary school, and of a primary school teacher. He completed his education at the University of Padova, graduating with a degree in Natural Sciences in 1993. Following a period of both independent and institutional fieldwork across the Southern Alps, he undertook doctoral training in Biomonitoring Techniques at the University of Trieste, earning his PhD in 2008. He progressed his early academic career through a series of post-doctoral and research fellowships, establishing deep scientific networks with prominent Italian and international lichenologists. In the mid-2010s, he joined the University of Bologna. Rising through the academic ranks, he was appointed Full Professor of Systematic Botany there in October 2023. He holds a prominent institutional profile within the university, serving concurrently as the Coordinator of the Bachelor's Degree Programme in Natural Sciences and as the Director of the Bologna Botanic Garden and Herbarium. He is also highly active within the national scientific community, having served as the President of the Italian Lichen Society since 2021. His extensive research programme focuses on the ecology, distribution, and conservation of lichens across terrestrial environments. He is highly regarded for his specialised work on Alpine and high-altitude ecosystems, notably

leading the groundbreaking *Dolichens* project to publish the first comprehensive online inventory of the lichens of the Dolomites. A significant component of his output evaluates agro-forestry systems; his papers have explored how intensive forest management affects lichen communities, strongly advocating for the retention of overlooked microhabitats, such as coarse woody debris and tree stumps, within standardised forest biodiversity monitoring. Beyond active ecological field surveys, he maintains a passionate focus on historical herbaria and Renaissance collections, investigating early botanical archives to reconstruct long-term environmental changes and track species extinction patterns driven by global climate change. His herbarium is private. Ref.: *Pers. comm.*



Nash III, Thomas ('Tom') Hawkes **(1945–)** – Born in Arlington, Virginia, USA, he studied biology at Duke University, where he developed an interest in lichens as an undergraduate. He initially worked as an assistant to the ecologist Lawrence (Larry) Bliss (1929-2019), before taking William Culberson's lichenology course and attending a summer programme led by Mason Hale. He completed his doctoral thesis at Rutgers University, investigating the impact of a zinc smelter on surrounding lichen vegetation. Nash was subsequently appointed assistant professor at Arizona State University (ASU), where he proved to be an active and popular teacher of ecology and lichenology, advancing to full professor in 1981. Fascinated by lichen diversity and their physiological adaptations to harsh desert environments, Nash expanded his research into lichen physiology. This led him to collaborate with Otto Ludwig Lange in Germany, resulting in several foundational papers in the field. His primary taxonomic legacy, however, centres on the flora of the American Southwest and adjacent Mexico, with a particular focus on the species-rich genus *Xanthoparmelia*. Alongside his students, Nash collected extensively throughout these arid regions, building a massive research collection. This material served as the baseline for the monumental, three-volume *Lichen Flora of the Greater Sonoran Desert Region*, a collaborative international project that Nash initiated, organised, and chief-edited. Following his retirement, he relocated to Madison, where he became a research associate at the University of Wisconsin. The IAL awarded him the Acharius Medal in 2010. Nash issued a well-distributed exsiccatae series during his career at ASU. The genus *Tomnashia* S.Y. Kondr. & Hur is named after him. His herbarium is housed at ASU, with duplicates at WIS. Ref.: Bates & al. (2011).



Navarro-Rosinés, Pere (1959–) – Born in Catalonia, Spain, he pursued his higher academic training in the biological sciences at the University of Barcelona, where he came under the influence of Xavier Llimona. He focused his field research on the rich cryptogamic communities of north-eastern Spain, particularly within Catalonia. In 1993, he obtained his PhD from the University of Barcelona after defending his doctoral thesis on the lichens and lichenicolous fungi of carbonate substrates in southern Catalonia, which was supervised by N. L. Hladun. Following his doctoral studies, Navarro-Rosinés joined the academic staff of the

Department of Plant Biology (now the Department of Evolutionary Biology, Ecology and Environmental Sciences) at the University of Barcelona, advancing to the position of *Professor Titular* (Associate Professor). Throughout the 1990s and 2000s, his research split into two prominent specialisations: the systematics of the complex, species-rich family *Teloschistaceae* (most notably the genus *Caloplaca* s.l.) and the taxonomy of non-lichenised lichenicolous fungi. He developed a prolific international network, working in frequent close collaboration with European specialists such as C. Roux, J. Hafellner, U. Søchting, and V. Calatayud. Together with Roux, he extensively revised calcicolous and littoral communities of the Mediterranean basin, describing numerous new taxa. In 2002, he expanded his phylogenetic horizons by spending a five-week research residency at Duke University in the laboratory of F. Lutzoni, contributing significantly to multilocus molecular reassessments of the *Teloschistaceae*. Over a career spanning more than four decades, Navarro-Rosinés authored or co-authored well over 100 peer-reviewed scientific papers and book chapters. He served as a key scientific collaborator for major regional cryptogamic overviews, contributing to conservation frameworks such as the Red List of lichens in Spain and Portugal. His taxonomic work yielded dozens of newly erected fungal lineages. Several species are named after him. His herbarium is housed at BCC. Ref.: Nimis *pers. comm.*



Navás Ferré, Longinos (1858–1938) – Born in Cabacés, Tarragona, Spain, he received his early education at the *Escuelas Pías de Reus* before studying law and philosophy in Barcelona. He subsequently entered the Society of Jesus and completed his advanced theological and scientific training in France, studying at Jesuit institutions in Toulouse and Ussat-les-Bains, Occitania. He was ordained as a priest in 1890. After serving in various Jesuit colleges in Veruela and Manresa within Catalonia, he was appointed professor of natural sciences at the *Colegio de El Salvador* in Zaragoza in 1892, a position he held for forty-six years. Although he was a prolific entomologist and an international authority on *Neuroptera*, describing hundreds of insect species, Navás also made significant and early contributions to Iberian and global lichenology. He actively collected and published on the lichen flora of northern and central Spain, the Azores, Madeira, and parts of South America. Throughout his botanical excursions, he described several new lichen taxa, including the genus *Nemaria*. Following the dissolution of the Society of Jesus by the Spanish Republican government in 1932, he lived clandestinely until his death in Girona. His main zoological, geological, and general botanical collections are at MZ, the cryptogamic collection at the *Colegio Nuestra Señora del Recuerdo* in Madrid, while duplicates are at BC. Ref.: Bastero Montserrat (1989).

Nearing, Guy George **(1890–1986)** – Born on a farm in Morris Run, Pennsylvania, USA, Nearing developed a keen interest in the natural environment, particularly plants, during his childhood. Following his primary education, he read biology at the University of Pennsylvania, where he graduated with a Bachelor of Science degree in 1911. He subsequently continued his studies at Harvard University, where he pursued cryptogamic



botany, quite possibly under the tutelage of William G. Farlow. However, he did not complete his programme there, moving instead to Columbia University after Farlow's death, where he also departed without taking a degree. He eventually established a commercial plant nursery in Ridgewood, New Jersey, where he became highly successful in breeding *Rhododendron* cultivars. Alongside his botanical pursuits, he worked in landscaping, gained recognition as a skilled landscape painter, and wrote poetry. He was also a deeply engaged member of the Sullivant Moss Society, later the American Bryological and Lichenological Society. Despite facing severe financial and health tribulations in the wake of the 1930s Great Depression, Nearing successfully revived his nursery business in Ramsey, New Jersey, in 1947. That same year, he published his seminal work, *The Lichen Book: Handbook of the Lichens of Northeastern United States*. This volume demonstrated his encyclopaedic knowledge of the region's lichen flora. Within the book, he fiercely championed the necessity of anatomical study, deliberately eschewing chemical spot tests, a methodology he thoroughly detested, and enriched the text with over 700 of his own detailed line drawings. Although his unorthodox multi-access identification keys were initially unfamiliar to contemporary botanists, they yielded highly reliable results when applied correctly. In an era devoid of alternative handbooks, his work proved instrumental in guiding a younger generation of researchers through the study of lichens. His collections are in NY. Ref.: Brodo, *pers. comm*.; Snyder (1986).



Necker, Natalis ('Noël') Martinus Joseph de **(1730–1793)** – Born in Lille, France, de Necker developed a keen interest in the natural world, particularly botany, from his youth. Following his local primary education, he undertook his academic studies at the University of Douai. During this period, he completed an apprenticeship at a pharmacy in Lille while simultaneously attending the public botanical lectures delivered by Professor Pierre-Joseph Cointrel (1698–1761). De Necker was awarded his doctorate in medicine in 1770 upon the publication of his thesis, *Dissertatio de generatione ac multiplicatione muscorum et algarum*, which examined the reproduction and generation of mosses and algae. He was subsequently appointed personal physician and botanist to the Elector Palatine (*électeur*) of Pfalz am Rhein in Mannheim, and he also secured an honorary position at the University of Nancy. Throughout his career, his research focused equally on the reproductive biology and the taxonomy of cryptogams, culminating in several highly influential publications. Necker described numerous new lichen genera, none of which remain in use today as they are considered invalid names; however, the species epithets he established, particularly within what is now the genus *Peltigera*, were subsequently adopted and validated by later authors and remain in use. The whereabouts of his herbarium are unknown. Ref.: Leclaire (1913).

Nees von Esenbeck, Christian Gottfried Daniel **(1776–1858)** – Born at Schloss Reichenberg near Reichelsheim in the Odenwald, Grafschaft Erbach, Nees von Esenbeck

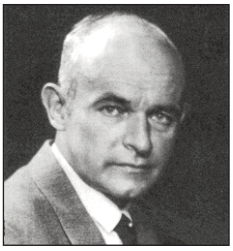


displayed a precocious interest in the natural sciences. Following his early education in Darmstadt, he moved to Jena in 1795, eventually graduating with a degree in medicine from Giessen in 1800. It was during his medical studies that he developed a serious passion for botany. His primary botanical mentor was August Batsch (1761–1802), who introduced him to both mycology and Antoine Laurent de Jussieu's natural system of classification, as well as to the theory of plant metamorphosis. Strongly supported by Johann Wolfgang von Goethe, this metamorphic theory profoundly inspired Nees von Esenbeck, who later established a lifelong friendship with the celebrated poet. Upon graduating, he returned to his native region to practise medicine, subsequently becoming the personal physician to Count Franz von Erbach (1754–1823) while continuing to cultivate his botanical research. In 1814, he published a major treatise on freshwater algae, marking his expanding focus on cryptogamic botany. He returned to academia in 1817 upon his appointment as professor of botany at Erlangen. That same year, he published his seminal mycological system, *Das System der Pilze und Schwämme*, which definitively established the fundamental structural terms *ascus* and *spore* in botanical literature. Although heavily influenced by the speculative tenets of German *Naturphilosophie*, the work remained highly influential for early fungal classification. The following year, he was elected president of the prestigious *Academia Leopoldina*, a highly influential administrative role he maintained until his death. In 1820, he took up the chair of natural history at Bonn, where he founded the university's botanical garden and collaborated closely with Carl Friedrich Philipp von Martius. He was eventually awarded the prestigious chair of botany at Breslau in 1831. In Breslau, his democratic and revolutionary political activities during the 1848 uprisings drew the severe displeasure of the Prussian government. Using his unconventional personal life as a pretext, the authorities dismissed him from his professorship in 1851 on grounds of alleged moral turpitude, completely revoking his pension. He died seven years later in Breslau (now Wrocław, Poland), impoverished and suffering from severe deprivation, yet internationally renowned. A highly prolific scientist with expansive intellectual interests, his primary expertise lay in mycology, though he contributed significantly to lichenology through several broader treatments. Furthermore, he mentored and supported many prominent lichenologists of the era, most notably Franz Meyen and Julius von Flotow. His herbarium was split after his death, and the cryptogams are said to be housed at STR. Ref.: Bohley (2003); Winkler (1926).



Nestler, Chrétien Geoffroy (Christian Gottfried) **(1778–1832)** – Born in Strasbourg, Alsace, France, Nestler was apprenticed to his father in pharmacy at the age of sixteen, while simultaneously reading medicine under the eminent naturalist Jean Hermann (1738–1800). In 1803, he moved to Paris to pursue formal pharmaceutical studies. There, he became a pupil of Louis Claude Richard (1754–1821) in botany and established close friendships with two fellow students who shared his passion for cryptogamic botany: François Victor Mérat and Jean-Baptiste Mougeot. Upon

qualifying, he served as a military pharmacist in the French army from 1806 to 1810. In 1811, he returned to academia upon his appointment as professor of botany and pharmacy at the *Université de Strasbourg*. In 1810, Nestler and his lifelong friend Mougeot embarked on a collaborative project to publish a monumental exsiccatae series titled *Stirpes Cryptogamae Vogeso-Rhenanae*. This extensive, multi-fascicle distribution documented the lower plants of the Vosges and Rhine regions and included a vast number of expertly curated lichen specimens. Today, these historical exsiccatae are preserved in major international herbaria, such as BM, FH, G, H, PC, and UPS, while his primary herbarium is housed at STR. Ref.: Dilg (1978); Ochsenbein (1996).



Nienburg, Karl Ortiges **Wilhelm (1882–1932)** – Born in Berlin, Kingdom of Prussia (now Germany), Nienburg was the son of a high-ranking government architectural councillor (*Baurat*). He began his primary education in Nienburg an der Weser, Niedersachsen, where he developed a deep affinity for the natural world and aspired to a career in forestry. He completed his secondary education in Hannover, where he became profoundly fascinated by coastal and marine environments. Following the untimely death of his father around the time of his graduation, Nienburg was left with sufficient financial means to pursue the natural sciences at the University of Berlin. He chose to specialise in botany, and between 1905 and 1906 he began researching the morphological development of lichen apothecia under the supervision of Erwin Baur (1875–1933). He continued this line of research after accepting an assistantship under Professor Friedrich Oltmanns (1860–1945) at the University of Freiburg, where he successfully defended his doctoral thesis in 1907. A formative visit to Uppsala in 1912 brought him under the academic influence of Rutger Sernander, a connection reflected in Nienburg's subsequent publications regarding the ecological importance of nitrogen enrichment in lichen habitats. However, Oltmanns, an eminent algologist who had trained under Anton de Bary, recognised Nienburg's aptitude and secured him a research residency at the *Stazione Zoologica* in Napoli, Italy, to investigate the reproductive organs of marine algae. This experience proved to be the turning point of his career. His academic trajectory was temporarily disrupted by the First World War and deteriorating health; from 1916 onwards, he suffered from the chronic tuberculosis that would eventually claim his life, forcing him to work predominantly as a private tutor during the conflict. In 1921, he returned to professional research upon his appointment as a curator at the Helgoland Biological Station. Two years later, in 1923, Nienburg succeeded Johannes Reinke as professor of botany at the University of Kiel, where he focused his efforts on intertidal algology. Despite his primary shift to marine biology, he retained a lifelong interest in the anatomy and reproductive biology of lichens, culminating in two seminal treatises published in 1919 and 1926. In these works, he focused closely on the physiological dynamics between the algal and fungal partners, actively championing the theory of "helotism", the view that the photobiont is effectively enslaved by the dominant mycobiont. His herbarium is housed at KIEL. Ref.: Hoffmann (1933).

Nimis, Pier Luigi (1953–) – Born in Udine, Friuli, Italy, Nimis was the son of Carlo, a baker, and Matilde (née Maddalozzo), a schoolteacher. Raised in the nearby village of



Tarcento, at the foot of the Julian Pre-Alps, his passion for natural history was ignited during childhood when an aunt gifted him the book *Il piccolo naturalista* ("The Little Naturalist"). He received his first microscope at the age of six, and by the age of seven, he had already gained membership of the Italian Entomological Society. Although he had amassed an extensive insect collection by his mid-teens, the lack of an entomology department at the University of Trieste, combined with the catastrophic loss of his collection during the 1976 Friuli earthquake, prompted him to commit fully to botany at university instead. He was awarded his doctorate in 1977, with a thesis on the thorny cushion vegetation of high Mediterranean mountains. Shortly thereafter, he secured a scholarship to the University of Western Ontario, Canada, where Professor László Orlóci (1932–) suggested that he survey the vegetation along the Alaska Highway in the Yukon Territory. Confronted with survey plots that yielded few phanerogams but were rich in unfamiliar lichens, Nimis was obliged to collect and identify them, marking his formal entry into lichenology. Upon returning to Italy, he found that domestic lichenology had languished in obscurity for decades. Determined to revitalise the discipline, he communicated his ambitions to his mentor, Professor Sandro Pignatti (1930–2025). Pignatti immediately contacted Josef Poelt, who invited Nimis to visit him in Graz that very week; Poelt subsequently became a close lifelong friend and mentor. Nimis joined the Botanical Institute at the University of Trieste, where he was appointed full professor of botany in 1986, at the age of 33. He later served terms as Director of the Department of Biology and Dean of the School of Biology, before retiring as Senior Professor in 2023. His research spans lichen ecology, taxonomy, floristics, phytosociology, biomonitoring, and the biodeterioration of ancient stone monuments. During the 1990s, he turned his attention to Antarctic lichens, undertaking a critical revision of the heavily obscured taxa previously erected by Carroll Dodge. Nimis is renowned for his pioneering work in atmospheric biomonitoring and for his monumental *The Lichens of Italy: An Annotated Catalogue* (1993), which was revised and updated in 2016. This vast systematic dataset forms the backbone of ITALIC (the Information System on Italian Lichens), an online platform featuring web-based identification keys for more than 3,500 lichen taxa. As the founder and first president of the Italian Lichen Society (SLI) in 1987, Nimis successfully revived lichenology in his home country, whilst also publishing historical reviews of the discipline. Beyond lichenised fungi, his biogeographical publications on Boreal and Arctic zones adapted Eric Hultén's (1894–1981) "Method of Equiformal Progressive Areas" by seamlessly integrating modern multivariate analysis into the classification of distribution ranges. The IAL awarded him the Acharius Medal in 2014, following his tenures as the society's Editor (1996–2000) and President (2000–2004). The genera *Nimisia* Kärnefelt & A. Thell, *Nimisiostella* Calat., Barreno & O.E. Erikss., and *Nimisora* Pérez-Ort. *et al.*, alongside several species, are named after him. His herbarium is housed at TSB. Ref.: Hawksworth (2014); Kärnefelt (2009); Kärnefelt & al. (2012); Sohrabi (2026); Tretiach (2023).

Norman, Johannes Musaeus **(1823–1903)** – Born in Asker, Akershus, Norway, where his father served as a vicar, whilst his mother, Alette Kristine (née Musaeus) belonged to



the prominent Musæus family, a distinguished line of theologians, educators, and scholars. Johannes studied medicine in Christiania (Oslo) and sat his final exams in 1847. However, he initially failed on a technicality that provoked widespread public debate: he had written a portion of his examination papers in Norwegian rather than the compulsory Latin. Following a revision of the university rules, he was granted permission to practice and briefly served as a military doctor during the First Schleswig War. Disillusioned by the experience, he abandoned medicine to pursue his true passion for botany. Supported by a university fellowship, he travelled and studied widely between 1853 and 1855, notably conducting plant anatomy research under Professor Franz Unger (1800-1870) in Vienna. Upon his return, he worked as a research fellow at the Botanical Garden in Christiania, which was when he actively initiated his studies into lichens. Following the appointment of Fredrik Christian Schübeler (1815–1892) to the chair of botany, whose focus leaned almost exclusively towards cultivated plants, Norman resigned his post and turned to forestry. He qualified as a forester after studying at the academy in Aschaffenburg, Bayern, from 1858 to 1860. On returning to Norway, he was appointed head of the state forestry office for the northern region, stationed in Tromsø. He stepped down from this role in 1876 when he was awarded a permanent state stipend to dedicate his remaining years to his *magnum opus*, *Norges arktiske flora* ("The Arctic Flora of Norway"). Due to failing health, he moved south to Larvik in Vestfold, where his daughter lived, eventually passing away back in Christiania. Norman holds a significant place in the history of lichenology. In 1852, he proposed a novel lichen classification system based in part on ascospore morphology, anticipating the famous work of Abramo Massalongo by several months. While it is unlikely that Norman and Massalongo were in direct contact, both collaborated with Gustav Wilhelm Körber, a scientist for whom Norman held immense respect. In 1871, Norman published a more comprehensive iteration of his system, uniquely formatted as a map. He undertook a botanical expedition to northern Italy and the Tyrol in 1874 to collect obscure crustose lichens, including species of the semi-lichenised family *Moriolaceae* (Norman, 1876). Several of the genera he described remain accepted today, including *Dimelaena*, *Diploschistes*, *Mycoblastus*, *Staurothele*, and *Teloschistes*. His most celebrated field discovery, however, remains the rare and unusual *Tholurna dissimilis* (Norman) Norman. Following the dissolution of the union between Norway and Sweden in 1905, his extensive herbarium, which included both lichens and seed plants, was purchased by the Norwegian government; the main part is now at O, with duplicates in BG, TRH and TROM. Ref.: Holmboe (2023); Jørgensen (2007b); Wille (1903).



Norrlin, Johan Petter (1842–1917) – Born in Hollola, Tavastland, Finland, Norrlin loved exploring the natural environment and collecting plants even as a boy, subsequently beginning his studies in natural history at the University of Helsinki in 1862. He shared a deep bond with Edvard A. Vainio (then known by his birth name, Edvard Lang), mentoring him as a young schoolboy by introducing him to cryptogams and encouraging his budding interest in lichens; Norrlin later married Vainio's sister, Helena

Evelina Lang, in 1873. One of his primary university teachers was the eminent William Nylander, with whom he maintained a close, lifelong professional association, a rare feat given that the notoriously sensitive Nylander severed relations with almost all other contemporary botanists. Nylander famously remarked that, like a good father, he maintained steadfast ties with Norrlin, whom he viewed as "his child" in science. Together with Vainio, they produced a monumental lichen exsiccatae, *Herbarium Lichenum Fenniae* (1875–1882), which was later continued and expanded up to 802 specimens in a posthumous fascicle sequence completed in 1921 by K. Linkola, incorporating many rare and newly described taxa that Norrlin had discovered during his extensive excursions across Finland. This celebrated exsiccatae series remains the most significant direct contribution to lichenology made by this remarkably many-sided botanist. Norrlin studied at the Evois Forestry Institute from 1864 to 1866 but returned to Helsinki the following year to work as an assistant at the Botanical Museum. In 1879, he defended his doctoral thesis, whereupon he was appointed an extraordinary professor of botany at the university, a chair he held until 1903. Though primarily a pioneering plant geographer who championed the systematic description and characterisation of vegetation types, he also developed a famous taxonomic expertise in the flowering plant genus *Hieracium*. Nevertheless, his sharp-eyed fieldwork as a lichenologist yielded numerous fundamental discoveries. His herbarium is housed at H. Ref.: Cajander (1923); Elfving (1919).



Nowak, Janusz Stanisław **(1930–2004)** – Born in Chrzanów, southern Poland, where he completed his primary and secondary education. In 1951, he moved to Kraków, where he initially began working at the Jagiellonian University's Institute of Botany and the Botanical Garden. From 1952, he took over curation duties for the university's herbarium. Nowak graduated with a Master of Science degree in biology in 1957. Five years later, in 1962, he successfully defended his doctoral thesis on the lichens of the Kraków-Częstochowa Upland, an intensive study supervised by the prominent Polish lichenologist Józef Motyka. Nowak was appointed associate professor (docent) in 1975, and in 1997 he attained the rank of full professor at the Władysław Szafer Institute of Botany of the Polish Academy of Sciences. His definitive contribution to the field remains the monumental lichen flora of Poland, *Porosty (Lichenes)*, which he co-authored with Zygmunt Tobolewski in 1975. Beyond his homeland, he significantly advanced the regional understanding of Central European lichens, conducting extensive fieldwork in the transboundary mountain chains crossing Poland's borders. In addition to describing several newly discovered taxa, he compiled and distributed a highly valuable lichen exsiccatae series. His herbarium is housed at KRAM. Ref.: Bielczyk (2005); Köhler (2010).

Nylander, William (1822–1899) – Born in Oulu, Ostrobothnia, Finland, to Anders Nylander, a merchant and magistrate, and Margareta Magdalena (née Fahlander), who came from a religious family. Nylander was inspired to pursue natural history by his older brother, Fredrik (1820–1880), alongside three of their other brothers; indeed, his younger brother, Anders Edvin Nylander (1831–1890), published two notable lichenological papers



in 1857. William initially studied medicine at the University of Helsinki from 1839, earning his doctorate in 1847, whilst concurrently pursuing botany and zoology. Whilst practising as a physician in Helsinki hospitals, he published several short papers on entomology, most notably a landmark treatise on northern European ants in 1846. Dissatisfied with life in Finland, he travelled abroad and sought a fresh start in France, living primarily in Paris from 1852 to 1856, where he became an ardent Francophile. He also visited England in 1857 to revise W. J. Hooker's lichen collection at the Royal Botanic Gardens, Kew. Despite his later assertions of being self-educated, he had attended the lectures of Elias Fries in Uppsala in 1851, subsequently publishing a study on the lichens of the Stockholm region under his guidance. In France, Louis René Tulasne (1815–1885) served as his primary mentor, helping him establish himself within Parisian scientific circles, though Nylander later broke off relations with him, as he did with most of his contemporaries. Inherently incapable of enduring criticism, Nylander frequently launched vitriolic attacks against his colleagues, including Th. M. Fries and S. Schwendener, whose dual-nature theory of lichens he utterly detested. Nevertheless, Nylander was one of the most prolific and brilliant lichenologists of his era, insisting that no single character should be given total precedence in taxonomy, which led him to reject the Italian-Silesian school that relied almost exclusively on spore morphology. The execution of his holistic taxonomical principles was demonstrated in his seminal early work, *Essai d'une nouvelle classification des Lichens* (1854). Inspired by Tulasne, Nylander had reported on the use of iodine to produce distinct chemical reactions in the hymenia of ascomycetes and lichens in 1853, a technique he synthesised in 1866. He went on to pioneer the definitive use of chemical colour reagents, specifically potassium hydroxide (K) and calcium hypochlorite (C), on the lichen thallus, publishing these findings in the same year. In 1857, he was appointed the inaugural professor of botany at the University of Helsinki, returning to take up the post in the autumn of 1858. Finding the local academic environment and working conditions restrictive, he immediately requested a two-year sabbatical to return to Paris; once this expired, he reluctantly returned to Helsinki, only to relinquish his chair a few months later in 1863. He settled permanently in Paris, where he lived out his days in relative poverty and suffered from frequent bouts of depression, yet he produced the majority of his most influential literature during this exile. After years of bitter negotiations, he convinced the University of Helsinki in 1878 to grant him a lifetime pension in exchange for his massive herbarium, which they would inherit upon his death. He died lonely at his writing desk, leaving his intended masterpiece, *Synopsis methodica lichenum*, unfinished. Nylander was not a dedicated field collector; his early excursions in Finland and France yielded only modest material. Instead, the bulk of his work relied on the precise microscopic evaluation of exotic specimens sent to him from global expeditions or via the Paris herbarium. He routinely kept small fragments of the specimens he examined, neatly gluing them onto small menu cards which he indexed in boxes within his apartment; these now comprise the vastly rich Nylander collection at Helsinki (H-NYL), while better material remains in Paris at PC. When his practice of keeping fragments was discovered, he was temporarily barred from the Paris herbarium by its most influential cryptogamist, C. Montagne, with whom Nylander had a fierce falling out.

He did, however, leave behind devoted acolytes, most notably his foremost pupil, the Abbé A.-M. Hue. Nylander is estimated to have described over three thousand species. Though a sharp observer, he was a conservative scientist and a notorious "splitter" whose taxa have frequently been synonymised. He also established numerous enduring genera, including *Anema*, *Cladia*, *Endococcus*, *Euopsis*, *Hypogymnia*, *Lichinodium*, *Leioderma*, *Lithographa*, *Melaspilea*, *Normandina*, *Parmeliopsis*, *Peltula*, and *Pyrenopsis*. He distributed three distinct exsiccatae series: one from the Paris herbarium (1855), and two from his field travels to Mont-Dore (1855) and the Pyrenees (1872). His private herbarium in Helsinki was later meticulously curated by E. A. Vainio, a man Nylander had routinely vilified during his final, bitter years. Ref.: Ahti (1990); Arnold (1900b); Collander (1965); Hue (1899); Norrlin (1913); Vitikainen (2001, 2009).

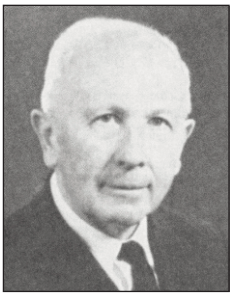


Obermayer, Walter (1960–) – Born in Friesach, Styria (Steiermark), Austria. After completing his secondary education locally, he studied at the commercial academy in Treibach-Althofen from 1975 to 1979. He subsequently read botany at the *Karl-Franzens-Universität Graz*, where he developed a deep interest in the cryptogamic flora of Central Europe and the high-altitude mountain ranges of Asia. He earned his doctorate under the supervision of Josef Poelt, a figure who heavily influenced his research direction. Obermayer began his professional academic career at the university's Institute of Plant Sciences, later becoming an Associate Professor, senior researcher, and a principal curator of the GZU Herbarium. While his broader scientific and pedagogical interests encompass the native vascular flora of Styria and the photographic documentation of alpine plants, his fundamental specialisation lies in the chemotaxonomy, systematics, and high-alpine ecology of lichenised Ascomycetes. He is recognised as a leading authority on the lichen flora of the greater Tibetan region and the Himalayas, a prominence established following his extensive field collections during major research ventures, notably the Sino-German Joint Expedition to Southeastern and Eastern Tibet in 1994. In addition to his regional monographs, he manages and distributes two highly regarded exsiccatae series, *Lichenotheca Graecensis* and *Dupla Graecensia Lichenum*, through which he has issued meticulously researched duplicates to major institutional herbaria worldwide. Over his career, he has collected and examined tens of thousands of specimens, contributing extensively to complex, chemistry-driven systematic studies of challenging genera such as *Arthrorhaphis*, *Cetrelia*, *Lethariella*, and *Lecanora*. His herbarium is housed at GZU. Ref.: *Pers. comm.*; Obermayer (2018).

Oberwinkler, Franz Christoph **(1939–2018)** – Born in Bad Reichenhall, Bayern, Germany, where his father was the technical manager of the local hospital. Although artistically gifted and fond of drawing and painting in his youth, Oberwinkler developed a keen interest in the natural sciences, particularly chemistry, during his early education. After graduating from secondary school in 1958, he began studying natural history at the University of München. There, he studied under Josef Poelt, who inspired him to specialise in biology and encouraged him to begin fieldwork on fungi in the forests near his birth-



place. In 1965, he defended his doctoral thesis on primitive Basidiomycetes, a fungal group that became his lifelong focus, though he maintained a broad interest in other plants. Between 1965 and 1967, Oberwinkler worked as an assistant to Karl Mägdefrau (1907- 1999) at the University of Tübingen. Over the following years, he held various academic and professional roles, including a posting with the FAO based in Venezuela (1968–1969). Upon returning to Europe, he worked at the University of München (1969–1974) before being appointed Professor of Special Botany and Mycology at the University of Tübingen in 1974, a position he held alongside the directorship of the university's botanical gardens. Oberwinkler revolutionised the study of basidiolichens by presenting a comprehensive revision of their known genera based on detailed electron microscopy observations. His pioneering research provided a sound structural and evolutionary basis for identifying these symbiotic associations. A leading global expert in his field, he described numerous new taxa and held several prominent national and international positions, notably serving as President of the International Mycological Association (IMA) from 1992 to 1996. His herbarium is housed at M and Tübingen. Ref.: Aoki (2018); Hertel (2018b).



Ochsner (-Christen)**, Fritz (1899–1976)** – Born in Winterthur, Switzerland. Following his early education locally and a period working in an engine factory during the First World War, he began his studies at the *Eidgenössische Technische Hochschule* (ETH) in Zürich in 1919. There, Heinrich Brockmann-Jerosch (1879–1939) suggested a thesis topic in phytosociology, and Ochsner went on to earn his degree in 1927 under the supervision of Professor Carl Schröter (1855–1939). Ochsner subsequently became a schoolteacher, working first in his native city and later in Muri. Although primarily a bryologist, he developed a keen interest in epiphytic cryptogamic communities through the activities of the Rübel Institute. While his contemporary Eduard Frey focused on saxicolous communities, Ochsner pioneered the characterisation and description of numerous corticolous lichen associations, many of which remain taxonomically accepted today. He served as the first president of the Swiss Bryological and Lichenological Society from 1956 to 1970. His herbarium is housed at Z and ZT. Ref.: Ammann (2006).

Oeder (von Oldenburg), Georg **Christian (1728–1791)** – Born in Ansbach, Margraviate of Brandenburg-Ansbach (now Bayern, Germany), he was the son of a theologian, whilst his mother belonged to the Hamberger family, a highly distinguished South German dynasty of theologians, physicians, and university scholars. Oeder studied medicine and botany at Göttingen under Albrecht von Haller, obtaining his doctoral degree in 1749, after which he practised as a physician in Schleswig. In 1752, on the recommendation of General Samuel von Schmettau (1684–1751) and his former mentor von Haller, the Danish Prime Minister, Count Johann Hartwig Ernst von Bernstorff (1712–1772), sum-



moned him to København on behalf of the King to take up a professorship in botany. However, the university authorities resisted the appointment, preferring Danish-born candidates. They took the opportunity to demand a habilitation examination; while procedurally correct, they intentionally appointed two notoriously pedantic academics as his opponents. Oeder lost his temper during the rigorous examination and failed the test. Consequently, the King bypassed the university by appointing him *professor extraordinarius* in 1754, charging him with the layout of the new royal botanical gardens at Amalienborg Castle. Oeder was subsequently commissioned to organise and execute the *Flora Danica*, a monumental botanical work based on his own proposed scheme that ultimately brought him international renown. In later years, his interests shifted towards political economy, a field in which he made significant contributions to the Danish-Norwegian Kingdom (which then encompassed Norway, Greenland, Iceland, and the duchies of Oldenburg and Schleswig-Holstein). His administrative competence earned him several government positions; in 1771, he was appointed governor of Oldenburg and ennobled as Edler von Oldenburg. Oeder's enduring legacy in lichenology stems from the numerous lichens he included in the *Flora Danica*. Although several of these were new to science, he failed to label them according to the Linnaean binomial nomenclature. Nonetheless, later authors honoured him by assigning Linnaean epithets derived from his name, such as *Rhizocarpon oederi*. The exact whereabouts of his personal herbarium remain unknown, but material collected during excursions for *Flora Danica* belonged to the crown and is preserved at C. Ref.: Christensen (1924–26); Jørgensen & Timdal (2012); von Halem (1793).



Øvstedal, Dag Olav (1944–) – Born in Haugesund, Rogaland, Norway, he was the son of two schoolteachers. He developed a strong fascination with the natural world during his boyhood and later studied biology at the University of Bergen, graduating with a *Cand. Real.* degree in 1969 with a thesis on the vegetation dynamics of western Norwegian heaths. It was during these postgraduate studies that he discovered a passion for lichens, a focus solidified after attending a specialised course taught by the eminent Swedish lichenologist Rolf Santesson. From 1971, Øvstedal held various academic appointments at the University of Bergen, a tenure interrupted by two stints as a lecturer in ecology at the University of Tromsø (1975 and 1982–1983). In 1983, he became the curator of the University of Bergen Botanical Garden, and he was appointed Professor of Botany there in 2002. Although initially focused on the lichen flora of western Norway, Øvstedal gradually shifted his attention towards polar ecosystems, becoming a global authority on Arctic and Antarctic lichens. His extensive Antarctic work was initiated by his 1983 taxonomic revision of cryptogams collected by the meteorologist Yngvar Gjessing (1938–2026) during the 1981 Norwegian Antarctic Research Expedition to Dronning Maud Land. Øvstedal subsequently authored two monumental regional monographs: a comprehensive lichen flora of Antarctica (with Ronald I. Lewis Smith, 2001) and a flora of Svalbard (with Arve Elvebakk, 2009). He

has described numerous new taxa, including the notable lichen genus *Bouvetiella*. His herbarium is housed at BG. Ref.*: Pers. comm.*

Ohlert, Otto Ludwig **Arnold (1816–1875)** – Born in Thiensdorf, Kingdom of Prussia (now Jezioro, Poland), where his father was a vicar. Despite a profound childhood interest in the natural environment, he followed his father's career path and studied theology at the University of Königsberg (now Kaliningrad), while simultaneously attending botanical lectures. After completing his studies, he served as a pastor in Labiau (now Labiensk, near Polessk) until 1860. He was then appointed director of the teacher training seminar in Angerburg, East Prussia (now Węgorzewo, Poland). It was during this period that he undertook his most intensive lichenological research, culminating in his landmark 1870 publication, *Zusammenstellung der Lichenen der Provinz Preussen* (Compilation of the Lichens of the Province of Prussia). His botanical endeavours were highly supported by Alexander Braun, the Professor of Botany in Berlin. By the time of this publication, Ohlert had been promoted to the rank of *Regierungs- und Schulrat* (Government and School Councillor) for regional schools and was stationed in Danzig (now Gdańsk, Poland). His private herbarium is recorded to be at the University of Kaliningrad, while the material he sent to B was destroyed during WWII. Ref.: Faltynowicz (2022).



Ohmura, Yoshihito (1970–) – Born in Hamamatsu, Shizuoka Prefecture, Japan, where his father ran a clock and optical shop. Following his local education, he trained as a teacher at Hiroshima University, graduating in 1995 and completing a master's degree there in 1997. It was during his undergraduate years, in 1991, that he first developed an interest in lichens. He subsequently pursued advanced studies in biology at the University of Tokyo, where he was awarded a doctorate in 2000 for a taxonomic thesis on the genus *Usnea* in Japan and Taiwan, supervised by Hiroyuki Kashiwadani. After holding a series of postdoctoral fellowships at various research institutions, Ohmura was appointed curator at the National Museum of Nature and Science in Tokyo in 2008. He has contributed extensive data on Japanese species to the present work and has described numerous new taxa. His herbarium is housed at TNS. Ref.*: Pers. comm.*



Olech, Maria Agata **(1941–)** – Born in Nowy Sącz, Lesser Poland, she developed a profound interest in the natural environment during her childhood, later choosing to study biology and earth sciences at the Jagiellonian University. Graduating with a master's degree in 1963, she immediately began her doctoral research at the university's Botanical Institute, focusing on the lichens of the Western Carpathians under the supervision of Jan Nowak. She earned her doctorate in 1968, subsequently joining the university staff as a research assistant. She was promoted to lecturer in 1971 and became a full professor of biology in 1992. Driven by a particular interest in arctic-alpine lichens, Olech was

frequently invited to join polar expeditions, gradually expanding her fieldwork across the region from the Kola Peninsula to Alaska. As Poland's foremost expert on Arctic lichens, she was invited by Professor Stanisław Rakusa-Suszczewski (1938–) to join a Polish expedition to Antarctica in 1986. Captivated by the polar landscape, she participated in numerous subsequent southern expeditions, distinguishing herself as the first Polish botanist to work on the continent. Olech went on to serve as the Head of the Polish Henryk Arctowski Antarctic Station (1991–1993 and 2005–2006), making her a pioneer among female polar base commanders. She also founded the Department of Polar Research and Documentation at the Jagiellonian University, directing it from 1996 to 2011. Alongside her academic and administrative roles, she curated the university's important cryptogamic herbarium (KRA). In addition to her extensive taxonomic papers describing more than 90 new taxa, she has published widely on anthropogenic impacts on terrestrial Antarctic ecosystems, notably researching heavy metal accumulation and environmental contaminants. Her herbarium is housed at KRA. Ref.: *Pers. comm.*; Köhler & Olech (2011).



Opiz, Philipp (Filip) Maximilian **(1787–1858)** – Born in Tschaslav, Bohemia, Austrian Empire (now Čáslav, Czech Republic), he was the son of a literary historian from a fiercely patriotic family. From early childhood, he showed a profound fascination with plants, a passion encouraged by a local physician, Anton Steinerer, who helped him collect and identify regional flora. Demonstrating remarkable precocity, Opiz published a *Calendarium florae* (an early phenological study) at just thirteen years old, followed by a *Flora Czaslaviensis* at sixteen. After completing his basic education, he initially worked alongside his father, moving to Prague in 1804. Financial constraints prevented him from entering university; however, between 1804 and 1806, he remained in Prague, networking with local botanists and joining their field excursions. To secure financial stability, Opiz entered the civil service in 1805 as a forestry administration clerk. He was transferred to Pardubice in 1808 and returned to Prague in 1814, eventually rising to the prestigious bureaucratic rank of *Kameral-Forstamtskonzipist* (Drafting Officer of the Imperial Forestry Registry). Although he possessed no formal academic training in botany, Opiz studied plants throughout his life, developing a particular expertise in cryptogams, including lichens. He collected extensively across Bohemia and was an early pioneer of regional lichenology. In 1819, Opiz established the *Pflanzentauschanstalt* (Plant Exchange Institution) in Prague, a highly influential non-profit exchange network which he directed until his death. Through this network, he distributed numerous exsiccatae sets, including the *Flora cryptogamica Boëmiae* (1818), which featured 30 prominent lichen specimens. He described several new species, most notably providing the basionym for the widespread reindeer lichen *Cladonia stellaris* (Opiz) Pouzar & Vězda. The vast bulk of his extensive herbarium is housed at PR, with duplicates at PRC. Ref.: Dworsky (1858); Halda (2008); Klášterský & al. (1958); Nádvorník (1946); Šebek (1989).

Orange, Alan (1955–2023) – Born in Leeds, England, UK, his family soon relocated to Longhope in the Forest of Dean, Gloucestershire, where his rural surroundings stimu-



lated a lifelong devotion to natural history and botanical exploration. He demonstrated an early talent as an artist, producing highly detailed botanical drawings and sketches that he would continue to refine throughout his career. In February 1986, he was appointed Curator of Lichens at Amgueddfa Cymru – National Museum Wales in Cardiff, a post he held with distinction for nearly twenty-eight years until transitioning to Honorary Research Fellow in 2014. Modest and unassuming, Orange quietly established a formidable global reputation as one of the foremost British lichenologists of modern times. He possessed an unrivalled expertise in sterile crusts, aquatic lichens, and the notoriously challenging family *Verrucariaceae*. Operating with meticulous precision, he seamlessly unified classical morphological observation, microchemistry, and cutting-edge molecular phylogenetics to reconstruct difficult taxonomic groupings. His monumental surveys of freshwater and upland saxicolous communities redefined ecological baselines across the British Isles, while his extensive field expeditions yielded numerous significant discoveries, including the description of *Porina rivalis* and multiple parasitic freshwater species. Beyond the laboratory, he served as a prolific first author for major family accounts within the *Lichens of Great Britain and Ireland* series. Following his formal retirement from curation, he continued active field research as a self-employed biological surveyor and published the acclaimed monograph *Lichen Flora of the Falkland Islands* (2016). His hebarium is at NMW. Ref.: Wolseley & al. (2023).

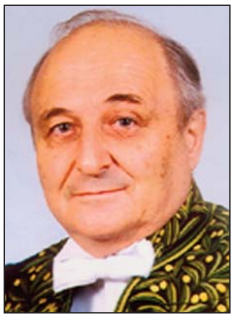


Osorio, Héctor Saúl **(1928–2016)** – Born in Montevideo, Uruguay, where he studied medicine and later worked professionally as a paediatrician and bacteriologist. Driven by a lifelong passion for the natural sciences, he became associated with the *Museo Nacional de Historia Natural* in Montevideo in 1944. He served as the museum's Deputy Director from 1971 to 1985, and as its Director from 1985 until his retirement in 1997, after which he continued his research there as Director Emeritus. Concurrently, from 1974 to 1985, he lectured in botany at the *Universidad de la República*. Osorio dedicated decades of prolific field research to the lichen flora of Uruguay and adjacent regions of Argentina and southern Brazil. He published extensively on regional biodiversity discoveries, most notably authoring a monumental, multi-decade series running to over thirty parts titled *Contribución a la flora liquénica del Uruguay*, which culminated in a definitive preliminary catalogue of the country's known lichens. He described several new taxa, and six species have been named in his honour. His herbarium is housed at MVM. Ref.*: Pers. comm*.; Marcelli & Seaward (1998).

Oxner, Alfred Mycolayovych **(1898–1973)** – Born in Elisavetgrad (subsequently Kirovohrad), Russian Empire (now Kropyvnytskyi, Ukraine) to Nicolay and Wilgelmine (née Schwartz). Both of his parents were of German noble descent, an ancestry Oxner was forced to conceal due to his highly fraught relationship with the ruling communist regime. He studied natural history at Kyiv University between 1917 and 1919, resuming his studies



from 1922 to 1924 following a period of university reorganisation. In 1922, he joined the herbarium of the Academy of Sciences in Kyiv, where the Academician Alexander V. Fomin (1869–1935) encouraged him to work across multiple plant groups. It was during this formative period that Oxner published his first lichenological papers. In 1931, Oxner was appointed head of the Department of Spore Plants at the Academy's Institute of Botany. In recognition of his substantial early research, he was awarded the degree of Candidate of Biological Sciences without a formal defence in 1935. He published an important handbook of Ukrainian lichens in 1937, which successfully revived regional interest in the discipline. This success, however, sparked a lifelong professional rivalry with Professor V. Savicz in Leningrad, who harboured competing ambitions for a centralised, all-Union Soviet lichen flora. The Second World War severely disrupted Oxner's research. He initially fled to Kirov to work as a schoolteacher before securing a senior research position at the university in Ufa. During this displacement, he completed his doctoral thesis, a biogeographical analysis of Arctic lichens, their history, and origins. Although he compiled a comprehensive manual on the lichens of the Soviet Arctic during his time in the north, political complications prevented its publication. In 1943, Oxner was awarded the title of professor. Returning to Kyiv, he dedicated the remainder of his career to the Institute of Botany, directing the Department of Lower Plants until his retirement in 1968, when he was named an Honoured Scientist of Ukraine. His principal research focused on the Ukrainian flora, culminating in the multi-volume *Lichen Flora of Ukraine* (1956–2010). Because the Soviet administration routinely discouraged regional scientific initiatives, parts of this flora remained incomplete at his death and were published posthumously from his manuscripts. His successor, Oleg Blum, published several sections under his own name, causing substantial professional controversy. However, Blum's successor, Sergij Y. Kondratyuk, successfully published the remaining volumes, ensuring they were properly attributed to Oxner. Oxner described numerous new taxa. The genera *Oxneria* S.Y. Kondr. & Kärnefelt and *Oxneriaria* S.Y. Kondr. & Lőkös are named after him. His herbarium is housed at KW. Ref.: Blum (1974); Kondratyuk (1998, 2000).



Ozenda, Paul (1920–2019) – Born in Nice, Provence, France. He developed a deep affinity for the natural world and mountaineering during his childhood, largely inspired by his parents, who were both native to the Alpes-Maritimes region. After completing his early education locally, he gained admission to the prestigious *École Normale Supérieure* in Paris in 1940. He graduated in natural sciences in 1943, subsequently working as a laboratory assistant with a primary research focus on plant anatomy. In 1948, he earned his doctorate for a structural and anatomical thesis on primitive, apocarpic dicotyledons, a foundational evolutionary theme to which he frequently returned throughout his career. Between 1949 and 1954, Ozenda served as a professor at the University of Algiers, where he became a leading authority on desert ecology and published a definitive flora of

the Sahara. Concurrently, he investigated the lichen biota of North Africa, frequently co-authoring papers with his colleagues Louis Faurel (1907–1973) and Georges Schotter (1922–1963). Having already collected and published on the lichens of the Alpes-Maritimes during his youth, his regional research intensified following his appointment as Professor of Botany at the University of Grenoble in 1954. At Grenoble, Ozenda established a highly productive collaborative partnership with Lucie Kofler. He also formed a close professional friendship with Georges Clauzade; together, they produced the monumental, richly illustrated handbook *Les Lichens: Étude biologique et flore illustrée* (1970), which featured comprehensive identification keys and became a cornerstone text for French lichenology. His herbarium is housed at GRM. Ref.: Asta (2020).



Park, Yun Sil (c. 1960–) – Born in South Korea. In the mid-1980s, she moved to the United States to pursue advanced studies in botany at Duke University, North Carolina, where she became a student of William Louis and Chicita F. Culberson. She participated closely in their research on the genus *Cladonia*, earning her Master's degree in 1984. She continued her doctoral track at Duke, culminating in a 1988 PhD dissertation titled *The Macrolichen Flora of South Korea and a Phylogenetic Analysis of the Genus Myelochroa*. Her work formed the basis of her landmark 1990 monograph, *The Macrolichen Flora of South Korea*, which was the first comprehensive treatment of its kind for the country. Through her subsequent collaboration with Mason E. Hale at the Smithsonian Institution, Park actively participated in the taxonomic restructuring of several genera within the *Parmeliaceae*, notably co-authoring the transfer of several species to the genus *Hypotrachyna*. Following her collaborative period with Hale, she chose to leave the field of lichenology. She described several new taxa. Her herbarium is housed at DUKE. Ref.: Registrar, Duke University.

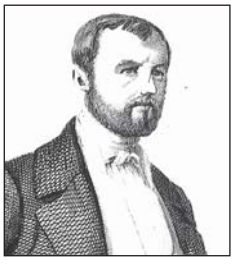


Patwardhan, Parshuram Gangadhar **(1935–2006)** – Born in Amalner, Maharashtra, India. Following his undergraduate studies, he relocated to Pune (Poona) for postgraduate work and took up a position as a college lecturer. Concurrently, he undertook doctoral research in mycology under the guidance of the renowned plant pathologist Madhav Narayan Kamat (1897–1880) at the Agharkar Research Institute (ARI). Upon completing his doctorate, he was invited to join the ARI staff as a research assistant in 1963. He spent his entire career at the institute, eventually rising to become Head of the Department of Mycology and serving as Officiating Director for a year. Due to a severe brain tumour, he was forced to take early retirement in 1995. From the 1970s onwards, Patwardhan established and championed lichenology as a core research theme at the institute. He maintained strong international academic ties, notably collaborating closely with the prominent American lichenologist Mason E. Hale. He worked alongside Hale as a research associate at the Smithsonian Institution during the 1970s. Patwardhan made seminal contributions to the lichenology of the Indian subcontinent, focusing extensively on the rich biotas of the Western Ghats and the Andaman and

Nicobar Islands. He spearheaded critical taxonomic revisions of several notoriously difficult and poorly understood crustose genera within the *Astrotheliaceae*, *Graphidaceae*, and *Thelotremataceae*, describing several species. His herbarium is housed at AMH. Ref.: Makhija (2006) and *pers. comm.*



Paulson, Robert (1857–1935) – Born in Hendon, Middlesex, England, UK, he spent much of his childhood in Ore, near Hastings, Sussex, where he developed a lifelong fascination with the natural world. Professionally, Paulson trained as a schoolmaster, specialising in natural history and later lecturing at Birkbeck College. In 1899, he joined the Essex Field Club, an institution he would heavily support, eventually serving as its President from 1920 to 1922; at the conclusion of his tenure in 1922, he delivered his prominent presidential address, titled *Ten Years of Progress in Lichenology in Britain*. Paulson's initial formal foray into lichenology dates to 1911, coinciding with the publication of the second volume of James Crombie's *A Monograph of the British Lichens*, which had been completed by Annie Lorrain Smith. Influenced by the pioneering ecological movements in British botany around the turn of the century, Paulson approached lichens primarily through the lens of fungal ecology, maintaining a close collaborative relationship with Annie L. Smith at the Natural History Museum, London, who initially assisted him in his research and subsequently entrusted him with the determination of foreign collections from regions as diverse as the Arctic and New Guinea. While residing in Pinner, Middlesex, Paulson co-authored his most influential work: a comprehensive, decade-long survey of the lichen flora of Epping Forest (1911–1920), written in partnership with fellow educator Henry Herbert Knight (1862–1944). A meticulous field worker and microscopist, Paulson was elected a Fellow of the Linnean Society in 1913 and was also a Fellow of the Royal Microscopical Society. He described a few taxa. His herbarium is housed at BM. Ref.: Ainsworth (1976); Cotton (1935); Hawksworth & Seaward (1977).



Payer, Jean Baptiste (1818–1860) – Born in Asfeld, Ardennes, France, he completed his secondary education in Reims (1830–1836) before moving to Paris, where he initially enrolled to study law. However, his true passion lay in botany, and he quickly established close relationships with Charles-François Brisseau de Mirbel (1776–1854) and Auguste de Saint-Hilaire (1779–1849), two of the most influential French botanists of the era. Bypassing a legal career, Payer earned his *Docteur ès sciences* and his *Agrégation* in 1840, followed by a Doctorate in Medicine in 1845. He held early academic positions in geology and mineralogy at Rennes before being appointed to the *École Normale Supérieure* and the Sorbonne in Paris. In 1848, Payer enthusiastically entered the political arena following the French Revolution, serving as *Chef de Cabinet* to the Minister of Foreign Affairs, Alphonse de Lamartine (1790–1869), and being elected as a Deputy to the National Assembly for the Ardennes department. Following the coup d'état of December 1851, he

withdrew from politics to return full-time to academia, and in 1852 he was officially appointed as Saint-Hilaire's successor to the prestigious Chair of Plant Organography at the Faculty of Sciences in Paris. Payer made substantial contributions to evolutionary plant taxonomy, editing a revised scheme based primarily on Jussieu's natural system. His notable textbook, *Botanique Cryptogamique* (1850), represents an important mid-century reference point; in this work, he fiercely opposed the merging of groups, explicitly defending the status of lichens as a completely independent class based on macro-morphological thallus characters. Because his systematic arrangement relied on these gross physical traits rather than internal structures, his system was later heavily modified by his successor Henri Ernest Baillon (1837-1885), who introduced micro-anatomical spore and ascus developments to the text. He was elected to the French Academy of Sciences in 1854. His herbarium is housed at PC. Ref.: Schlechtendal (1860), Tourlet (1861).



Persoon, Christiaan Hendrik **('Chrétien Henry') (1761–1836)** – Born in Stellenbosch, within the Dutch Cape Colony (now South Africa), to a mother of Dutch colonial descent who died shortly after his birth. In 1775, his Pomeranian-born father, a tailor, sent the young Persoon to Europe to pursue his education. He initially undertook basic education and classical studies at the gymnasium in Lingen an der Ems (then a Prussian territory, now in Germany). In 1783, he commenced theological studies at the University of Halle, but abandoned this track in 1784 to study medicine, a pursuit he continued at the University of Leiden in 1786 and subsequently at the University of Göttingen from 1787 to 1788 under Georg Franz Hoffmann, a mentor with whom he had a notoriously fraught relationship. Persoon eventually graduated with a doctoral degree from the *Deutsche Akademie der Naturforscher* in Erlangen in 1799, where he was highly influenced and encouraged by Johann Christian Daniel von Schreber. During his years in Germany, Persoon published several groundbreaking mycological papers, culminating in his famous *Icones Pictae Specierum Rariorum Fungorum* (1798–1800). Unable to secure a stable institutional post, he travelled through Germany and Switzerland before settling permanently in Paris in 1802. There, he lived an impoverished, solitary, yet incredibly industrious life dedicated entirely to un-salaried research. A masterful microscopist and sharp observer, Persoon fundamentally reformed fungal taxonomy. He was among the first to systematically decouple fungi from the traditional plant kingdom based on structural anatomy and microscopical characters, establishing the groundwork for mycology as an independent discipline. He also observed and pointed out the close structural affinities between the fruiting bodies of certain lichens and free-living fungi. His contribution to lichenology was profound; he described several prominent genera, including *Calicium* and *Sphaerophorus*, alongside numerous species. He maintained an active correspondence with Erik Acharius, deeply influencing the latter's landmark 1803 systematic classification. In Paris, he mentored A. L. A. Fée, inspiring Fée's use of ascospore characters to delineate lichen genera. Persoon also examined and revised vast amounts of exotic tropical material brought back by French global expeditions, greatly expanding the knowledge of tropical lichen biotas. In 1825, the Dutch government granted him a modest state pension

in exchange for his priceless personal herbarium, which is now preserved at L, although the expedition material he revised is often found in PC. Ref.: Fée (1891); Schmid (1933); Zeeuw (1939).



Petit-Thouars du**, Louis** Marie Aubert **(1758–1831)** – Born at the Château de Boumois near Saumur, in the historic province of Anjou, France. As was customary for sons of the aristocracy, he received a military education at the *École Royale Militaire de La Flèche*. In 1792, he embarked on an Atlantic voyage aboard *Le Diligent*, a vessel commanded by his brother Aristide to search for the lost explorer La Pérouse. During this journey, he visited Tristan da Cunha in January 1793, remaining for three days to conduct the first-ever scientific exploration and botanical collection on that isolated island. Following the subsequent capture of his brother's ship by Portuguese authorities, Petit-Thouars made his way to Mauritius (then *Isle de France*), where he spent the next nine years effectively isolated from the horrors of the French Revolution. There, he worked extensively at the famous Pamplemousses Botanic Garden, a tenure interrupted by a six-month expedition to Madagascar between 1795 and 1796, where he collected botanical material under challenging conditions. During his time in the Indian Ocean, he collaborated with Jean-Baptiste Bory de Saint-Vincent, and upon returning to Europe, he maintained close ties with prominent military botanists of the era, including Dominique Delise and Léon Dufour. He was elected a member of the *Académie des Sciences* in 1812. Upon his return to Paris in 1802, Petit-Thouars brought back a vast collection of roughly 2,000 specimens, which are now housed at the PC. This collection included numerous pioneering lichen specimens, greatly expanding European knowledge of the cryptogamic flora of the Mascarene Islands and Madagascar. Ref.: Allorge & Ikor (2003); Flourens (1840).

Pissarzhewski, Viktor Dmitrievich **(1876–1903)** – Born in Chisinau (Kishinev), within the Bessarabia Governorate of the Russian Empire (now the capital of the Republic of Moldova), he was born into an influential noble family of legal professionals. Following his early education locally, he enrolled in 1894 to study natural history at the Imperial Moscva University, where he excelled academically and integrated into the research circle surrounding the eminent plant anatomist Professor Ivan Gorozhankin (1848–1904). At Moscva, Pissarzhewski's thesis was supervised by the young lecturer Mikhail Ilyich Golenkin (1864–1941), who assigned him the highly ambitious task of compiling a comprehensive literature index of the country's known species, a project far too vast for an undergraduate student. This research resulted in his landmark 1898 publication, *Aufzählung der bisher in Russland aufgefundenen Flechten*, which stands as the first pan-Russian lichen checklist. Golenkin immediately published this student thesis in the prestigious *Bulletin de la Société Impériale des Naturalistes de Moscou*. Although Pissarzhewski graduated that same year with high honours, his checklist faced severe professional backlash. Critics published two independent, scathing reviews, most notably by the influential St Petersburg lichenologist Alexander Elenkin and the botanist Franciszek Błoński, chastising the young author for his weak knowledge of lichen literature, multiple

overlapping synonyms, and for omitting numerous regional records from older texts and peripheral territories. Deeply discouraged by this hostile academic reception, Pissarzhewski abandoned botany entirely, returned to Chisinau, and entered his family's legal practice as a notary candidate. In April 1903, he became actively involved in the notorious and brutal Kishinev pogrom. Ostracised and overwhelmed by public disgrace following the atrocities, he committed suicide later that year. He described no new taxa during his brief botanical career. Ref.: Andreev (2025).



Pišut, Ivan (1935–2017) – Born in Bratislava, Czechoslovak Republic (now Slovakia). After completing his early education locally, he studied biology at the Faculty of Natural Sciences of Comenius University in Bratislava, graduating in 1958. During his university years, he was heavily mentored and inspired by the prominent Prague-based lichenologist Zdeněk Černohorský, who directed his academic focus toward lichen taxonomy and ecology. In 1959, Pišút was appointed curator of botany at the Slovak National Museum in Bratislava, where he served for over three decades, eventually becoming the Head of the Natural History Museum. In 1993, he moved to the Institute of Botany of the Slovak Academy of Sciences, where he remained active well past his formal retirement. Pišút dedicated his career to pioneering the study of the Slovak lichen biota, focusing deeply on its biogeography, ecology, and conservation status under increasing industrialisation. He also undertook extensive field expeditions across the Balkans and Turkey, publishing numerous floristic and distribution papers on those territories. Between 1964 and 1983, he compiled and distributed a major regional exsiccatae series, *Lichenes Slovakiae Exsiccati*. He described several new taxa. The genera *Pisutiella* S.Y. Kondr. *et al.* and *Ivanpisutia* S.Y. Kondr. *et al.*, alongside many species, were named in his honour. His herbarium is housed at BRA. Ref.: Guttová & al. (2015).



Piterāns, Alfons (1930–2024) – Born in the village of Istalsna, Cibla Parish, in the Ludza district of Latvia, he completed his secondary education locally and went on to study natural history at the Latvian State Pedagogical Institute in Riga, graduating in 1954. He remained at the institute as a laboratory assistant in the Department of Botany, where his tutor, Emilija Ozoliņa (1895–1975), encouraged him to specialise in lichens—a highly neglected organismal group in the country at the time. In 1958, the Pedagogical Institute merged with the University of Latvia (then Latvia State University), where Piterāns transferred to the Faculty of Biology. He undertook his postgraduate research under the guidance of the eminent Soviet lichenologist V. Savicz in Leningrad, successfully defending his Candidate of Sciences dissertation on the lichen flora of the Daugava River valley in 1965. He was promoted to senior lecturer in 1968 and was elected as a university docent in 1970. In 1985, he defended his advanced doctoral dissertation on the lichen flora of the Daugava River valley at the Komarov Botanical Institute in Leningrad, subsequently attaining the rank of

Full Professor at the University of Latvia. Piterāns dedicated his multi-decade career to establishing systematic lichenology as an independent academic discipline in Latvia, mentoring generations of students and publishing multiple textbooks on cryptogams. In 1981, he published the first definitive synopsis of Latvian lichens, an influential work that went through multiple updated iterations, while also contributing extensive floristic data to the broader *Lichen Flora of the USSR*. A passionate conservationist, Piterāns spearheaded regional cryptogamic preservation initiatives, contributed the definitive lichen section to the *Red Data Book of Latvia* (2001), and was officially honoured as a State Scientist Emeritus in 2001. His large herbarium is housed at RIG. Ref.: Latvian Wikipedia.



Plinius Gaius Secundus (the elder) (23–79) – Born in Novum Comum, Roman Empire (now Como, Lombardy, Italy), into a wealthy and influential equestrian family that secured him an exceptional education in rhetoric and public speaking in Rome. Rather than pursuing a standard senatorial path, he entered the imperial administration, serving with distinction as a military cavalry commander in Germany (*Germania*) during the 40s and 50s CE. Following a brief period practicing as a lawyer in Rome under Claudius, he rose to high prominence under the Flavian emperors, serving as an imperial procurator in several western provinces, including Spain and Gaul, before being appointed commander of the Roman imperial fleet at Misenum. Pliny's enduring scientific legacy rests on his monumental *Naturalis Historia*, a 37-volume encyclopaedia designed to encompass the entirety of ancient human knowledge regarding the physical world. In this work, Pliny formally introduced the Greek term λειχήν into the Latin language as *lichen*. However, in accordance with the older traditions of Dioscorides, he utilised the term primarily to describe creeping, encrusting plants thought to cure skin diseases; these organisms are widely understood by modern historians to have been thalloid liverworts (hepatics) rather than true lichens. He died during the eruption of Mount Vesuvius while attempting to rescue citizens at Stabiae. Ref.: Dannemann (1912); Kytzler (1987).



Plitt, Charles Christian **(1869–1933)** – Born in Baltimore, Maryland, USA, he received his early education at local public schools, where he first developed an interest in botany. In 1891, he graduated from the Maryland College of Pharmacy, later undertaking supplementary studies in biology at John Hopkins University. Plitt chose education as his primary profession, spending the final twenty years of his life teaching botany and general science at Baltimore City College. Concurrently, he maintained an academic career at the University of Maryland School of Pharmacy (formerly the Maryland College of Pharmacy), where he was promoted to Full Professor and Head of the Department of *Materia Medica* in 1927, teaching botanical histology and pharmacognosy. Plitt began formal research into lichens around 1909, publishing a preliminary note on the lichen biota in the vicinity of Baltimore with taxonomic assistance from G. K. Merrill. His research horizons eventually

expanded into tropical ecosystems; following field expeditions to the West Indies, he authored several papers on the lichens of the region, culminating in a major posthumous monograph on the lichens of Jamaica. Plitt also provided vital taxonomic determinations for the Chinese botanist Chien Sung-shu (1883–1965) for his landmark 1932 ecological study of a mountain ridge in China, which marked the first rigorous attempt to evaluate Chinese lichens within their broader plant communities. Plitt's primary scientific contributions were firmly rooted in lichen ecology and biogeography, making him a true pioneer of the discipline in the United States. By the time of his death, his massive personal collection, documented across a meticulous series of field journals titled *Tramps,* stood as one of the largest private cryptogamic herbaria in the world. He described very few new taxa, focusing instead on environmental associations and community structures. His herbarium is housed at BPI and US. Ref.: Jennings (1934).

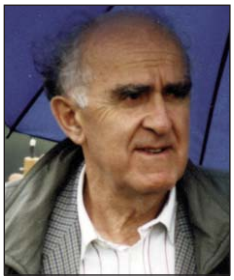


Plot, Robert (1640–1696) – Born in Sutton Baron, Borden, Kent, England, UK, he completed his early education at the Wye Free School and went on to enter the University of Oxford, graduating with an MA in 1664. He subsequently became a tutor at Magdalen Hall, Oxford, where he served as Dean and Vice-Principal for several years, and in 1671 he earned his Doctor of Civil Law (DCL) degree, after which he migrated to University College. In 1682, he was appointed Secretary of the Royal Society, and the following year he became the first Keeper of the newly established Ashmolean Museum, as well as Oxford's first Professor of Chemistry. Plot possessed a profound passion for natural history and antiquities, and in 1674 he commenced a systematic regional survey of Oxfordshire under the influential patronage of John Fell (1625-1686), the Bishop of Oxford, and Ralph Bathurst, the university's Vice-Chancellor. In 1677, the same year he was elected a Fellow of the Royal Society, he published his landmark volume, *The Natural History of Oxford-shire*. He followed this success in 1686 with a companion volume, *The Natural History of Stafford-shire*. Plot's place in early cryptogamic history is secured by his inclusion of a detailed illustration of the cup lichen *Cladonia coccifera* in his Staffordshire volume. While noting that the country folk commonly referred to the organism as "chalice moss", Plot remarked that, because it produced neither flowers nor seeds, "*I rather chuse to reckon it among the Fungus's*." Although he worked at Oxford, his historical plant specimens were eventually absorbed into the collection of Sir Hans Sloane and his herbarium is housed within the Sloane Herbarium at BM. Ref.: Hawksworth & Seaward (1977); Turner (2004).



Plukenet, Leonard (1642–1706) – Born in Westminster, London, England, UK, he was educated at Westminster School and matriculated at Hart Hall, Oxford, in 1662, though he left the university without formally taking a degree. Despite his name not appearing in the registries of English medical graduates, he established a highly prosperous practice as a physician in London and routinely styled himself an MD. Driven by an intense passion for botany, he cultivated a small private botanical garden, dedicating

much of his spare time to accumulating exotic plants and cryptogams. His botanical expertise earned him an appointment as Royal Professor of Botany and supervisor to Queen Mary II (1662–1694), charging him with the curation of her extensive collection of rare botanical specimens at Hampton Court Palace. He was an active member of the influential Temple Coffee House Botanical Club, regularly collaborating with leading contemporary naturalists including John Ray, William Sherard (1659-1728), and Samuel Doody. Although Plukenet's primary focus was indexing global botanical rarities rather than constructing a unified taxonomy, his work proved vital to early lichenology. In his landmark illustrated volumes, notably the *Phytographia* (1691–1696), he recorded and engraved several lichens for the first time; among these was a vibrant, orange Macaronesian macrolichen, later recognised as *Lethariella canariensis*, which he captured from specimens in his collection. Plukenet's expansive personal herbarium provided critical pre-Linnaean material for J. J. Dillenius's *Historia Muscorum* (1741). Through the intermediate references of Dillenius, Plukenet's specimens were ultimately cited by Carl Linnaeus in his *Species Plantarum* (1753), despite Linnaeus never personally examining the original vouchers. Following Plukenet's death, his vast herbarium was purchased by Sir Hans Sloane (1660–1753) and is now preserved within the Sloane Herbarium at BM. Ref.: Dandy (1958), Hawksworth & Seaward (1977).



Poelt, Josef (1924–1995) – Born in Pöcking, near Starnberg, Bayern, Germany, where his family had owned the *Gasthof zur Post* inn for generations, a heritage of which he was deeply proud. As a boy, he suffered severely from asthma, rendering him unfit for manual labour. The local priest initially suggested theological studies, which he commenced at a humanistic gymnasium in München. However, the village's new priest, Dr Vincenz Hamp (1907–1991), himself a highly accomplished botanist, soon recognised that the boy's true devotion lay in the study of natural creation rather than theology, and actively encouraged his botanical inclinations. Poelt's education was interrupted by the Second World War. Placed in an intelligence unit rather than combat forces, he fortunately avoided the Eastern Front and was eventually stationed in Bornholm, where he developed a deep appreciation for the Scandinavian landscape and lifestyle. Near the end of the war, the botanist Hermann Paul (1876–1964) lost his home in a bombing raid over München and was temporarily hosted at the Poelt family inn in Pöcking. Upon Josef's return from the war, Paul introduced him to the world of cryptogamic botany. In 1946, Poelt officially began his studies in natural history at the University of München, graduating in 1950 with a doctoral thesis on the bryophyte vegetation of the Starnberger See under Professor Karl Suessenguth (1893–1555). Shortly thereafter, he was employed as an assistant at the München Botanical Garden, transferring in 1954 to the *Botanische Staatssammlung München*, where he eventually rose to the rank of *Oberkonservator* (Senior Curator). He drew immense inspiration from the herbarium's rich lichen collections, particularly those of Ferdinand Arnold, whom he considered his spiritual tutor and primary scientific role model. A research stay in Uppsala during the 1950s, upon invitation from Du Rietz, who was keen on reestablishing contact with German botany after WWII, marked a major turning point in his career; he

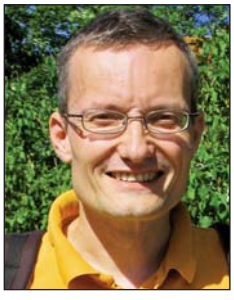
befriended the leading Scandinavian lichenologists of the era and mastered the Swedish language. For his habilitation, he undertook a sweeping geographic revision of the lobate species of the genus *Lecanora* across the Holarctic. Throughout his career, Poelt maintained a broad interest in mosses, fungi, and lichens alike. In 1965, he was appointed Professor of Systematic Botany at the *Freie Universität Berlin*, a setting in which he felt constrained. Consequently, in 1972, he accepted the Chair of Systematic Botany at the University of Graz (*Karl-Franzens-Universität*) in Austria, where he remained until his death. Poelt single-handedly revived Central European lichenology in the post-war era with his countless monumental contributions. He focused intensely on the flora of the Alps, frequently scaling the most challenging peaks in search of rare or little-understood crustose species, which he revised continuously. He famously used to say that a day spent without studying a single lichen under the microscope was a wasted one. He certainly did not waste many days, maintaining an extraordinary research productivity in spite of chronic health problems and severe personal trauma; following the premature death of his wife, Christa, he was left with the sole responsibility of raising their two small daughters. His scientific influence rapidly expanded globally. In 1962, his pioneering expeditions to the Himalayas resulted in a substantial, definitive series of revisions of the lichen flora of Khumbu Himal, the first large-scale treatment of its kind for the region. His most influential publication, however, was the *Bestimmungsschlüssel europäischer Flechten* (1969), a cornerstone text later expanded with supplements (1977, 1981) co-authored with his close friend Antonín Vězda. Poelt also pioneered conceptual advancements in the discipline; most notably, he introduced the concept of *Artenpaare* (species pairs) to describe morphologically identical fertile and sterile (sorediate or isidiate) evolutionary counterparts. Beyond his immense publication record, he was an extraordinarily inspiring mentor to a brilliant generation of younger lichenologists, including Hannes Hertel, Josef Hafellner, Helmut Mayrhofer and Pier Luigi Nimis. In recognition of his unmatched lifetime achievements, he was awarded the Acharius Medal by the IAL in 1992, and was uniquely honoured in 1994 with the society's first and only golden Acharius Medal. Numerous taxa were named in his honour, including the genera *Josefpoeltia*, *Opeltia*, *Poeltinula*, and *Topelia*. Poelt himself described countless new taxa and established several highly important genera, including *Bryonora*, *Squamarina*, *Phaeorhiza*, and *Physconia*. He issued an exsiccatae series of alpine lichens and his herbarium is housed at GZU and M. Ref.: Bresinski (1995), Hertel & Oberwinkler (1996), Hertel & al. (1996); Hertel (2018a); Mayrhofer & al. (1996).

Popnikolov (Popov Nikolov; published as **pop-Nikoloff), Atanas (1883–196?)** – Born in the Kostur region of Macedonia (then part of the Ottoman Empire, now Kastoria, Greece), where his father served as an Orthodox priest (*pope*), an heritage reflected in his surname. Following his early education, he relocated to Sofia to study natural history at Sofia University, graduating in 1914. In 1923, he was appointed as a research assistant in the university herbarium and was later promoted to the rank of *Kustos* (curator). Tasked with managing the university's cryptogamic collections, Popnikolov was briefly assisted between 1934 and 1935 by the visiting Romanian lichenologist Paul Cretzoiu. This collaboration sparked Popnikolov's lifelong interest in the group, prompting him to collect and publish widely on regional flora. For several decades, he worked meticulously on a com-

prehensive national flora; although accepted for publication in 1942, its production was completely halted by the outbreak of the Second World War. Following the war, the Bulgarian botanist B. Zhelezova systematically revised, expanded, and updated Popnikolov's original, unpublished manuscript to incorporate modern regional data. The finalised volume was posthumously published in 1964 as *Flora na Balgariya: Lishei* (*Lichen Flora of Bulgaria*), providing the country with its first unified cryptogamic handbook. Popnikolov described several new regional infraspecific taxa. His collections are at SOM. Ref.: Mayrhofer & al. (2005).

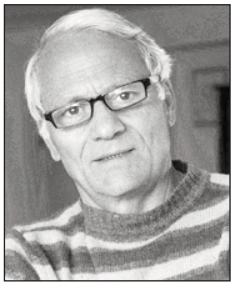


Presl, Carol (Karel) Bořivoj **(1794–1852)** – Born in Prague (Prag), Kingdom of Bohemia, within the Habsburg Monarchy (now Praha, Czech Republic), he was the son of a needle-maker, whilst his mother came from the Czech Straka family belonging to the urban middle-class of Prague. He was educated in medicine at the Charles-Ferdinand University in Prague, earning his doctoral degree in 1818 with a pioneering dissertation on the grass family (*Poaceae*), which he had personally collected during an extensive botanical expedition to Sicily in 1817. Following his graduation, he was appointed assistant to Johann Franz Xaver Berger (1798-1850?) in natural history and medicine at the university. Presl developed a profound passion for systematic botany, a focus he shared with his elder brother, Jan Svatopluk Presl (1791–1849), with whom he frequently conducted regional field surveys. They co-authored the foundational *Flora Bohemica* (*Flora Čechica*) in 1819, which laid the formal baseline for Czech botanical nomenclature. They followed this early collaborative success by compiling and distributing a landmark cryptogamic exsiccatae series between 1823 and 1825, titled *Vegetabilia cryptogamica Boemiae*, which documented numerous regional lichen and bryophyte taxa. In 1832, Presl was appointed Professor of Natural History and Technology at the Charles-Ferdinand University, a tenure he held alongside a highly influential role as the custodian of the natural history collections at the National Museum in Prague. Although his research spanned the entire botanical spectrum, he achieved global renown for his monographic treatises on pteridophytes and his extensive taxonomic treatments of the South American botanical collections amassed by the Bohemian explorer Thaddäus Haenke (1761–1817). The Czech botanical journal *Preslia* is named after the brothers Presl. His herbarium is housed at PRC. Ref.: Maiwald (1904); Weitenweber (1854).



Printzen, Christian (1962–) – Born in Kiel, Germany, the son of a chemist and a physiotherapist. He grew up in Krefeld, Nordrhein-Westfalen, where he completed his secondary education. A high school teacher initially awakened his interest in biology, with an early focus on genetics. After graduating in 1982, Printzen began studying biology at the University of Köln (Cologne), where he attended inspiring botanical lectures led by Gerhard Follmann. During a student field excursion to Madeira, Printzen resolved to pursue a lichenological theme for his diploma

thesis. This research ultimately centered on a different Atlantic archipelago, the Isles of Scilly, culminating in a 1990 study for which he received significant guidance from the British lichenologist Peter James, who had previously investigated the islands' flora. At James's suggestion, Printzen contacted Hannes Hertel to pursue advanced research. In 1995, he earned his doctorate from the University of München for a taxonomic revision of the genus *Biatora*, supervised by Hertel. He then returned to the University of Köln, serving as a research assistant from 1996 to 1999 at the Institute of Biology Education. Before securing a permanent institutional post, he undertook fruitful research fellowships abroad, working at Arizona State University in Tempe, USA, and the University of Bergen, Norway. In 2002, Printzen was appointed Head of the Cryptogamic Herbarium at the Senckenberg Research Institute and Natural History Museum (*Senckenberg Forschungsinstitut und Naturmuseum*) in Frankfurt am Main. Alongside global monographic and collecting initiatives focusing on *Biatora* and other lecideoid and lecanoroid crustose lichens, his research has been heavily dedicated to phytogeography, historical biogeography, and evolutionary dynamics, pioneering the integration of molecular and DNA-sequencing methods into phylogeographic and species delimitation studies on lichens. He has described several taxa. The major part of his herbarium is housed at FR, with duplicates at BM and M, and collections from Eastern North America and Turkey at BG. Ref.: *Pers. comm.*; Hertel & al. (2017); Kärnefelt & al. (2012).



Puntillo, Domenico (1950–) – Born in Rende, Calabria, southern Italy, Puntillo built a unique and highly productive academic trajectory alongside a career in the public sector. After completing his secondary education, he initiated university studies in Political Science, which were interrupted in 1975. Driven by a lifelong dedication to botany, he later resumed his academic path, earning his master's degree in Political Science in 2005. He also attended the specialised Herbalist course at the University of Urbino. Professionally, he worked for the Italian Ministry of Posts and Telecommunications from 1974 until his retirement. In spite of his civil service career, he pursued his lifelong scientific interest in botany, regional history, and the cryptogamic microflora of southern Italy, including bryophytes and lichens. Operating largely as an independent scholar and free researcher (*libero ricercatore*) attached to the Botanical Garden of the University of Calabria, he completed extensive, exhaustive fieldwork across the rugged and understudied Mediterranean ecosystems of his home region. Throughout the late 1980s and 1990s, Puntillo became the central reference point for Calabrian lichenology, filling a massive historical geographic gap in Italian cryptogamic biodiversity records. He collaborated closely with national and international specialists, such as T. Ahti, P. Diederich, J. Etayo, P.L. Nimis, J. Poelt, E. Sérusiaux, A. Vězda, and W. von Brackel. Puntillo's research agenda encompassed a broad ecological scope. In 1989, he published a paper featuring dichotomous identification keys for all *Caliciales* species ever reported across Italy. In 1996, he achieved a monumental milestone by authoring the monograph *I Licheni di Calabria* (The Lichens of Calabria), which became the taxonomic baseline for the region, boosting the total recorded lichen biota of Calabria to nearly 1,000 taxa and rendering it one of the most thoroughly documented regions in the

Mediterranean basin. In 2000, he published a pioneering national survey detailing the overlooked communities of foliicolous lichens and their associated microfungi across Italy. He continuously expanded his taxonomy into non-lichenised lichenicolous fungi, co-authoring key checklists and floristic additions for southern Italy. Beyond lichenology, his deep naturalistic curiosity led him to co-describe the rare, yellow-flowered endemic plant *Centaurea poeltiana*. He described several new species. His large herbarium, initiated in 1985, is housed at CLU, and represents the single most significant collection of south-peninsular Italian lichens. Ref.: *Pers. comm*.



Purvis, Ole **William (1959–)** – Born in Corbridge, Northumberland, UK, Great Britain, to a Norwegian mother and an English father who worked as a French teacher. From his earliest years, Purvis was drawn to botany; as a boy, he was formally introduced to lichens by a visiting French student, Pierre Noël, who later became a professor of biology. Purvis completed his secondary education locally before entering the University of Sheffield in 1978, graduating with a BSc (Special Honours) in Botany with Biochemistry in 1981. During his undergraduate years, he met Oliver Gilbert, then a lecturer at the university, who heavily encouraged his field collecting and cryptogamic studies. Purvis subsequently pursued postgraduate work at Imperial College London, which brought him into close contact with Peter W. James at the British Museum (Natural History), now the Natural History Museum (BM). He joined the museum's staff as an assistant scientific officer in 1981. Shortly thereafter, the economic geologist Christopher Halls (1941–2018) of the Royal School of Mines suggested a pioneering interdisciplinary study on the mechanisms of lichens colonising cupriferous and metalliferous substrata. Under Halls's supervision, Purvis completed his doctoral thesis on this specialised biogeochemical theme in 1986, establishing a lifelong research track focusing on metal-tolerant lichens, toxic element stress, and substrate-induced thallus morphology. Purvis spent several decades at the Natural History Museum in various research capacities, ultimately directing the museum's prominent Bioindicator Programme until its conclusion in 2011. He subsequently accepted an academic post at the Camborne School of Mines, University of Exeter, later working as a plant taxonomist at the University of Reading from 2013, focusing heavily on industrial air pollution and biomonitoring systems. Throughout the 1990s, Purvis also participated in multiple botanical expeditions to the Azores, publishing several fundamental papers evaluating Macaronesian lichen vegetation. He is globally recognised as the primary co-editor of the definitive *Lichen Flora of Great Britain and Ireland* (1992) and the author of the popular introductory handbook *Lichens* (2000), which has been translated into multiple languages. He has described several new taxa, and his extensive collection of metalliferous and regional voucher specimens is at BM. Ref.*: Pers. comm.*

Quilhot Parra**, Wanda (1929–2023)** – Born in Concepción, Chile. Her childhood education was severely disrupted by a prolonged illness following an accident, preventing her from completing her secondary schooling until the age of twenty-four. Encouraged by an uncle to pursue higher education, she entered university in 1955 to study biology. Although

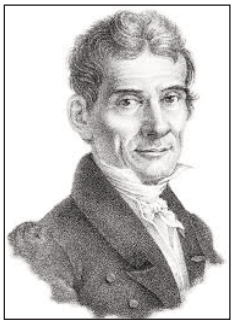


she initially focused on hydrobiology, she soon pivoted to zoology, working under Gustavo Mann (1919–1963) at the newly established zoological institute, before undertaking studies in marine chemistry at the Montemar Marine Biological Station, where she developed a fascination with algae. Following her graduation in 1959, Quilhot began teaching as a professor of biology and natural sciences at the University of Chile in Santiago. The following year, she secured a prestigious scholarship to study plant physiology and phycology at the University of Paris. After three years, she returned to Chile for pressing family reasons without completing her formal degree, but remained determined to pursue cryptogamic research. During the 1963–1964 austral summer, Quilhot made history alongside Nelly Lafuente as one of the first Chilean women scientists to conduct biological fieldwork in Antarctica, carrying out landmark research under the auspices of the International Council for Science (ICSU) at the Bernardo O'Higgins station. Her subsequent work on polar microfauna and soil-forming microorganisms brought her into contact with bryophytes and lichens. Entranced by lichens, she shifted them to the centre of her scientific career. Alongside her extensive floristic and biodiversity cataloguing, she became a regional pioneer in lichen chemistry, secondary metabolites, and ecophysiology. In 1969, she was appointed Professor of Botany at the Valparaíso campus of the University of Chile (which became the independent *Universidad de Valparaíso* in 1981), where she mentored generations of students. Quilhot established a highly productive international taxonomic partnership with the eminent New Zealand lichenologist David Galloway, co-authoring several new species. In 2016, the Latin American Group of Lichenology (*Grupo Latinoamericano de Liquenología*) established a research excellence prize in her honour (*Premio a la Excelenza en Investigación Wanda Quilhot)*. Her herbarium is housed at UV. Ref.: Carvajal (2012); Martínez Pulido (2024); Rubio & Vargas (2009); Vargas (2023).



Rabenhorst, Gottlob **Ludwig (1806–1881)** – Born in Treuenbrietzen, Kingdom of Prussia (now Brandenburg, Germany), where his father worked as a merchant, whilst his mother's family was firmly planted in the middle-class artisan and burgher echelons. He began his professional path in 1822 as an apprentice at a pharmacy owned by his brother-in-law in Belzig. Shortly thereafter, he undertook formal studies in botany and pharmacy at the University of Berlin (1823–1830), where he was heavily influenced by Heinrich Friedrich Link. Certified as a pharmacist in 1830, Rabenhorst acquired a pharmacy in Luckau, Oberlausitz (then part of Prussia), where he actively continued his research into cryptogamic plants. Following the death of his first wife, he sold his business in 1840 and earned a doctorate in botany from the University of Jena a year later. He subsequently settled in Dresden as a *Privatgelehrter* (independent scholar) and remarried. In 1875, due to compounding health and financial struggles, he relocated to Meißen, Sachsen, where he resided until his death. Rabenhorst left an indelible mark on cryptogamic botany. He is most famous for his monumental *Deutschlands*

Kryptogamen-Flora (Cryptogamic Flora of Germany, 1844–1853), a work whose meticulous treatment of lichens became a benchmark for regional floras. Decades after his death, this series was dramatically expanded into the celebrated multi-volume *Dr. L. Rabenhorst's Kryptogamen-Flora von Deutschland, Oesterreich und der Schweiz*. In 1852, he also founded *Hedwigia*, which became one of the world's premier journals for cryptogamic botany. An exceptionally prolific collector, Rabenhorst organised and distributed his own specimens alongside those of leading contemporary naturalists through several exsiccatae series, including *Lichenes Europaei Exsiccati* (1855–1879, comprising 974 numbers) and a specialised series dedicated entirely to the genus *Cladonia* (1860). Following his death, his personal collections were sold and dispersed across several major institutions, with substantial portions held at M. Ref.: Bary (1881); Illig (1982); Kärnefelt & al. (2012).



Raddi, Giuseppe (1770–1829) – Born in Firenze, Grand Duchy of Toscana (now Italy), to impoverished parents forcing him to work from an early age. He was initially apprenticed to a local apothecary shop, where he developed an enduring interest in medicinal plants. In 1785, he met Ottaviano Targioni Tozzetti (1755–1826), a member of a highly influential family of naturalists, through whom he was introduced to Gaetano Savi (1769–1844). Recognising the teenager's affinity for the natural sciences, Targioni Tozzetti secured Raddi a position in 1785 as an assistant to Attilio Zuccagni (1754–1807), the director of the botanical garden at the Royal Museum of Physics and Natural History in Firenze. During this period, Raddi taught himself Latin and rapidly specialised in cryptogamic botany. In 1807, following the Napoleonic reorganisation of Tuscany, Raddi was dismissed from his museum post. This was an act of political retaliation by the newly appointed director and Bonaparte supporter, Count Girolamo de' Bardi (1685–1743), who targeted Raddi for his open political opposition to the French regime by abolishing his curatorial position. Operating as an independent researcher during this prolonged period of displacement, he published a foundational monograph on Italian hepatics. Following the collapse of the Napoleonic administration, he was successfully reinstated to his curatorial position. In 1817, Raddi was selected to join the Austrian scientific expedition to Brazil, joining the grand entourage accompanying the Austrian Archduchess Maria Leopoldina for her marriage to the future Emperor of Brazil. Sponsored in part by Ferdinand III, Grand Duke of Tuscany, he focused his intensive, highly fruitful fieldwork on the dense Atlantic Forest (*Mata Atlântica*) of the Rio de Janeiro province, notably exploring the Serra dos Órgãos alongside prominent European naturalists. This expedition established him as a pioneer of Neotropical cryptogamic research; he returned to Europe with vast collections of plants, animals, and lichens. Following his return, the new Grand Duke, Leopold II (1797–1870), appointed Raddi to accompany the celebrated French Egyptologist Jean-François Champollion (1790–1832) on the joint Franco-Tuscan literary and scientific expedition to Egypt in 1828. During this journey, Raddi contracted a severe systemic illness; while attempting to return to Italy, he died in transit on the island of Rhodes. Although primarily known for his landmark works on ferns, grasses, and bryophytes, he described several new lichen species based on his

Brazilian collections. His herbarium is housed at FI. Ref.: Baldini & Pignotti (2018); Bargagli Petrucci (1922).



Räsänen, Veli Johannes Paavo Bartholomeus **(1888–1953)** – Born in Simo, Lapland, Finland, Räsänen attended school in nearby Oulu before commencing his studies in natural history at Helsinki in 1910, where he graduated with a Master's degree in 1914. He subsequently took up a teaching post in Kemi, Lapland. During his university years, he befriended Edvard A. Vainio, who assisted him with lichen identification and inspired him to continue his lichenological research after leaving university. In 1927, he successfully defended his doctoral thesis on the lichen vegetation of north-western Finland, a work that mirrored Häyrén's contemporary studies in the south-west. In 1921, Räsänen joined the faculty of the agricultural high school in Kurkijoki, Karelia (Karelen), situated on Lake Ladoga (now part of Russia). He conducted extensive fieldwork on the region's rich lichen flora, which provided the empirical foundation for his numerous publications. He became a renowned expert on crustose species, particularly within the genus *Rhizocarpon*, and gradually expanded his scope to revise collections from abroad, including exotic specimens from New Caledonia and South America. Regarded by contemporaries as a taxonomic "splitter", he famously replied to criticism from his colleague and friend A. H. Magnusson by stating: "*Man muss mutig sein*" (One must be brave). Räsänen maintained a vast international network, inviting prominent figures such as the Hungarian lichenologist V. Gyelnik and the Polish scholar J. Motyka to visit Finland. He authored a Finnish lichen flora intended for schools and issued several influential exsiccatae series, most notably the monumental *Lichenotheca Fennica*. This collection comprised 1,300 specimens; it was initiated in 1946 and completed posthumously in 1960 by his pupil Rainar Hakulinen. Räsänen described hundreds of new taxa, including genera such as *Malmgrenia* and *Protothelenella*. His herbarium is housed at H. Ref.: Hakulinen (1956).



Rambold, Gerhard (1956–) – Born in Pocking, Niederbayern, Germany. Following his early education, he studied biology at the University of München (LMU), where he integrated into the prominent lichenological research group led by Hannes Hertel. He specialised in the taxonomy and global distribution of saxicolous lecideoid lichens, earning his doctorate from LMU in 1987. He completed his habilitation in botany at the same institution in 1994, subsequently holding lecturing and research positions at both LMU and the Technical University of München (TUM) until 1998. In 1999, Rambold was appointed Professor of Mycology at the University of Bayreuth, where he also established and directed the university's molecular and DNA sequencing laboratory. Rambold became a leading global pioneer in the integration of computer science and biological research, heavily promoting the field of biodiversity informatics. He spearheaded the design and development of advanced digital traits databases and character-based iden-

tification systems, most notably founding LIAS (A Global Information System for Lichenised and Non-Lichenised Ascomycetes). Throughout his prolific research career, he has investigated evolutionary lineages, phenotypic traits, and environmental adaptations in both lichenised and non-lichenised fungi. He has described numerous new taxa, including the genera *Amylora* and *Miriquidica* (co-authored with H. Hertel), as well as the family *Icmadophilaceae* (described alongside Hannes Hertel and his wife Dagmar Triebel). The genus *Ramboldia* Kantvilas & Elix is named after him. His herbarium is housed at M. Ref.: Hertel & al. (2017); Kärnefelt & al. (2012).



Ramond de Carbonnières**, Louis-**François-Elisabeth **(1755–1827)** – Born in Strasbourg, France, where his father served as a military treasurer (*trésorier de guerre*), whilst his mother's family belonged to the comfortable, well-educated upper-middle class of Strasbourg. A precocious youth, Ramond received his early education at home from private tutors. He was profoundly influenced by German literature, particularly the works of Johann Wolfgang von Goethe, whom he later met. In 1775, he commenced his law studies at the University of Strasbourg, qualifying as a solicitor in 1777. During his time at university, he also attended lectures in the natural sciences and medicine, which sparked his lifelong interest in botany. An accomplished writer, he published a highly romantic novel that stands as a rare French contribution to the German *Sturm und Drang* movement. Ramond was a passionate traveller with a deep affection for mountainous terrains, exploring Switzerland between 1777 and 1778, and embarking on his first journey to the Pyrenees in 1787. In 1791, he was elected to the Legislative Assembly in Paris, where he aligned himself with the Marquis de Lafayette. This political stance placed him in severe danger during the radical phase of the French Revolution in 1792. He managed to escape the Reign of Terror by fleeing to Tarbes in the Pyrenees in 1793, where he settled and dedicated himself to the study of the alpine environment. In 1796, he was appointed Professor of Natural History at the *École Centrale de Tarbes*. Following the rise of Napoleon, his political standing was fully restored; he was appointed Prefect of the Puy-de-Dôme region (1806–1814) and made a Commander of the *Légion d'Honneur* with the title of Baron. His enduring significance to lichenology rests on his pioneering collections of high-altitude lichens gathered during his numerous mountain ascents. Notable among these were various species belonging to the genus *Rhizocarpon*, a taxon he circumscribed and which was later validly published by De Candolle. His private herbarium is housed at BBF, with a few duplicates at PC. Ref.: Cuvier (1830); Girdlestone (1968); Hestmark (2017).

Randlane, Tiina (1953–) – Born in Tallinn, Estonia, she completed her secondary education locally in 1971 before pursuing her higher education in botany at the University of Tartu (formerly Tartu State University). She graduated *cum laude* in 1977 and later defended her candidate's dissertation (PhD equivalent) at the same institution in 1986, focusing on the lichen flora of Estonia's western islands. She began her professional journey at the university as a technician in 1975, steadily advancing through the academic ranks to become a Senior Researcher and Associate Professor. She currently continues her academic



association there as an Associate Professor Emeritus and the long-time leader of the University of Tartu Lichenology Team. Her extensive research has focused heavily on the phylogeny, taxonomy, and ecology of lichenised *Ascomycota*, with a particular emphasis on the usneoid and cetrarioid genera within the family *Parmeliaceae*. She spearheaded the development of a global taxonomic database for cetrarioid lichens and has been a principal author of identification guides, including several volumes of the Estonian lichen flora. Her research combines classic morphology and secondary chemistry with molecular genetics to map complex evolutionary trees and evaluate the indicator qualities of rare taxa for conservation. Her global leadership includes serving on the Council of the International Association for Lichenology (IAL) from 1992 to 2004, as well as acting as a long-term expert for the Estonian Science Foundation. Renowned as a dedicated educator and scientific communicator, she has trained multiple generations of Baltic environmental scientists and taxonomists while continuously expanding the digital inventory of local mycobiota. In recognition of her lifetime achievements, a *Festschrift* in her honour was published in the journal *Folia Cryptogamica Estonica* on her 70th birthday. She has co-described multiple new species and genera. The genus *Randlanea* Zhurb. *et al.* is named after her. Her herbarium is housed at TU. Ref.: *Pers. comm.*



Rassadina, Xenia Alexandrovna **(1903–1988)** – Born and educated in St. Petersburg, Russia, Rassadina was raised in an orphanage following the loss of her parents during her infancy. After graduating from high school, she entered Leningrad State University in 1922, where she was supervised by the prominent cryptogamist Vsevolod Savicz. She completed her university course in 1926, officially defending her graduation thesis, which detailed the lichen flora of the former Peterhof district within the Leningrad region, in 1928. Her professional career was entirely tied to the Academy of Sciences' Botanical Museum (later reorganised into the Komarov Botanical Institute). Beginning in 1925 as a conservator and preparator, she steadily advanced through various academic roles, culminating in her appointment as a Senior Scientific Officer in the Department of Lichenology and Mycology in 1941. In her early career, she participated in major botanical expeditions to the Lake Baikal region, which shifted her focus firmly towards alpine and Siberian lichens. She followed this with extensive fieldwork across Central Asia, Siberia, and the Crimea, producing foundational floristic and ecogeographical assessments of these largely uncharted territories. During the Second World War, Rassadina chose to remain in besieged Leningrad with her husband and two young sons despite the catastrophic conditions. She pivoted her research to support military medicine and survival, investigating *Sphagnum* moss as an emergency surgical dressing and evaluating wild plants for use as emergency fodder. Most notably, her biochemical insights led to the development of *Binan* (sodium usniate), an antimicrobial preparation derived from usnic acid that saved countless lives from wound infections and burns. In the post-war era,

her research turned decisively towards taxonomy. She made seminal contributions to the study of the family *Parmeliaceae*, most notably with her definitive 1950 monograph on the genus *Cetraria* in the USSR. In her final active years, she was instrumental in compiling the inaugural volumes of the definitive *Handbook of the Lichens of the USSR*. An exceptionally generous mentor, she trained a new generation of Soviet lichenologists. Her herbarium is housed at LE. Ref.: Andreev *pers. comm.*; Golubkova & Bredkina (1989).



Ray (lat. **Rajus**, until 1670 spellt **Wray), John (1627–1705)** – Born in the village of Black Notley, Essex, England, UK, where his father was the local blacksmith; his mother, Elizabeth, was a well-known village herbalist and empiric healer with extensive, practical knowledge of local wild plants and utilised them to compound traditional remedies to treat sick neighbours. As a young boy, John Ray spent countless hours accompanying his mother on long walks through the Essex countryside to forage for medicinal flora. He attended the grammar school in nearby Braintree before entering Catharine Hall, Cambridge, at the age of sixteen, migrating to Trinity College two years later. There, he studied under the prominent linguist James Duport (1606-1679) and graduated with a Master of Arts degree in 1651. Ray subsequently held several academic positions at the university, serving successively as a lecturer in Greek, mathematics, and the humanities. He was ordained into the Church of England in 1660, frequently preaching in the college chapel. However, natural history remained his true passion. In 1660, he published a pioneering catalogue of the plants growing around Cambridge, which notably included an early page dedicated to lichens. During this period, he travelled extensively across the British Isles, fieldwork that culminated in his seminal *Catalogus Plantarum Angliae* (1670; second edition, 1677). In 1662, following the Restoration, Ray chose to resign his fellowship rather than sign the Act of Uniformity, a conscientious objection that restricted his religious freedom but became a crucial turning point in his career. Free from academic constraints, he embarked on a grand tour of Europe alongside several companions, including his wealthy pupil and close collaborator, the celebrated ornithologist Francis Willughby (1635–1672). Following his return to England, Ray was elected a Fellow of the Royal Society in 1667 and dedicated the remainder of his life to prolific scientific writing. Though often grouped with the earlier herbalists, Ray departed radically from their tradition by focusing strictly on the systematic definition and morphology of taxa rather than their medicinal properties, earning him his reputation as “the father of British botany”. While he initially included few cryptogams in his major treatises, his posthumously published third edition of the *Synopsis Methodica Stirpium Britannicarum* (1724) became a foundational milestone for British lichenology. This edition incorporated extensive collections from his friend Samuel Doody and was meticulously edited by Johann Jacob Dillenius, who later drew heavily upon Ray’s material when compiling his monumental *Historia Muscorum* (1742). His herbarium is housed at BM. Ref.: Mandelbrote (2015); Raven (1947, 1950).

Redinger, Karl Martin **(1907–1940)** – Born in Wien (Vienna), Austro-Hungarian Empire (now Austria), Redinger was the son of a civil servant in the Ministry of Finance.

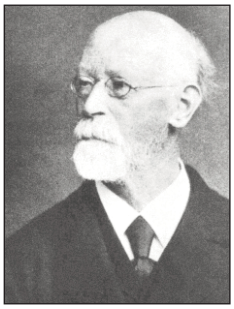


After completing his local education, he began studying natural history at the University of Wien in 1925. He chose hydrobiology as his specialism and spent time in 1930 working at the Biological Station in Lunz am See, Niederösterreich, under the supervision of the limnologist Franz Ruttner (1882–1861). He earned his doctorate in 1931 with a thesis on bog vegetation, which sparked a keen interest in bryophytes. That same year, he was employed to curate collections at the *Naturhistorisches Museum Wien*, where he was taken under the wing of the retired but highly influential lichenologist Alexander Zahlbruckner. Following this mentorship, Redinger turned his focus to lichenology. He was eventually commissioned to write several volumes, covering families such as the *Arthoniaceae* and *Graphidaceae*, for the new edition of Rabenhorst's cryptogamic flora. He developed a particular expertise in tropical members of the *Graphidaceae* and *Thelotremataceae*. In 1933, he travelled through Norway to Abisko in Sweden; on his return journey, he made an extended stop in Uppsala to attend a plant geography course delivered by Rutger Sernander. While it was widely anticipated that Redinger would complete Zahlbruckner's monumental *Catalogus Lichenum Universalis*, having already assisted with its preparation, this transition ultimately did not materialise following Zahlbruckner's death in 1938. That same year, Redinger pivoted towards experimental biology, joining a cytological project on the *Solanaceae* in Berlin under his former teacher, Fritz von Wettstein (1895–1945). This research yielded several important papers, and in 1939 he accepted a position at the institute of tobacco studies in Karlsruhe, Baden-Württemberg. By this time, however, he was already suffering from a terminal lung disease, to which he soon succumbed. Redinger described numerous new taxa and collaborated with Zahlbruckner on a renowned exsiccatae series of rare lichens. The lichen genus *Redingeria* Frisch, alongside several species, is named in his honour. His herbarium is housed at W. Ref.: Mattick (1941); Rechinger (1941).

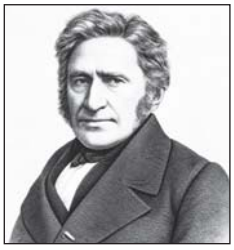


Redon Figueroa**, Jorge** Juan **(1936–)** – Born in Santiago, Chile. After completing his school education, he studied biology at the *Universidad de Chile* (1962–1966), where he met the German lichenologist Gerhard Follmann, who had recently been appointed professor there. Follmann inspired Redon to study lichens, and Redon subsequently graduated in 1966 with a thesis on Chilean lichen flora under Follmann's supervision. When Follmann returned to Germany, Redon succeeded him as professor of biology at the Pedagogic Institute. He later became a professor at the *Universidad de Chile*, before serving as professor of botany at the *Universidad de Valparaíso* (1984–1993) and finally at the *Universidad de Viña del Mar* from 1993 to 2007. In 1971–1972, he received a fellowship from the Alexander von Humboldt Foundation for further research on Chilean lichens, which he spent in Kassel, Germany, where Follmann was then based. He later obtained a postgraduate fellowship from the same foundation (1981–1982) to work in Würzburg, Germany, under the supervision of Otto Ludwig Lange. There, he was awarded a *Doctor rerum naturalium* (Dr. rer. nat.) degree for his doctoral thesis on the epiphytic lichens of the Chilean fog oasis Fray Jorge. In addition

to his extensive fieldwork on the ecology and phytogeography of Chilean lichens, Redon has been heavily involved in Antarctic research, publishing a monograph on the region's prominent species, *Líquenes Antárticos* (1985). The genera *Redonia* C.W. Dodge and *Redonographa* Lücking et al. were named after him. His herbarium is housed at VALPL. Ref.: Hertel (2012).



Rehm, Heinrich Simon Ludwig Friedrich Felix **(1828–1916)** – Born in Ederheim, Kingdom of Bavaria (now Bayern, Germany), Rehm completed his secondary education at the Melanchthon Gymnasium in Nürnberg. From 1846, he studied medicine at the universities of Erlangen, München, and Heidelberg, where he earned a doctorate in 1852, before continuing his medical training in Wien and Prag. He practised as a physician from 1854, first in Dietenheim, Baden-Württemberg, and later in Regensburg. In 1898, he was appointed *Medizinalrat* (medical councillor) in München. Throughout his medical career, he remained a highly active mycologist specialising in ascomycetes, including lichens, and collected extensively across Bayern, Franken, and adjacent regions. Rehm was a close friend of F. Arnold and A. von Krempelhuber, both of whom pursued lichenology as their primary passion. He described numerous new taxa, including the genus *Mycobilimbia*. He also issued a *Cladoniae exsiccatae* series, which was completed in collaboration with his friend Arnold. The recently resurrected genus *Rehmia* Krempelh. is named after him. Although his personal herbarium was destroyed at Berlin-Dahlem (B) during the Second World War, duplicates survive in several herbaria, including M and S. Ref.: Ade (1916); Wagenitz (1988).



Reichenbach, Heinrich Gottlieb Ludwig **(1793–1879)** – Born in Leipzig, Kurfürstentum Sachsen (now Germany), where his father was a prominent Greek scholar, and his mother managed a large, deeply intellectual household. Ludwig was the eldest son and grew up alongside one sister and four brothers. He began studying natural history and medicine at the local university in 1810. He earned his medical doctorate there in 1817, having already received a PhD in 1815. In 1820, he was appointed director of the Dresden Natural History Museum and was named professor at the city's Surgical-Medical Academy. He also went on to establish both the botanical and zoological gardens in Dresden. Reichenbach published numerous highly regarded works on flora and fauna, which he illustrated himself. Although he did not focus primarily on lichens, he is celebrated in the field for a pioneering exsiccatae series of German lichens distributed between 1822 and 1826, which he issued in collaboration with his associate Carl Schubert. Reichenbach also described several new lichen taxa, including the genus *Laurera*. While his original herbarium collections were destroyed in the fire at the Zwinger Palace during the May Uprising of 1849, his subsequent botanical collections are preserved at W. Ref.: Anonymous (1879); Hess (1888).

Reichert, Israel (1891–1975) – Born in Ozorków, Russian Empire (now Poland), into a well-to-do Orthodox Jewish family, Reichert attended the Rabbinical College at Lida,

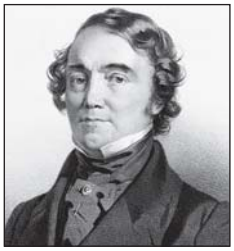


Belarus, after completing his local education. As ardent Zionists, he and his family emigrated to Palestine in 1908, where he initially found employment as a labourer before working as a natural history teacher. Following the First World War, he returned to Europe to study biology and botany under Adolf Engler (1844–1930) at the University of Berlin, later specialising in plant pathology at the *Biologische Reichsanstalt*. In 1921, he graduated with a landmark doctoral thesis, *Die Pilzflora Ägyptens*, which analysed a collection of Egyptian fungi housed at Berlin-Dahlem (B). He concluded his time in Europe in 1921 with an investigative stay at the plant pathological institute in Firenze, Italy. Upon his return to Palestine that same year, he was engaged by the Agricultural Experiment Station in Rehovot, where he established and organised a pioneering plant pathology department that integrated robust research into both fungi and lichens. From 1949 to 1959, Reichert served as a professor in the Faculty of Agriculture at the Hebrew University of Jerusalem. Alongside his extensive research into economically destructive crop pathogens, he developed a deep fascination with steppe vegetation and its associated lichen flora, describing several new species. As a true pioneer of lichenology and pathogeography in the region, he mapped lichen distributions from North Africa to Central Asia. He strongly advocated for their use as precise climate indicators and as character plants that distinctively demarcate steppe environments from true deserts. His seminal publication on the lichens of Palestine (1936) laid the foundations for regional lichenology, a legacy subsequently advanced by his prominent student Margalith Galun. His herbarium is housed at HUJ. Ref.: Kenneth & Ciccarone (1976); Oppenheimer (1966).



Reinke, Johannes ('Hans') (1849–1931) – Born in Ziethen near Ratzeburg, in the Duchy of Lauenburg, Germany, Reinke was the son of Theodor Friedrich Julius, a Lutheran vicar, and grew up in a family of many theologians, which deeply shaped his worldview; his mother, Elisabeth (née Kämpfer), belonged to an educated middle-class family deeply rooted in the religious, academic, and administrative history of Northern Germany. Despite this background, he was drawn to natural history, particularly botany. His father encouraged this interest during walks around the rectory and presented him with a microscope in his teens to allow him to study cryptogams in detail. Although Reinke initially enrolled to study theology at the University of Rostock, he finally pivoted to botany under the influence of Johannes Roeper (1801–1885), with whom he had corresponded since the age of ten. Disapproving of Reinke taking botany as a minor, Roeper convinced both the young man and his reluctant father to allow him to major in the subject. After studying with Julius Sachs (1832–1897) in Würzburg, Reinke earned a PhD (*Dr. phil.*) in 1871 with a thesis on protoplasmic streaming in plant shoots. The following year, he became a *Privatdozent* at the University of Göttingen, later transferring to Bonn. In 1879, he was promoted to full professor and established a plant physiological laboratory. He was appointed professor at the University of Kiel and director of its botanic gardens in 1885. He received an honorary medical doctor-

ate (*Dr. med. h.c.*) there in 1921, having already received an honorary doctorate in theology from Bonn in 1919. While Reinke contributed broadly to botany, his primary research focused on brown algae. His lichenological publications mainly addressed thallus development, though he also supervised Darbishire's taxonomic work on the family *Roccellaceae*. He maintained a keen interest in evolutionary and phylogenetic concepts, which came to dominate his work after his eyesight began to fail in 1895. In 1901, believing this discipline had been critically neglected, he coined the term "theoretical biology". He rejected Darwin's theory of natural selection, attempting instead to explain biological diversity through his own "dominanten" theory, though this was never fully developed. Later in life, Reinke authored religious books, some under the pseudonym Henning von Horst, arguing that scientific inquiry and Christian faith were inherently compatible, a conviction inspired by the writings of William Paley (1743–1805). His most significant systematic lichen paper was published in 1896, wherein he attempted to construct an entirely natural classification system. While his layout found a supportive advocate in the American lichenologist Albert Schneider and its framework was adopted by Alexander Zahlbruckner, it attracted few direct adherents; today, its primary value lies in Reinke's exceptional anatomical illustrations. His herbarium is housed at KIEL. Ref.: Kärnefelt & al. (2012); Reinke (1925); Schmidt (1932); Schneider (1897); Wissemann (2012).



Richard, Achille (1794–1852) – Born in Paris, France, Richard was the son of the notable botanist Louis Claude Marie Richard (1754–1821) and successfully followed in his father's footsteps. His primary mentor, however, was A. L. de Jussieu (1748–1836). In common with most botanists of his era, he studied medicine and was appointed assistant demonstrator on the botanical course for medical students as early as 1817. He earned his medical doctorate in 1820 and was appointed professor of botany at the Faculty of Medicine in 1831. Richard was a leading botanist of his generation, widely celebrated for his taxonomic precision and structural clarity. Although his research focused predominantly on flowering plants, he maintained a keen interest in cryptogamic flora, including lichens. He made the acquaintance of the prominent mycologist C. Montagne and, like him, authored descriptions of lichens collected from exotic regions. Most notably, he described the specimens collected by the French navigator J. D. d'Urville (1790–1842) during the 1826–1829 voyage of the *Astrolabe* to Australasia and the Pacific, publishing them in his landmark *Essai d'une Flore de la Nouvelle Zélande* (1832). He also worked extensively on exotic collections gathered by G. S. Perrottet (1793–1870) in Senegal and the tropics. His herbarium is housed at P. Ref.: Fée (1863); Payer (1854).

Richardson, David Horsfall Stuart **(1942–)** – Born in Crantock, Cornwall, UK, where his father was the village doctor, Richardson was deeply influenced by his natural surroundings and developed a lifelong passion for gardening, particularly rose cultivation. After completing his local schooling, he chose to study botany at the University of Nottingham with the intention of becoming a rose breeder; however, his academic path shifted when he elected to study the reproductive structures of lichens for his master's



degree. He subsequently moved to the University of Oxford to pursue a doctorate under the supervision of David C. Smith, completing a thesis that investigated the biology and physiology of lichens, with a particular focus on *Xanthoria*. Following a brief period working at the University of Exeter, he relocated to Canada in 1969 to join Laurentian University in the nickel-mining city of Sudbury, Ontario. There, he collaborated closely with the chemist Evert Nieboer on the critical, contemporary issue of sulphur dioxide pollution, documenting its destructive impact on lichen communities alongside the accumulation of heavy metals within their thalli. Richardson became a highly popular lecturer and completed his influential book, *The Vanishing Lichens*, in 1975. In 1980, he spent six months at the Western Australian Herbarium in Perth, where he and his wife compiled a comprehensive catalogue of the region's known lichen flora. Upon his return to Europe, he was appointed to the Chair of Botany at Trinity College Dublin, Ireland, where he expanded his pioneering research into environmental pollutants, culminating in several definitive texts, including *Pollution Monitoring with Lichens* (1992). That same year, he returned to Canada to accept the position of Dean of Science at Saint Mary's University in Halifax, Nova Scotia, a post he held until his retirement. His herbarium specimens are distributed across the respective institutional herbaria where he was employed. Ref.*: Pers. comm.*



Riddle, Lincoln Ware **(1880–1921)** – Born in Jamaica Plain, close to the Arnold Arboretum near Boston, USA, Riddle developed a deep passion for botany while attending the Roxbury Latin School. He chose botany as his principal field of study when entering Harvard University, graduating in 1902. Four years later, he earned his PhD from Harvard with a cytological thesis on the development of reproductive structures in fungi. In 1906, he took up a position as instructor of botany at Wellesley College, where he was tasked with curating the extensive lichen collections left by Clara Eaton Cummings following her recent death. He was promoted to professor at Wellesley in 1917. During this tenure, he published a landmark paper on the genus *Stereocaulon* in North America (1910). A sabbatical year in 1913 allowed him to visit Europe, where he conducted research alongside several of the continent's leading lichenologists. In 1919, Riddle returned to Harvard University upon his appointment as Assistant Professor of Cryptogamic Botany and Associate Curator of the cryptogamic herbarium. He described numerous new taxa, particularly from the West Indies, including the genus *Pyrenothrix*. His herbarium is housed at FH. Ref.: Fink (1925); Thaxter (1921).

Rizzini, Carlos Toledo **(1921–1992)** – Born in Buquira (now known as Monteiro Lobato) near São Paulo, Brazil, Rizzini completed his regional school education before studying medicine. After practising as a physician for several years, he transitioned to botany during the 1940s, officially joining the scientific staff at the Rio de Janeiro Botanical Garden in 1946. His first lichenological paper, a taxonomic study of the genus

Chiodecton, was published in 1947. He subsequently pivoted his research focus towards the study of secondary metabolites in lichens and their potential biochemical applications, a line of inquiry that soon became a predominant and highly influential field among Brazilian lichenologists. His historic collections and herbarium specimens are housed partly at RB and partly at the Serra dos Órgãos National Park in Teresópolis. Ref.: Rodrigues & al. (1993).



Rogers, Roderick ('Rod') Westgarth **(1944–)** – Born in Angaston, South Australia, Rogers completed his local school education before entering the University of Adelaide, where he began studying biology. Under the supervision of Dr R. T. Lange, he earned his PhD in 1971 with a doctoral thesis on the ecology of soil-surface lichens in arid regions of south-eastern Australia. Following his graduation, he was appointed lecturer and later Professor of Botany at the University of Queensland in Brisbane, where he became an influential mentor. Among other successful students, he supervised Nell Stevens in her landmark research on mangrove-associated lichens. Although his primary scientific inquiries were rooted in community ecology, he contributed significantly to regional floristics and taxonomy. In 1979, he collaborated with Rex Filson to publish *Lichens of South Australia*, followed in 1981 by *The Genera of Australian Lichens*, which served as the continent's first modern diagnostic generic monograph. He also authored several comprehensive chapters for the introductory volume of the *Flora of Australia* lichen series (1992). In 2000, his lifetime of scientific output was recognised by the University of Adelaide with a Doctor of Science (DSc) degree for his cumulative research into the biology of lichens, solidifying his standing as Australia's first true lichen ecologist. His herbarium is housed at BRIS. Ref.: Elix *pers. comm.*



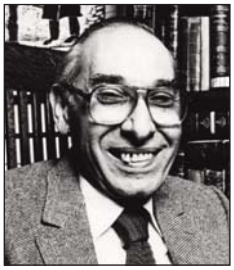
Rose, Francis (1921–2006) – Born in London, England, UK, Rose was the son of a journalist, whilst his mother, Mary Ruth (née Bussey) lived an exceptionally long life, passing away in 1966 at the age of 100. His father died when young Francis was only two years old. As a result, Mary Ruth was left to raise her young family as a widow under highly modest and financially challenging circumstances. The upbringing of the boy was heavily influenced by his grandfather, who actively stimulated his interest in the natural world by frequently taking him into local forests to teach him about native plants, which decisively compensated for the lack of formal biological education at St Francis Xavier's College, an institution Rose attended primarily for religious reasons due to his family's devout Catholic faith. He went on to pursue formal biological studies between 1938 and 1941 at the University of London and St Mary's College. Following his service during the Second World War, he worked as a lecturer in botany at several higher education colleges. In 1953, he was awarded a doctorate by Bedford College for his seminal ecological thesis on the structure and development of British bogs and heaths. Alongside his profound,

encyclopaedic knowledge of Western European vascular flora, Rose developed a deep expertise in cryptogams, focusing initially on bryophytes. Upon making the acquaintance of the prominent lichenologist Peter James in the 1960s, he turned his focus toward lichenology. He famously discovered the utility of lichens as precise bioindicators, especially for evaluating ancient, undisturbed woodlands. He loved to conduct extensive fieldwork in these woodlands, often botanising until late into the night. When daylight completely failed, he was known to exclaim, "We have not seen the best parts of the wood yet!" before producing a matchbox and continuing his examination of tree trunks by the light of flickering matches. This deep field insight led him to develop the highly influential Revised Index of Ecological Continuity (RIEC), a metric used internationally to evaluate forest conservation values. The genus *Francisrosea* Ertz & N. Sand. was named after him. His herbarium is housed at BM. Ref.: Hawksworth (2006); Streeter (2007).



Roux, Claude (1945–) – Born in Orange, department of Vaucluse, France, Roux completed his school education locally before studying at the University of Marseille (1964–1968) to qualify as a teacher. He practised this profession until 1975, teaching successively in Morlaix (Finistère), Carpentras (Vaucluse), and Marseille (Bouches-du-Rhône). In 1958, at the age of 13, he had first met Georges Clauzade, who became an influential mentor and later supervised Roux's diploma thesis on the lichen and bryophyte vegetation of Villeneuve-lès-Avignon (Gard), completed in 1967. Clauzade also introduced him to the study of lichenicolous fungi, another core focus of Roux's research interests. From 1975 to 2005, Roux worked at the *Centre National de la Recherche Scientifique* (CNRS). During this period, in 1979, he successfully defended his doctoral thesis at the Pierre and Marie Curie University. In 1984, he joined the *Institut méditerranéen d'écologie et de paléontologie* in Marseille, where he was eventually appointed director in 1994. Roux has published extensively on the taxonomy, ecology, and phytosociology of Mediterranean lichens and lichenicolous fungi. He has described numerous new taxa, including several genera such as *Zamenhofia*, which he named in honour of L. L. Zamenhof (1859–1917), the creator of Esperanto, a language Roux enthusiastically promotes. In a remarkable collaborative achievement, he and his former teacher Clauzade published a comprehensive diagnostic key to the lichens of Western Europe written entirely in Esperanto (*Likenoj de Okcidenta Eŭropo*, 1985). Another monumental achievement was the publication of the extremely detailed *Catalogue des lichens et champignons lichénicoles de France métropolitaine*, whose fourth edition was published in 2025. His immense contributions to the field are commemorated in the lichen genera *Claurouxia* D. Hawksw. and *Klauderuiella* S.Y. Kondr. & Hur. He maintains a vast private herbarium. Ref.*: Pers. comm.*

Rudolph, Emanuel David **('Rudy') (1927–1992)** – Born in Brooklyn, New York, USA, Rudolph was the son of a cheesemaking company executive of Russian descent; his mother was born to Russian-Jewish immigrant parents who had fled Eastern Europe to seek a better life in the United States. Displaying a bookish nature from early childhood, he developed a keen interest in the natural environment. During his high school years, he



came into contact with Dr Phyllis S. Busch (1909–1999), an authority on primary natural science education, whose teaching methodologies deeply influenced him. Encouraged by her mentorship, he began studying biology at Hunter College, New York, before transferring to New York University. His education was interrupted when he joined the US Army in 1945 during the final months of the Second World War. While stationed in Santa Fe, New Mexico, he developed a fascination with lichens, which culminated in his earliest lichenological paper (1953), a preliminary contribution to the regional lichen flora based predominantly on collections amassed by Robert A. Darrow (1911–2003) and Francis H. Elmore (1910–1994). Rudolph completed his undergraduate degree at NYU in 1950, subsequently undertaking graduate research at Washington University in St. Louis, Missouri. Under the supervision of Carroll W. Dodge, he earned his PhD in 1955 with a doctoral thesis on the family *Teloschistaceae* in North America. Although this treatment was deemed somewhat superficial and was never formally published, he maintained his research momentum, preparing an extensive monograph on Arctic taxa that he presented at the International Botanical Congress in Montreal (1959). From 1955 to 1958, he was employed as an instructor and later as an assistant professor at Wellesley College. Despite heavy curatorial and teaching schedules that restricted his research output, he proved to be an inspiring educator and managed to publish seven papers during this tenure. Following a brief postgraduate appointment at the University of Wisconsin studying non-lichenised fungi, Rudolph was appointed assistant professor of botany at The Ohio State University in Columbus in 1961, where he eventually rose to full professor and professor emeritus. At Ohio State, he became deeply involved in polar biology, particularly in Antarctica. Having previously co-authored a paper on Antarctic lichens with Carroll Dodge in 1955, Rudolph went on to participate in five major expeditions to the continent during the 1960s. His research shifted towards macro-ecological questions, focusing on how lichens physiologically adapt to extreme environments. He held such a profound affection for Antarctica that he requested his ashes be scattered there upon his death. Rudolph also possessed a passion for the history of science, publishing an illustrious account of early North American bryological and lichenological research in 1969. This bibliophilic interest was mirrored in his famous personal library, which grew to exceed 53,000 volumes. He described a few taxa. His herbarium is housed at OS. Ref.: Stuckey (1993, 1994).

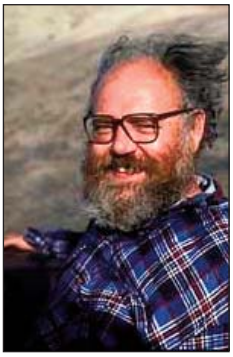


Ruel (Ruelle, Ruellius), Jean (Johannes) (1474–1537) – Born in Soissons, Aisne, France, Ruel was a gifted youth who taught himself classical languages. He studied medicine at the University of Paris, graduating as a physician in 1502. He subsequently joined the academic staff and served as Dean of the Faculty of Medicine from 1508 to 1509. Following this prominent academic tenure, he was appointed personal physician to King Francis I (1494–1547), a position that allowed him ample opportunity to dedicate himself to the study of botany and pharmacology. He devoted much of his subsequent career to analysing

Dioscorides' *De Materia Medica*, producing a landmark Latin translation in 1516 that heavily influenced Renaissance science. He also managed to study the flora throughout France, particularly in his native region. Following the death of his wife, Ruel took holy orders and was appointed Canon of Notre-Dame de Paris on 12 December 1526, an office that enabled him to pursue his scholarly interests in tranquillity. Upon his death, he was buried within the cathedral. His masterly three-volume work, *De natura stirpium*, was published shortly before his death in 1536. This text served as a standard botanical reference of the Renaissance, offering detailed descriptions and nomenclature of plants, including an early systematic treatment of a species belonging to the lichen genus *Usnea*. His herbarium is currently unknown. Ref.: Coupin (1930).



Runemark, Per **Hans** Bengt ('Hasse') **(1927–2014)** – Born in Chicago, Illinois, USA, Runemark later moved to Sweden, where he pursued formal biological studies at Lund University. Originally, Runemark had considered becoming a geneticist and a plant breeder, but being interested in chemistry and biogeographical problems of species with limited distributions, the lichen genus *Rhizocarpon* caught his interest. Important for this was the trip to southern Europe that he undertook together with G. Degelius in 1948. In 1956, he was awarded a doctorate at Lund for his monographic thesis on the yellow species of *Rhizocarpon*, under the supervision of Ove Almborn, a piece of research that introduced the then-innovative paper chromatography into lichenological taxonomy. In the chemical analyses, he collaborated with Carl-Axel Wachtmeister (1924–2017), who developed the method of paper chromatography in the investigation of lichen substances. Alongside his short but influential career in lichenology, Runemark developed a profound expertise in the broader vascular flora of Europe, shifting his primary focus in 1957 toward the field of island phytogeography and evolutionary patterns, with extensive collecting trips across the Aegean Islands. Following his appointment as Professor of Systematic Botany at Lund in 1970, a post he held until his retirement in 1992, he dedicated decades to mentoring a generation of Nordic botanists, an academic contribution later recognised with the prestigious OPTIMA Gold Medal in 1993. His extensive herbarium is primarily housed at LD. Ref.: Frödén (2009); Hertel & al. (2017); Kärnefelt & al. (2015b).



Ryan, Bruce Douglas **(1950–2004)** – Born in Los Angeles, California, USA, Ryan studied biology at universities in Florida and Washington. He subsequently earned his doctorate from Arizona State University, where he completed a dissertation on *Squamarina* subg. *Petroplaca* in North America under the supervision of Tom Nash. He became a leading authority on the placodioid members of *Lecanora* s. lat., with a particular focus on the western United States. Following his studies, he was appointed Associate Curator of the herbarium at Arizona State University in Tempe. His primary scientific contributions are published in the *Sonoran Lichen Flora*, a seminal project led by Tom Nash III to

which he contributed extensively across both volumes published during his lifetime. An avid field collector throughout the region, he described numerous taxa. His rich collections are preserved at ASU. Ref.: Hertel & al. (2017); Nash (2004b).



Rydzak, Jan (1908–1971) – Born in Sambor, Galicia, then part of the Austro-Hungarian Empire (now Sambir, Ukraine). After completing his local education, he studied natural history at the Jagiellonian University in Kraków, graduating with a Master's degree in 1932. Following the Second World War, he integrated into the newly established Maria Curie-Skłodowska University in Lublin, where he became a close student and collaborator of Józef Motyka, focusing his research on lichens and environmental pollution. He earned his doctorate there in 1947, establishing himself as a pioneering Polish authority on urban lichen ecology. Rydzak subsequently published a monumental series of papers on the decline of lichens in small towns within the Lublin region (a study he later expanded to encompass other major territories). He proposed a highly debated "desiccation theory" (or drought hypothesis), which controversially argued that urban dryness and microclimatic changes, rather than toxic industrial gases, were the primary causes of "lichen deserts". Despite the contemporary pushback against this hypothesis, his empirical fieldwork and environmental investigations were exceptionally thorough. In 1950, he was appointed Assistant Professor of Plant Systematics and Geography at the university in Lublin, later serving as head of the Department of General Botany. He described no new taxa. His herbarium is housed at LBL. Ref.: Kukwa *pers. comm*.; Salata (1995).



Sampaio, Gonçalo António da Silva Ferreira **(1865–1937)** – Born into a modest family in São Gens (Calvos) in northern Portugal, Sampaio was educated in nearby Braga before moving to Porto in 1885. He initially matriculated at the Faculty of Mathematics at the University of Coimbra but left without completing his degree. In 1891, he entered the *Academia Politécnica do Porto*, studying mineralogy, zoology, and botany. Inspired by his teacher, Professor Manuel Amândio Gonçalves (1861–1928), Sampaio discovered his passion for botany. Although he once again abandoned his formal university coursework, he continued to collect and independently study plants in the field. In 1895, Sampaio published his first major paper: an ambitious and well-received flora mapping the vascular plant families of Portugal. This achievement led to his appointment as a *naturalista adjunto* (assistant naturalist) at the *Academia Politécnica* in 1901. When Professor Gonçalves fell seriously ill in 1910, Sampaio took over his teaching responsibilities. Despite the severe political instability following the 1910 Republican Revolution, which targeted high-profile royalists like Sampaio, he was appointed Professor of Botany at the newly established University of Porto in 1912, becoming director of its botany department in 1913. Sampaio's uncompromising royalist convictions drew him deeply into political movements aimed at restoring the monarchy, culminating in his active participation in the 1919 "Monarchy of the North"

counter-revolution and subsequent imprisonment in Porto's Aljube jail. He was also a passionate patriot with a deep devotion to northern Portuguese folklore and traditional folk music. Despite these political and cultural diversions, he produced several important botanical works, including the pioneering *Manual da Flora Portuguesa* (1909–1914). Though published incompletely in fascicles during his lifetime, his manuscripts later formed the basis of the posthumous *Flora Portuguesa* (1947). While his early work focused on vascular plants, Sampaio increasingly turned his attention to lichenology, a shift cemented by a 1921 sabbatical with Robert Chodat (1865–1934) in Geneva. He went on to publish several landmark papers on Portuguese lichens, alongside a collaborative 1927 study on the lichens of Pontevedra with Spanish botanist Luis Crespí Jaume (1889–1963), whom he had met during field excursions to Galicia. Sampaio issued the first exsiccatae series of Portuguese lichens and laid the groundwork for a national lichen catalogue. He described numerous new taxa, including the genus *Carlosia*, which he named in honour of the assassinated King Carlos I (1863–1908), a monarch known to share Sampaio's keen interest in biology. His herbarium is housed at PO. Ref.: Cabral (2009); Taborda de Morais (1937).



Sancho, Leopoldo García **(1956–)** – Born in Madrid, Spain, where his father practised as a physician, Sancho developed a deep interest in the natural environment during his school years. He chose to study biology at the Complutense University of Madrid, where he met the prominent lichenologist Ana Crespo. Under her influence, and with additional mentorship from Josef Poelt, he began researching alpine lichens. In 1986, he earned his doctorate with a thesis investigating the lichen flora and vegetation of Spain's Sistema Central mountain range. Following his PhD, Sancho was awarded a postdoctoral fellowship at the Institute for Polar Ecology in Kiel, Germany, working under the guidance of Ludwig Kappen between 1987 and 1989. This period marked the beginning of his extensive polar career. He undertook numerous field seasons at the Juan Carlos I Spanish Antarctic Station on Livingston Island in the South Shetlands, a region whose lichen flora became a major focus of his publications. Invited by Antarctica New Zealand, he also conducted extensive research across the Transantarctic Mountains. His pioneering work on Antarctic lichens was sustained after his fellowship by several subsequent German research grants. In 2005, Sancho led a groundbreaking astrobiology milestone as the principal investigator of the 'LICHENS' experiment aboard the Foton-M2 satellite. Funded by the European Space Agency (ESA), this research demonstrated the extraordinary survival capabilities of lichens in cosmic conditions and established a robust, ongoing lineage of astrobiological space research. In 2007, he was appointed Full Professor of Botany within the Faculty of Pharmacy at the Complutense University of Madrid. His expertise has been widely sought internationally; he became a research associate at the University of Waikato in Hamilton, New Zealand, in 2006, and at the University of Magallanes in Chile in 2011. He also served as the secretary for the International Association for Lichenology (IAL) from 2000 to 2008. He has described several species. His herbarium is housed at MAF-lich. Ref.: *Pers. comm*.



Sanders, William ('Bill') Bennett **(1960–) –** Born in Cold Spring, New York, USA, to parents who were both educators, Sanders attended local schools before studying at Cornell University, where he graduated in biology in 1981. While at Cornell, he developed an early interest in plant anatomy under Dominick Paolillo, as well as mycology under the guidance of Richard Korf (1925–2016). That summer, he took additional coursework at the University of Montana, where attending a lichen course led by Mason Hale permanently cemented his fascination with mycology and lichenised fungi. In 1982, Sanders began his graduate studies at the University of California, Berkeley. Though he expanded his research interests to include algae, he chose to study the iconic lace lichen, *Ramalina menziesii*, for his doctorate, a species whose unusual morphology had puzzled generations of botanists. At Berkeley, he benefited from the dual mentorship of anatomist Donald Kaplan (1928–2006) and mycologist John W. Taylor (1950–), the latter of whom played a transformative role in pioneering molecular taxonomy in fungi and lichens. After successfully completing his PhD, Sanders moved to Madrid in 1989 on a research scholarship at the Spanish National Research Council (CSIC), collaborating with Carmen Ascaso to investigate the ultrastructural interactions between fungal and algal partners within the lichen thallus. Upon returning to the United States, he held various academic positions before being appointed Professor of Biological Sciences at Florida Gulf Coast University in Fort Myers in 2018. He has described a few taxa. Ref.: *Pers. comm.*



Sandstede, Johann **Heinrich (1859–1951)** – Born in Bad Zwischenahn within the Grand Duchy of Oldenburg (now Germany), Sandstede was the son of a master baker whose family business he was destined to inherit; his mother's family belonged to the established, respectably situated middle-class citizen and artisan community of the Ammerland district, which possessed an intense, multi-generational dedication to the preservation of Northwest German heritage. After completing his primary education in 1876, he embarked on a traditional wandering apprenticeship that took him through Alsace, the Rhineland, Switzerland, and Bavaria. While visiting regional bakeries, he eagerly studied local flora along his routes, indulging a lifelong passion for botany. In 1879, a pivotal meeting with the botanist Friedrich Müller directed his attention towards cryptogamic botany, sparking a profound, lifelong fascination with lichens. Sandstede proactively established contact with leading authorities, most notably Wilhelm von Zwackh-Holzhausen, gradually integrating himself into the broader network of prominent German and international lichenologists, including Josef Anders and Alexander Zahlbruckner. Sandstede's earliest publications (1889–1903) were strictly floristic, documenting the lichen flora of his native Ammerland district, a region to which he was deeply devoted, also contributing significantly to the preservation of its local history and folklore. From 1912 onwards, he focused his research intensely on the taxonomically challenging genus

Cladonia, which grew abundantly across the heaths of Oldenburg. Having assumed ownership of his father's bakery, which he managed until 1912 (the year following his wife's death), his early fieldwork was logistically restricted to his home region. Despite these professional limitations and a total lack of formal university education, he gradually established himself as the eminent global specialist on *Cladonia*, frequently revising complex material sent to him by international correspondents. He eagerly adopted Yasuhiko Asahina's pioneering microchemical methodologies for taxonomic determination, famously writing in his correspondence: 'Three hurrahs for Asahina!' Among his extensive bibliography, Sandstede's monumental treatment of the *Cladoniaceae* for the new edition of *Rabenhorst's Kryptogamen-Flora* (1931) stands out as his undisputed masterpiece. This milestone was published just one year after the University of Münster awarded him an honorary doctorate on his 71st birthday in 1930. He also distributed a highly influential, widely cited exsiccatae series, the *Cladoniae Exsiccatae*, which comprised 1,886 numbered specimens issued between 1918 and 1930. The primary repository of his herbarium is housed at BREM, while a significant portion is at BRNU, having been transferred there during the Second World War. Ref.: Kärnefelt & al. (2012); Klement (1951); Llano (1952); Steilen (1957).



Santesson, Rolf (1916–2013) – Born in Trollhättan, Västergötland, Sweden, where his father was a chief accountant and his mother Hillevig ('Gigi') (née Frebelius) belonged to an established family; rather than pushing her children into traditional corporate or industrial paths, she encouraged creative and intellectual autonomy. Santesson demonstrated a precocious interest in botany. As a schoolboy, he taught himself to identify specimens using Josef Anders' seminal 1928 flora, *Die Strauch- und Laubflechten Mitteleuropas,* a work he revered throughout his life as the ideal handbook for beginners. He pursued his higher education at Uppsala University, where he was naturally drawn to the vibrant lichenological circle active at the *Växtbiologiska Institutionen* under the influence of Rutger Sernander and G. Einar Du Rietz. After graduating in 1939, Santesson joined the staff of the Regnellian Herbarium in Stockholm. His tenure was almost immediately interrupted by a major field expedition to Patagonia and Tierra del Fuego (1939–1940). Originally intended to last only a few months, the trip was extended until 1942 due to the outbreak of the Second World War, forcing him to make a long and difficult return journey across South America. It was during this extended stay on the continent that Santesson first encountered foliicolous lichens. Fascinated by their unique biology, he dedicated his doctoral research to the group, culminating in his groundbreaking 1952 monograph, *Foliicolous Lichens*. This work remains the undisputed global foundation upon which all subsequent studies of leaf-dwelling lichens are based. Crucially, Santesson utilised this monograph to implement a revolutionary taxonomic approach, classifying lichenised organisms directly within non-lichenised fungi using the Ascomycete classification system championed by his colleague and friend, John Axel Nannfeldt (1904–1985). Following the tragic death of his first wife in 1946, Santesson returned to Uppsala. He was appointed

curator of the Uppsala University Herbarium (UPS) in 1959, managing its historic collections until 1973, when he accepted a prestigious professorship at the Swedish Museum of Natural History (*Riksmuseet*) in Stockholm. Santesson committed decades to curating these vast archives, making the globally critical UPS lichen collections flawlessly accessible to the international community. This exhaustive herbarium work allowed him to undertake profound revisions of lichen nomenclature. He became an influential voice in shaping the International Code of Botanical Nomenclature regarding lichens, notably leading the defense against Ruggero Tomaselli and Raffaele Ciferri's controversial taxonomic proposals at the 1954 International Botanical Congress in Paris. Another monumental legacy of his archival mastery was his checklist of Scandinavian lichens. Issued across multiple print editions, this fastidiously researched catalogue now serves as the foundation for the authoritative online database maintained by Uppsala University, acting as an indispensable reference for researchers worldwide. While based in Stockholm, he continued to edit and distribute supplementary fascicles of Gustaf Oskar Andersson Malme's famous exsiccatae series of South American lichens. Later, in Uppsala, he turned his focus to lichen parasites (lichenicolous fungi), compiling and distributing a highly valued exsiccatae series dedicated to them. He was awarded the Acharius Medal by the IAL in 1992. The genera *Santessonia* Hale & Vobis and *Santessoniella* Henssen, alongside many species, were named after him. His herbarium is housed at UPS, though the South American material is (also) found at S. Ref.: Holm (1984); Jørgensen (2014a); Moberg & Tibell (1986); Tibell & Moberg (1986).



Sántha, László (Ladislaus) **(1886–1954) –** Born in Jászkisér, Austro-Hungarian Empire (now Hungary), Sántha completed his early education locally before moving to Budapest to read pharmacy at the Pázmány Péter University (now Eötvös Loránd University). He earned his doctorate there in 1909 and was subsequently employed as a researcher and assistant at the university's Botanical Institute. During his tenure, Sántha studied under the prominent botanist Sándor Mágocsy-Dietz (1855–1945), who carried on the cryptogamic traditions of Friedrich August Hazslinszky and enthusiastically fostered Sántha's growing interest in lichenology. Sántha's debut scientific paper, published in 1910, provided a detailed floristic account of the lichen communities in the immediate vicinity of Buda. He went on to publish several important regional floristic papers up until 1924. Parallel to his university studies, Sántha entered the field of agricultural sciences, joining Budapest's Ampelological Research Institute as a researcher in 1909. He dedicated the rest of his career to viticulture, plant pathology, and oenology, rising to become department head in 1931 and ultimately serving as Director of the National Viticultural Institute. Although his professional focus shifted completely to agricultural crops, his final major lichenological contribution in 1928 was a monumental milestone: a comprehensive monograph on the genus *Physcia* in Hungary. This publication stands as the very first genus-level lichen monograph produced in the history of Hungarian botany. Through this work and his earlier papers, he described several new infraspecific lichen taxa. His herbarium is housed at DE. Ref. Versheghy (1963).



Satô, Masami (1910–1984) – Born in Yamazoe (now Tsuruoka City) in Yamagata Prefecture, Japan, where his father worked as a schoolteacher and his mother helped support the running of the Shōnaikan hostel in Tokyo, an institution co-founded by her husband to provide housing, cultural preservation, and university mentoring for rural students arriving from their home province. Satô completed his primary education locally before moving to Tokyo in 1927 to attend high school. In 1931, he entered Tokyo Imperial University, reading botany and graduating in 1935. He was appointed an assistant at the university's Botanical Institute in 1938. During this period, he collaborated closely with the pioneering chemist and lichenologist Professor Yasuhiko Asahina. Under Asahina's influence, Satô decided to specialise in lichenology, a discipline that had fascinated him since his high school days. In 1942, he earned his doctorate with a dissertation focusing on the taxonomy of the *Cladoniaceae*. The escalation of the Second World War disrupted his academic trajectory; he was deployed to Java, where in 1944 he was stationed as a scientific administrator at the Bogor Botanical Garden (*Syokubutsu-en*). Following the war, he was recruited during the foundational inauguration of the College of Agriculture and Forestry in Yamagata. When the institution was restructured into a national university in 1950, he was elevated to the rank of Full Professor of Botany. In 1954, Satô accepted a professorship at Ibaraki University in Mito, where he remained until his retirement, though his final years were tragically clouded by Parkinson's disease. Satô was a highly versatile and industrious researcher who contributed fundamentally to the baseline knowledge of East Asian lichen diversity. He undertook exhaustive field expeditions across the historical breadth of the Japanese Empire, collecting specimens from Sakhalin in the far north to Taiwan in the south. He published prolifically on his findings, compiling the *Catalogue of the Lichens of Japan* (first edition 1943). Beyond floristics, Satô made lasting contributions to lichen biogeography. His most widely cited work is his landmark global mapping of the distribution patterns and mixture ratios of the chemical variants of the genus *Thamnolia*, published in the mid-1960s. Deeply committed to institutional growth, he chronicled the history of Japanese lichenology, became the founding president of the Lichenological Society of Japan, and published numerous educational books and newsletters. He also prepared and distributed an authoritative exsiccatae series of Japanese lichens. Satô described numerous new taxa, particularly within the *Cladoniaceae* and *Umbilicariaceae*. His herbarium is housed at TNS and IBAR. Ref.: Inoue (1985), Tuyama & Kurosawa (1984).



Savicz, Vsevolod Pavlovitsch **(1885–1972)** – Born in Bobruisk near Minsk in Belarus (then part of the Russian Empire), Savicz completed his primary education in the Minsk region before entering St Petersburg University in 1904. To support his studies, he worked in his spare time as an actor at the private Yavorsky Theatre. In 1906, he secured a position as an assistant in the university herbarium, where he met Mikhail Elenkin. Elenkin recognised the young student's talent and directed his focus towards the study of lichens. Around this period, Savicz began a lifelong

personal and scientific partnership with Lydia Ivanovna Lyubitskaya (1886–1967), whom he later married. An aspiring scientist who went on to become an eminent Soviet bryologist, she collaborated with Savicz on a collection of lichens from the Minsk region, co-publishing the results between 1907 and 1908. From 1907, Savicz served as an assistant to the celebrated botanist Professor Vladimir Komarov (1869–1945). In this capacity, he accompanied Komarov on his seminal expedition to the Kamchatka Peninsula (1908–1909), where Savicz assumed primary responsibility for collecting and cataloguing cryptogams. His academic ascent was disrupted by the First World War; he was mobilised as a military meteorologist, serving in field campaigns that took him as far west as the Austrian front. Following the cessation of hostilities and the Russian Revolution, he returned to Petrograd (later Leningrad) to resume his lichenological research. He participated in numerous hazardous scientific expeditions, including journeys to the Arctic archipelago of Novaya Zemlya. Throughout the 1920s, he held a succession of curatorial posts at the city's botanical gardens and museums. In 1934, Savicz was awarded an honorary doctorate in recognition of his extensive scientific contributions, after which he was appointed Assistant Director of the Division of Spore Plants at the Komarov Botanical Institute of the Academy of Sciences of the USSR. In 1939, he was promoted to Professor and Director of the institute's cryptogamic herbarium, significantly expanding its holdings through field trips and meticulous revisions of historical collections. Under the Soviet regime, Savicz became the undisputed administrative leader, frequently regarded as the 'Patriarch', of Soviet lichenology, wielding substantial institutional influence over the discipline's development. He mentored generations of future lichenologists, educating both domestic Soviet scholars and international students. Although his methodology was anchored in a traditional floristic and biogeographical approach, he also executed critical genus-level taxonomic revisions and described numerous new taxa. He compiled and distributed the highly regarded exsiccatae series *Lichenotheca Rossica*. His herbarium is housed at LE. Ref.: Golubkova (2003); Trass (1972).



Sbarbaro, Camillo (1888–1967) – Born in Santa Margherita Ligure, Liguria, Italy, where his father, Carlo Giuseppe, was an engineer and architect, whilst his mother, Angiolina (née Bacigalupo) belonged to an established, middle-class Ligurian family; her presence in her children's lives was cut tragically short, as she suffered from tuberculosis and passed away when Camillo was only five years old. Sbarbaro was educated in classical languages, eventually becoming a leading expert and translator of ancient Greek and French literature. Although he initially found employment teaching Greek and Latin, his refusal to join the National Fascist Party or swear the mandatory oath of allegiance forced his resignation. Consequently, he spent most of his professional life working as an administrative clerk in the iron and steel industry in Genova. Beyond his bureaucratic employment, Sbarbaro achieved widespread national acclaim as one of the most prominent Italian hermetic poets and prose writers of the twentieth century. Lichens were never a mere hobby to him; they became a core philosophical anchor in his life and a recurring motif throughout his celebrated literary works, such as *Trucioli* (1920) and *Scampoli* (1960). Sbarbaro's botanical

path began during his school years in Varazze under the guidance of his teacher, the Salesian priest Don Giacomo Gresino (1859–1946). Gresino was an expert botanist who had been initiated into lichenology through his contact with the historic Italian master Francesco Baglietto. Sbarbaro later noted that he became fascinated by lichens because they represented a largely overlooked, primitive, and resilient form of life. Conducting exhaustive field studies on foot, he made numerous important floristic discoveries, principally across his native Liguria. Because Italy lacked active university-backed lichenologists during this period, Sbarbaro established a vast international network, corresponding and exchanging specimens with European authorities such as Maurice Bouly de Lesdain, Oskar Klement, Adolf Hugo Magnusson, and Miroslav Servít, all of whom described dozens of new taxa based directly on his meticulously prepared material. Sbarbaro is widely recognised as a pivotal figure who single-handedly kept the flame of Italian lichenology alive during an era when national academic institutions completely ignored the discipline. Several species were named in his honour. He donated his magnificent personal collection to the Genoa Museum (GDOR) between 1963 and 1964, where it remains beautifully intact, though duplicates are also widely distributed across major foreign herbaria including F, H, S, and UPS. Ref.: Nimis (1988, 1993); Magurno (2011); Burguera & al. (2024).



Schade, Friedrich **Alwin (1881–1976)** – Born in Putzkau, Königreich Sachsen (now Germany), Schade was the son of a market gardener; despite originating from a modest, rural farming background, his mother and her husband prioritised an elite academic path for their son and developed a fascination with flowering plants during his childhood. Following his secondary education in Bautzen and Freiberg, Schade matriculated at the University of Leipzig in 1901 to study biology, chemistry, and geography. While working, he pursued advanced botanical research, earning his doctorate in 1912 from the University of Jena. His dissertation, which investigated the ecology of cryptogamic communities inhabiting rock faces in the 'Saxon Switzerland' region, was supervised by the celebrated plant physiologist Ernst Stahl. Schade's academic career was disrupted by the outbreak of the First World War; he was called up for military service in 1916, subsequently spent time as a British prisoner of war between 1918 and 1919, and returned to Germany following his release. Long before the war, in 1906, he had embarked on a lifelong teaching career at the historic *Kreuzgymnasium* in Dresden, where he spent his entire professional life, ultimately achieving the civil service rank of *Studienrat* in natural sciences. Outside the classroom, Schade was an exceptionally industrious cryptogamist within the prestigious *Naturwissenschaftliche Gesellschaft ISIS zu Dresden*. He collaborated closely with fellow researchers Emil Stolle (1868–1940) and Ernst Riehmer (1874–1966), joining forces with them to distribute a highly valued exsiccatae series of Saxon lichens, the *Lichenes Saxonici Exsiccati*. Although Schade initially maintained a stronger research focus on bryophytes and their ecology, it was Riehmer who ultimately inspired him to dedicate his energies to lichenology. Within the discipline, Schade achieved international recognition for his pioneering, highly original research exploring the biological interactions between lichens and animals, specifically documenting how snails, slugs, and insects graze upon thalli. He also

published foundational floristic and taxonomic treatises on the Saxon flora. Tragically, his massive historical herbarium was completely destroyed during the Allied firebombing of Dresden in February 1945, though he managed after the war to build a new collection which is now at GLM. Ref.: Kärnefelt & al. (2012); Reusch (2009); Schindler (1979); Seitz (1977).



Schaerer, Ludwig **Emanuel (1785–1853)** – Born in Bern, Switzerland, Schaerer was the son of a prominent professor of theology and Hebrew, whilst his mother's family belonged to the established, influential burger class of Bern. He followed in his father's footsteps by reading theology from 1805 and was ordained as a Protestant minister in 1808. Alongside his theological pursuits, he became a devoted pupil of the French-born botanist Nicolas Charles Seringe (1776–1858). To advance his scientific training, Schaerer spent 1811 and 1812 in Halle and Berlin studying botany under the guidance of Kurt Sprengel and Heinrich Gustav Flörke, both of whom decisively steered him into the field of lichenology. Upon returning to Bern, he initially worked as a secondary school teacher before being appointed director of the municipal orphanage (*Waisenhaus*) in 1819. He balanced his administrative duties with pastoral assignments, serving as the minister for Lauperswil in the Bernese Emmental from 1823 to 1836, and subsequently in Belp, Canton of Bern, from 1836 until 1852. These rural pastoral posts provided Schaerer with an ideal base to study the alpine lichen flora of the surrounding mountains in exhaustive detail. Although deeply tied to his home parishes, he undertook extensive collecting expeditions throughout the entire country. His fieldwork culminated in a detailed, highly regarded lichen flora of Switzerland. Schaerer's international renown, however, rests on his 1850 magnum opus, *Enumeratio critica lichenum europaeorum*. Modestly framed as a mere checklist, this monumental volume proved of vital importance to nineteenth-century taxonomy. In stark contrast to the emerging microscopical schools of his contemporaries, Schaerer's classification system mostly relied on traditional macroscopic and external morphological characters, marking the grand finale of the pre-microscopic era in European lichenology. He also compiled and distributed a magnificent exsiccatae series, the *Lichenes Helvetici Exsiccati*, which remains a prized reference for modern researchers. The genus *Schaereria* Th. Fr. is named after him. His herbarium is housed at G. Ref.: Fischer (1853); Guthnick (1853).



Scheidegger, Christoph (1958–) – Born in Oberbottingen near Bern, Switzerland, Scheidegger completed his primary and secondary education locally before reading natural history at the University of Bern. He earned his doctorate there in 1987 with a taxonomic revision of the saxicolous species of the lichen genus *Buellia*. The following year, he was appointed Head of the Scanning Electron Microscopy research group at the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL) in Birmensdorf, an institution to which he would commit the entirety of his career. Scheidegger steadily rose through the

institutional ranks at WSL, directing successive state-of-the-art laboratories. He managed the Genetic Diversity research group from 1999 to 2002, and led the Ecological Genetics research section between 2002 and 2006, before ultimately serving as the interim Head of the institute's primary Biodiversity and Conservation Biology research unit from 2006 to 2010. Parallel to his appointments at WSL, he maintained a highly active teaching career; he completed his Habilitation at the University of Bern in 1995, where he was subsequently appointed Honorary Professor of Lichen Biology in 2006. His academic expertise was also sought internationally, prompting a multi-year appointment as an Adjunct Professor of Conservation Biology at Memorial University in St John's, Newfoundland, Canada, from 2000 to 2004. Throughout his career, Scheidegger has held prominent leadership positions within influential global botanical bodies, including serving on the executive boards of the International Association for Lichenology (IAL) and the International Union of Biological Sciences (IUBS). His extensive research framework has been predominantly directed towards answering fundamental ecological and conservation questions within forest dynamics and river management. He famously pioneered the integration of modern methodologies, such as molecular biology, population genetics, and conservation genomics, to understand lichen populations. He has described several new taxa. His herbarium is housed at BERN and WSL. Ref.: *Pers. comm.*; Hertel & al. (2017).



Schimper, Georg Heinrich **Wilhelm (1804–1878)** – Born in Lauf an der Pegnitz in the territory of the free city of Nürnberg (now Bavaria, Germany), Schimper belonged on his father's side to a prominent Palatine family that produced several highly accomplished naturalists. His father, Friedrich Ludwig Heinrich Schimper (1771–1823), was a surveyor and mathematics teacher who divorced his noble wife, Margaretha Baroness von Furtenbach, when Wilhelm was ten. Consequently, Wilhelm had to care for his chronically ill mother, a responsibility that severely disrupted his early formal education. He briefly served in the Baden Army and subsequently qualified as a master wood-turner and ivory carver (*Kunstdrechsler*). Endowed with superb practical skills and a remarkable talent for natural history drawing, his illustrations eventually brought him to the attention of influential scientists, including Carl Friedrich Philipp von Martius. This network enabled him to finally matriculate to study natural history at the University of Munich in 1828, where he worked as an illustrator and laboratory assistant to the celebrated zoologist Louis Agassiz (1807–1873). In 1829, before completing his degree, Schimper was recruited by the *Esslinger Reiseverein* (an innovative botanical exchange society founded by Christian F. F. Hochstetter and E. G. von Steudel) to undertake a plant-collecting expedition to Algiers. He subsequently joined a major expedition to Upper Egypt in 1834, before crossing the Red Sea in 1836 to settle permanently in Abyssinia (modern-day Ethiopia). His life in East Africa unfolded in an extraordinary manner. The powerful warlord Dejazmach Wube Haile Maryam (1799–1867), ruler of Tigray and Semien, became so profoundly impressed by Schimper's administrative and technical capability that he appointed him *Šum*, or governor, of the Enticho district, a post he held from 1843 until Wube's defeat in 1855. The ruler also arranged his marriage to Mersit, a noblewoman from a powerful regional family. Operating from a fortified stone

residency, Schimper balanced his official administrative duties with pioneering scientific explorations of uncharted afroalpine zones, amassing vast collections of flora and fauna across the Ethiopian Highlands. Schimper possessed a deep curiosity regarding cryptogamy, a passion shared by his cousin, the eminent French-German bryologist Wilhelm Philipp Schimper (1806–1880). His Abyssinian lichen collections were the very first to be systematically documented from the Horn of Africa, with Hochstetter publishing the initial records in 1841. His material was subsequently analysed by Julius von Flotow in 1845, and later by William Nylander, resulting in the description of numerous species entirely new to science. For a time, his fieldwork was financially sustained by an official appointment as a designated foreign collector for the *Muséum National d'Histoire Naturelle* in Paris. Tragically, during the chaotic rise of Emperor Tewodros II, a regional civil war resulted in the total destruction of Schimper's home and personal scientific notes. Stripped of his governorship, he was taken hostage and imprisoned in the mountain fortress of Magdala, before being liberated in 1868 following the successful British Expedition to Abyssinia led by Sir Robert Napier. Despite these hardships, Schimper chose to remain in the country with his family until his death. Fortunately, the vast duplicates of his botanical material sent to European sponsors survived intact; his lichen specimens are preserved across several major herbaria, including H, M, and PC. Ref.: Bary (1879); Smidt & Smidt (2020).



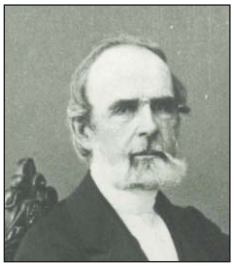
Schindler, Arthur Walter **Herbert (1907–1998)** – Born in Zittau, Königreich Sachsen (now Germany), Schindler lost his father during the First World War, prompting his mother to relocate the family to her native city of Dresden, where he completed his primary education. While attending the historic *Kreuzgymnasium*, he studied biology under Alwin Schade, who inspired a lifelong passion for plant sciences and lichenology, sparking a close personal and scientific friendship between the two. Schindler pursued his higher education in the natural sciences across both Dresden and the Free City of Danzig (now Gdańsk, Poland), ultimately earning his doctorate of technical sciences in 1931 at the Technical University of Dresden with a dissertation exploring wood anatomy. His supervisor, Friedrich Tobler, himself a former student of Simon Schwendener and an author of foundational textbooks on lichen biology, keenly encouraged Schindler's continued academic focus on cryptogamic systems. Schindler conducted several detailed floristic studies across Saxony while simultaneously carving out a successful non-academic career as a bacteriologist, homeopath, and research scientist within the pharmaceutical industries of Dresden, Leipzig, and Radebeul. This professional trajectory was interrupted by the Second World War, during which he saw active service and was subsequently taken as a prisoner of war. Following his release in 1946, he chose to settle in West Germany, establishing himself in the Karlsruhe region, where he channelled his research energies into the lichen flora of the Black Forest (*Schwarzwald*), focusing heavily on biogeographical distribution patterns. In 1972, Schindler became officially affiliated as a research associate with the State Museum of Natural History Karlsruhe, where he methodically revitalised and curated the museum's neglected historical lichen collections, significantly expanding them with his own extensive field gatherings. During this West German period, he expand-

ed his geographic reach, undertaking international collecting expeditions and publishing noteworthy papers on the lichen biotas of Alaska and Turkey. His extensive international fieldwork included collaborative expeditions to Chile with Jorge Redon, and to Uruguay and Brazil with Héctor Osorio. Although he chose not to describe any new taxa himself, his significant field contributions were honoured by other taxonomists who named several species in his memory. In an act of profound professional generosity, he donated all his invaluable pre-war collections to his former mentor, Alwin Schade, whose own historical herbarium had been entirely incinerated during the 1945 bombing of Dresden. Schindler's post-war collections are preserved at KR. Ref.: Kärnefelt & al. (2012); Philippi (1999).

Schleicher (orig. Sawitzky)**, Johann** Christoph (Jean Charles) **(1770–1834)** – Born in Hofgeismar, Landgrafschaft Hessen-Kassel (now Germany), he was formally adopted after his father's untimely demise, and took his stepfather's surname following his mother's second marriage to Carl Schleicher, a master huntsman. In 1790, the same year his widowed mother, Anna Marie Sawitzky, married for a third time, Schleicher relocated to Switzerland to establish himself as a practising pharmacist in Bex, Canton of Vaud. In the nearby hamlet of Le Bévieux, he designed and cultivated one of the earliest botanical gardens in the canton. Driven by an entrepreneurial spirit, he leveraged this garden to launch a highly successful commercial trade in living plants and dried herbarium specimens, gaining wide recognition as the pioneer of commercial botanical seed and plant catalogues after publishing his first edition in 1800. Furthermore, Schleicher was the first scientist to introduce the use of mercuric chloride (corrosive sublimate) as a chemical preservative for herbarium specimens, a technique for preventing insect degradation that remained an international museum standard until the late 20th century. Throughout his career, he published several highly regarded catalogues tracking the Swiss flora, which comprehensively indexed cryptogams and lichens. He maintained a fruitful scientific correspondence with E. Acharius, who described several of Schleicher's unique alpine collections as new species, though Schleicher also published several valid taxonomic descriptions of his own. Between 1805 and 1807, he issued a significant and widely distributed exsiccatae series dedicated to Swiss cryptogams (*Plantae Cryptogamae Helveticae*), which included numerous lichen specimens. His herbarium is housed at LAU. Ref.: Burdet (1978); Wilczek (1937).

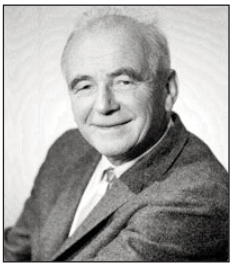
Schmiedel (Schmiedl)**,** Casimir **Christoph (1719–1792)** – Born in Bayreuth, Margraviate of Brandenburg-Bayreuth (now Bayern, Germany), Schmiedel was the son of the personal physician to the local Margrave and followed in his father's professional footsteps by studying medicine, pharmacy, and the natural sciences across Gera, Halle, and Jena. He earned his medical doctorate at the University of Jena in 1742 and, after a brief period practising as a conventional physician, was appointed Professor of Pharmacology at the newly opened *Friedrichs-Akademie* in Bayreuth, later transitioning to the University of Erlangen. In 1763, he secured an appointment as the personal physician to Margrave Christian Friedrich Karl Alexander of Brandenburg-Ansbach (1736–1806); though initially dismissed from the court because his intense devotion to botanical field studies caused him to neglect his royal duties, he was later reinstated by the ruler. During his early stay in Gera, Schmiedel had made the acquaintance of the pharmacist and botanical writer Johann Christian Hoppe (1697–1778), who permanently ignited his interest in cryptogamic plants,

prompting Schmiedel to publish several foundational botanical works. From 1747 onwards, he issued a celebrated series of detailed copperplate engravings paired with meticulous anatomical descriptions, titled *Icones plantarum et analyses partium*; widely regarded as a pinnacle of 18th-century botanical illustration, this masterpiece contained unprecedentedly precise analyses focusing primarily on mosses and liverworts. While Schmiedel is most famously remembered in broad botany as the discoverer of the antheridia (male reproductive organs) in liverworts and the first to deduce their function, he also secured a distinct niche in the history of lichenology. In a notable 1749 academic dissertation defended by his student Georg Wilhelm Hölzel regarding the moss genus *Buxbaumia*, Schmiedel confidently asserted the reproductive function of soralia within lichens, a pioneering insight into lichen biology that remained entirely overlooked by mainstream science until the historian and lichenologist August von Krempelhuber rediscovered the text a century later. Schmiedel's herbarium is (partly) housed at M. Ref.: Henglein (2010); Hess (1890); Leydig (1905).



Schneider, Albert (1863–1928) – Born in Granville, Illinois, USA, Schneider was the son of German immigrants dedicated to providing him with an exceptional education. After completing his primary education, he studied pharmacy and medicine in Chicago, earning his Doctor of Medicine (MD) degree in 1887 from the College of Physicians and Surgeons of Chicago. He initially found employment as a physician and instructor at the Spicer Academy in North Dakota. Dissatisfied with standard medical practice, he pivoted towards natural history, enrolling at the University of Minnesota, where he obtained his Master of Science (MS) degree in 1894 with a thesis investigating the nitrogen-fixing bacterial genus *Rhizobium*. Schneider subsequently transferred to Columbia University in New York to pursue advanced botanical research. Around this time, he developed a profound interest in the theoretical aspects of lichen symbiosis, inspired heavily by the writings of the German botanist Johannes Reinke. Schneider operated largely in isolation from contemporary American collectors and never formed close professional ties with domestic lichenologists. He published numerous papers and a monumental doctoral dissertation on the subject, earning his PhD from Columbia in 1897. Seeking to sustain his research, he applied for a fellowship at the Farlow Herbarium of Harvard University; however, his application was unsuccessful. Following this institutional rejection, Schneider effectively abandoned active lichenological research. He was subsequently appointed Professor of Pharmacognosy and Bacteriology at Northwestern University in Evanston, Illinois. He then spent the remainder of his highly versatile career working as an expert pharmacologist and toxicologist across California (1903–1913), Nebraska (1919–1921), and Oregon (1921–1928). Within American lichenology, Schneider remains an important historical figure for his precocious attention to the biological and evolutionary status of lichens, advocating fiercely for their natural classification based on fungal affinities. His influential textbooks, most notably *A Text-Book of General Lichenology* (1897) and *A Guide to the Study of Lichens* (1898), heavily shaped the views of a younger generation of researchers, including Bruce Fink and Charles Plitt. However, because Schneider was fundamentally a labo-

ratory theorist who disdained routine floristic mapping and field collecting, his legacy was rapidly overshadowed, to the extent that Irwin Brodo's modern history of American lichenology completely omits him. He is also famously responsible for an enduring nomenclatural anecdote: in translating Reinke's German rendering (*"das armselige Pöbelvolk"*) of Linnaeus's description of lichens (*"rustici pauperrimi"*), Schneider chose the unfortunate English phrasing "the poor trash of Nature", a quote that has been repeated in botanical literature ever since. As noted by Plitt in his obituary, Schneider possessed a mercurial intellect, becoming intensely enthusiastic about a new scientific domain before abruptly abandoning it for another. True to this pattern, he spent his final years immersed in psychophysiological criminology and forensic science, successfully engineering an early polygraph mechanism that paired a word-association test with a galvanometer to measure electrodermal deception. Taxonomically, Schneider described only a single American species, *Parmelia multispora* (now *Melanohalea multispora*). Although he was an inactive field collector, the vital anatomical and morphological voucher specimens utilised for his 1897 Columbia doctoral thesis were collected across New York, Illinois, and Pennsylvania, and are today at NY. Ref.: Plitt (1934); R. Harris, *pers. comm.*



Scholander, Per ('Pete') Fredrik **(1905–1980)** – Born in Örebro, Närke, Sweden, where his father worked as an engineer, Scholander was relocated to Oslo by his pianist mother, Agnes (née Faye-Hansen), who took the children with her after divorcing her husband. He completed his secondary education in Oslo before matriculating at the University of Oslo to study medicine, earning his *Cand.med.* degree in 1932. During his medical studies, a fortunate meeting with the eminent botany professor Bernt Lynge led to his employment as a research assistant on a major Norwegian scientific expedition to Northeast Greenland, a polar experience that proved entirely transformative, steering Scholander towards a lifelong engagement with Arctic biology. He rapidly completed a doctoral dissertation on the vascular flora of Nordaustlandet, Svalbard, earning his PhD in 1934; despite his initial focus on flowering plants, Scholander maintained a profound taxonomic interest in lichens, which he continued to collect throughout his global travels. He published several landmark papers on Arctic lichenology, specialising in the family *Umbilicariaceae*, and pioneered the structural hypothesis that the vast genus *Umbilicaria* could be segregated based on the ontogeny and morphology of its apothecia, a taxonomic concept that heavily influenced the American lichenologist George Albert Llano, whom Scholander met during a research stay in the United States. In 1939, Scholander moved to America on a prestigious Rockefeller Foundation Fellowship at Swarthmore College, and following the outbreak of the Second World War, he joined the war effort by commissioning into the United States Army Medical Corps, rising to the rank of Major. Stationed in Alaska, he served as an aviation physiologist and cold-weather survival specialist, a role that allowed him to rigorously investigate the mechanisms of frost tolerance and respiratory physiology in Arctic animals under extreme conditions, permanently shifting his primary career toward comparative zoophysiology. In 1955, he returned to Norway to accept a chair as Professor of Zoophysiology at the University of Oslo; however, frustrated by a severe lack of domestic

funding and research infrastructure, he permanently returned to the United States in 1958 to join the Scripps Institution of Oceanography in La Jolla, California. There, he established the world-renowned Physiological Research Laboratory, directing cutting-edge studies on deep-sea diving physiology, gas secretion in fish, and human adaptation to extreme cold. Despite his international status as a giant of 20th-century animal physiology, Scholander never lost his passion for botanical mechanics; within plant physiology, he achieved immense renown for inventing the Scholander pressure chamber, an elegant apparatus that allowed him to experimentally validate the cohesion-tension theory of sap ascent by demonstrating definitively how majestic forest lianas and tall trees transport water to extreme heights under massive negative tension, rather than osmotic pressure. He was elected to the United States National Academy of Sciences in 1961. His herbarium is housed at O. Ref.: Enger (2004); Schmidt-Nielsen (1987); Scholander (1990).



Schrader, Heinrich Adolf **(1767–1836)** – Born in Alfeld, Prince-Bishopric of Hildesheim (now Germany), Schrader pursued his higher education at the University of Göttingen, where he studied medicine and earned his doctorate in 1797. Having demonstrated an exceptional aptitude for structural botany, he was appointed Adjunct Professor of Botany at Göttingen in 1802, before being elevated to Full Professor and Director of the Göttingen Botanical Garden in 1805. In this prestigious institutional role, he succeeded his former teacher and mentor, the eminent early lichenologist Georg Franz Hoffmann (1760–1826). Throughout his academic career, Schrader maintained a profound research interest in cryptogams, publishing his foundational treatise, *Spicilegium florae Germaniae*, in 1794. To visually anchor and experimentally validate the taxonomic treatments outlined in this book, he prepared and distributed a highly influential exsiccatae series, *Plantae Cryptogamicae Germaniae*, which included sixty carefully curated lichen numbers. Schrader was a central node in the early European botanical network and maintained a prolific scientific correspondence with Erik Acharius, routinely shipping unique German specimens to Sweden for evaluation. He played a major logistical role in the history of international lichenology by leveraging his publishing contacts to secure a German printer for Acharius's monumental, discipline-defining masterpiece, *Lichenographia Universalis* (1810). Schrader's institutional influence also extended through his students; notably, Johann Albert Luyken (1785–1867) eagerly adopted Acharian methodologies for his landmark 1809 doctoral thesis, *Tentamen Physiographiae Lichenum*, with Acharius even permitting the young scholar to debut several new generic descriptions within the text. Schrader's herbarium is housed at GOET. Ref.: Killermann (1941); Martius (1837).

Schrank, Franz de (von) Paula **(1747–1835)** – Born in Vornbach am Inn, Kurfürstentum Bayern (now part of Neuhaus am Inn near Passau, Germany), Schrank was the son of a monastery judge, whilst his mother came from a prominent legal and administrative family deeply connected to the regional court system. This legal and religious background likely influenced his unusual Christian name, chosen in honour of the founder of the Paulaner Order, St Francis of Paola. Schrank attended the Jesuit Gymnasium in



Passau (the historical predecessor of today's *Gymnasium Leopoldinum*) before entering the Society of Jesus as a novice. From 1762 onwards, his ecclesiastical and scientific education took him to Vienna (Wien), Austria, as well as to Raab (now Győr, Hungary) and Tyrnau (now Trnava, Slovakia). Upon completing his coursework, he worked as an instructor at the Jesuit College in Linz from 1769 until 1773. Following the papal suppression of the Jesuit Order that same year, he returned to Vienna to complete his theological training and was formally ordained as a secular priest in 1774. In 1776, Schrank earned a doctorate in theology and was promptly appointed Professor of Mathematics and Physics at the Lyceum in Amberg, Bayern, before accepting a chair at the primary Bavarian university in Ingolstadt (which later relocated to Landshut) in 1784. There, he served for decades as Professor of Economics and Botany. In 1809, his immense administrative and scientific expertise led to his appointment as the founding Director of the newly established *Botanischer Garten München*. In recognition of his vast contributions to Bavarian state science, he was elevated to the nobility in 1808, receiving the title Ritter von Schrank. In addition to his prolific, multi-volume publications on European phanerogams and entomology (such as *Baierische Flora* and *Fauna Boica*), Schrank maintained a lifelong interest in cryptogams. He carved out a unique niche in exotic lichenology by examining and describing roughly twenty new lichen species native to Brazil. These specimens were discovered growing on imported tropical barks shipped to Europe for pharmaceutical and medicinal use, a specialised investigative tradition originally pioneered by Carl Ludwig Willdenow. In München, Schrank acted as a major mentor, supervisor, and paternal tutor to Carl Friedrich Philipp von Martius, the legendary explorer who would go on to map the Brazilian flora. Schrank's primary historical herbarium collections are conserved at M, where his distinct Brazilian epiphytic lichens are largely integrated into the general South American cryptogamic collections curated by Martius and Franz Gerhard Eschweiler rather than being housed as an isolated set. Ref.: Martius (1836); Wunschmann (1891).



Schreber, Johann **Christian** Daniel von **(1739–1810)** – Born in Weißensee, Thüringen (then part of the Electorate of Sachsen), Germany, Schreber initially studied theology and medicine at the University of Halle. He subsequently transferred to the University of Uppsala as a medical student to study under Carl Linnaeus. The Swedish master exerted a profound, permanent influence on Schreber's scientific worldview. In 1760, he successfully defended his medical dissertation, *Theses Medicae*, under Linnaeus's direct supervision. Following his formative Swedish period, Schreber returned to Germany in 1761 to practice medicine in Bützow, Mecklenburg, where he concurrently served as a lecturer at the local university. In 1770, he accepted a prestigious appointment as Professor of Medicine and Botany at the University of Erlangen in Bayern. His institutional responsibilities grew rapidly; he was appointed Director of the Erlangen Botanical Garden in 1773, and was elevated to Professor of Natural History in 1787. Schreber became one of the most influential teachers

of natural history in Central Europe, acting as a primary conduit for the dissemination of the Linnaean sexual system across the German-speaking world. His classroom mentored several brilliant minds who would go on to shape cryptogamic botany, including Georg Franz Hoffmann and Christiaan Hendrik Persoon. Within lichenology, Schreber maintained a conservative, highly traditional view of species limits, remaining conceptually faithful to his mentor's broad circumscriptions. However, he executed vital structural work that transformed future taxonomy. In his monumental, meticulously revised eighth edition of Linnaeus's *Genera Plantarum* (1789–1791), Schreber systematically subdivided the vast, overarching Linnaean genus *Lichen* into distinct morphological sections based on precise structural characters. These diagnostic subdivisions provided the direct framework that later authors, most notably Erik Acharius, elevated into universally accepted separate genera, including *Cornicularia*, *Lobaria*, and *Sticta*. His herbarium is housed at M. Ref.: Hertel & Schreiber (1988); Kärnefelt & al. (2012); Schrank (1818).



Schultz, Matthias (1972–) – Born in Pritzwalk, Brandenburg, Germany, Schultz was the son of a biology teacher, a parental background that heavily influenced his early scientific curiosity, although chemistry remained his favourite subject during his school years. Although he had initially intended to pursue biochemistry, a highly constrained number of available places led him to enrol at the University of Rostock in 1990 to study general biology under the guidance of Helmut Pankow (1929–1996). During a student field excursion to regional sand dunes, Schultz became fascinated by the highly diverse local lichen vegetation and gathered his very first field collections. Because his professor was unable to identify the specimens with certainty, Schultz was introduced to a departmental colleague, Matthias Giersberg, who provided him with fundamental identification literature, including the identification keys of Josef Poelt and Volkmar Wirth. This cryptogamic interest was cemented during two international field excursions in 1992, prompting Giersberg to suggest that Schultz investigate lichens within the context of environmental monitoring. In 1995, Schultz successfully received his university diploma with a thesis evaluating lichens as bioindicators across the Rostock region. A pivotal meeting with Burkhard Büdel in 1996 led to Schultz's relocation to the Technical University of Kaiserslautern in Rheinland-Pfalz, where he worked as a research scientist from 1997 to 2001 and earned his doctorate in 2000 with a widely acclaimed taxonomic dissertation on the family *Lichinaceae*, supervised directly by Büdel. Following his PhD, Schultz accepted an appointment as a visiting post-doctoral researcher at Arizona State University in Tempe, USA; during this American period, he contributed fundamentally to the milestone *Lichen Flora of the Greater Sonoran Desert Region*, authoring the vast majority of the treatments dedicated to the complex, taxonomically demanding cyanobacterial lichens. Upon his return to Germany, Schultz joined the Biozentrum at the University of Hamburg, where he advanced through several curatorial positions. In 2015, he was appointed as Curator, and in 2016 he assumed his current role as the Senior Curator (*Oberkustos*) of the prestigious *Herbarium Hamburgense* (HBG). Schultz has executed extensive global generic revisions within the *Lichinales*, pioneering the use of advanced DNA sequencing and molecular phylogenetics to resolve

longstanding evolutionary uncertainties within these minute, rock-dwelling cyanolichens, and describing numerous new taxa in the process. His herbarium is housed at HBG. Ref.: P*ers. comm.;* Hertel & al. (2017); Kärnefelt & al. (2012).



Schumm, Felix (1946–) – Born in Göppingen, Baden-Württemberg, Germany, where his father worked as a physician, Schumm demonstrated a keen interest in the natural sciences even as a schoolboy, an inclination that evolved over time into a particular fascination with abstract disciplines, namely mathematics, physics, and chemistry. In 1966, after brief hesitation, he chose to study physics at the University of Stuttgart, graduating in 1972 with a diploma thesis focused on photon emissions during specific chemical reactions. Following several years of teaching and further training, Schumm worked in ecophysics at the University of Hohenheim from 1974 to 1976, subsequently securing a teaching position at the *Friedrich-Schiller-Gymnasium* in Fellbach, Baden-Württemberg, where he progressed through the German school system to be appointed *Studiendirektor* (senior master) in 1981. After taking early retirement, Schumm turned his attention increasingly towards lichenology, having originally collected lichens as a schoolboy and becoming fascinated by their structural beauty after receiving his first microscope in 1960. He even published a short paper in 1965 explaining how to prepare lichen slides, and throughout his university physics studies, he continued to collect and identify lichens in his spare time. Driven by his passion for microscopy, he became an active member of the Microscopical Society of Stuttgart in 1983; within the lichenological community, Schumm quickly made the acquaintance of leading German experts, including Josef Poelt and Oscar Klement, and went on to document several new lichen records for his region. Following his retirement, he began travelling extensively across the globe, with expeditions starting in the Canary Islands, which he first visited in 1976, and later taking him to remote, poorly researched regions, particularly after 2000. His publications from these travels are highly regarded for their exceptional quality, notably the precise presentation of microscopic cross-sections, and a defining hallmark of Schumm's modern work is his vast, meticulously curated photographic archive. Over decades of fieldwork, he compiled tens of thousands of high-resolution macro photographs of lichen habitus, alongside detailed microscopic structures and thin-layer chromatography (TLC) profiles. This massive image repository forms the core of his extensive publishing output. He has published dozens of richly illustrated reference books, atlases, and multi-volume series, most of which are available in the online open-access platform *Archive for Lichenology.* Alongside various co-authors, Schumm has described numerous new species. The genus *Schummia* Lücking, R. Miranda & Aptroot was named in his honour. His private herbarium contains approximately 20,000 specimens. Ref.*: Pers. comm.;* Kärnefelt & al. (2012).

Schweinitz, Ludwig (Lewis) David **von (de) (1780–1834)** – Born in Bethlehem, Pennsylvania, USA, where his German father served as the superintendent of the Moravian *Herrnhuter* community, whilst his mother came from a noble family which was deeply tied to the founding and administration of the Moravian Church. The settlement had been co-founded by his maternal great-grandfather, Count Nicolaus Ludwig von Zinzendorf



(1700–1760). Schweinitz began his education at the Moravian institution in Nazareth, Pennsylvania, where his interest in the natural environment was first stimulated. He reputedly became completely absorbed in the study of a lichen he happened to encounter, examining it in meticulous detail. In 1798, the family returned to Europe when his father was elected to the governing board of the congregation. In 1801, young Ludwig completed his studies at the theological seminary in Niesky, Upper Lusatia (Germany). He was appointed a preacher at the Moravian settlement of Gnadenberg in Silesia (now Godnów, Poland) in 1807, and subsequently at Gnadau in Sachsen, Germany, in 1808. During this period, he collaborated with his botanically minded teacher, Bishop Johann Baptist von Albertini (1769–1831), on a landmark survey of local fungi. This was published in 1805 as the *Conspectus Fungorum in Lusatiae Superioris Agro Niskiensi Crescentium*. In 1812, Schweinitz was recalled to the United States to take up an administrative position within the Church. During his return journey, he made a brief stop in Kiel, Germany. He left such a favorable impression on the faculty at the University of Kiel that he was awarded a Ph.D. *in absentia* after his departure for America. He initially settled in Salem, North Carolina, before moving back to his birthplace of Bethlehem, Pennsylvania, in 1821. Alongside his demanding religious duties, he continued his intensive study of fungi and has widely been called "the Father of North American Mycology". Although primarily a mycologist, his publications also treated and described several lichens. Furthermore, he served as an important advisor and correspondent to pioneer American lichenologists, including A. Halsey and G. H. E. Muhlenberg. His herbarium is housed at PH. Ref.: Benedict (1934); Rogers (1977); Seidel (1923).



Schwendener, Simon (1829–1919) – Born in Buchs, in the canton of St Gallen, Switzerland, near the Liechtenstein border, into a family of farmers, Schwendener was an only son who was expected to take over the family farm, but he demonstrated such academic talent at school that a university education appeared far more suitable. Because his father could not afford the fees, Schwendener enrolled at a teacher training college in St Gallen in 1847, later becoming a teacher at a local school near Buchs, and it was only after inheriting money from his grandfather in 1849 that he was able to begin studying in Genève, where he befriended Alphonse de Candolle and attended his lectures. When his funds ran out, he was forced to interrupt his studies and resume teaching at a private school, where he became highly popular with his pupils as well as with the school's proprietor, who reportedly offered Schwendener the school alongside his daughter's hand in marriage. Determined to devote his life entirely to science, Schwendener declined the generous offer and remained unmarried throughout his life, resuming his university studies in 1853 by transferring to Zürich, where the celebrated palaeontologist Oswald Heer (1809–1883) became his primary mentor. His 1856 doctoral thesis, a phenological study on the periodicity of nature in relation to plants, focused on a theme originally suggested to him by de Candolle. The turning point in Schwendener's career came when Carl Wilhelm Nägeli

(1817–1891) was appointed to a professorship in Zürich, prompting Schwendener to immerse himself in Nägeli's pioneering research into plant structure and function, later following him to München in 1857, where Schwendener qualified as a *Privatdozent* (lecturer) in 1860. This line of research led him to scrutinise lichens under the microscope, and in a series of ground-breaking papers published during the 1860s, he presented observations that culminated in his famous dual-nature hypothesis of lichens, a revolutionary theory proposing that lichens were not single plants, but composite organisms formed by a symbiotic association between a fungus and a photosynthetic alga. Although the theory provoked fierce controversy and was summarily rejected by most contemporary leading lichen taxonomists, his meticulous research was subsequently proven entirely correct. In 1867, Schwendener was appointed professor of botany in Basel, where he shifted his primary research interest toward higher plants, conducting extensive work on the correlation between anatomical structures and mechanical principles and concluding his career with prestigious professorships at Tübingen (1877–1878) and finally Berlin (1878–1910). Despite his international renown, he remained a modest individual and a deeply considerate teacher whose students affectionately called him "*Der Meister*" (The Master); he detested formal titles, felt visibly embarrassed when invested with the honorary rank of *Geheimrat* (Privy Counsellor), and was legendary among his pupils for demanding absolute observational precision and rigorous logical thinking. Rather than keeping a traditional herbarium, his research legacy consists primarily of anatomical slide preparations, which are preserved at B, with further early material housed at Z. Ref.: Haberlandt (1929); Honegger (2000); Kärnefelt & al. (2012); Wille (1919); Zimmermann (1922).



Scopoli, Johannes Antonius (Giovanni Antonio) **(1723–1788)** – Born in Cavalese, Val di Fiemme (Fleimserthal), Prince-Bishopric of Trento, (now Italy), Scopoli was the son of a lawyer who served as a superintendent to the Bishop of Trento, whilst his mother belonged to a prominent, aristocratic Trentino family. Scopoli received his early education in Trento before being sent to study philosophy at Hall, near Innsbruck, Austria, but finding this curriculum dry and unproductive, having already been drawn to the natural sciences, he abandoned philosophy to study medicine, completing his foundational medical courses at the University of Innsbruck in 1743. He initially practised medicine in his hometown of Cavalese and later in Venice, whilst simultaneously building comprehensive collections of Alpine flora and insects, until the patronage of Count Leopold Ernst von Firmian (1708-1783), the Prince-Bishop of Trento, enabled him to relocate to Vienna. There, he presented his innovative botanical manuscript *Methodus Plantarum* to a court medical commission headed by the celebrated physician Gerard van Swieten (1700–1772); the work was formally accepted as his medical dissertation, and Scopoli was awarded his Doctor of Medicine degree by the University of Vienna on 26 May 1754. After serving for two years as a doctor in Linz, Austria, he was appointed in 1754 as the official physician to the state mercury mines in Idrija (now Slovenia), a post he held until 1769, where alongside his outdoor environmental surveys, he conducted vital medical research into the devastating effects of mercury poisoning among the local miners. During his tenure in Idrija, Scopoli published the first

edition of his landmark *Flora Carniolica* (1760), and the expanded second edition (1772) fully adopted the new binomial nomenclature system championed by Carl Linnaeus, with whom Scopoli maintained a regular correspondence; consequently, many plants and lichens native to the region received their first valid scientific names under this system. Despite not holding a specialised interest in cryptogamic botany, Scopoli is the author of several lichen names, including two large, widespread macrolichens which he originally described under the names *Lichen amplissimus* and *Lichen scrobiculatus* (now classified in the genera *Ricasolia* and *Lobarina*, respectively). He was subsequently appointed professor of chemistry and metallurgy at the Mining Academy in Schemnitz (now Banská Štiavnica, Slovakia), and in 1777, he moved to his final academic post when he was appointed professor of chemistry and natural history at the University of Pavia in northern Italy, where he remained until his death, overseeing the development of the university's Botanical Garden. Celebrated as "The Linnaeus of the Austrian Empire", his immense contributions were immortalised by Linnaeus, who named the plant genus *Scopolia* in his honour, and although historical records indicate his lichen collections were deposited at the University of Pavia (PAV), the original specimens are now considered missing or lost. Ref.: Guglia (1972b); Petkovšek (1977); Scopoli (1788); Voss (1881).



Seaward, Mark Richard David **(1938–)** – Born in Lincoln, Lincolnshire, England, UK, he was educated locally before reading natural sciences at the University of Birmingham, graduating in 1959. He then took up a lecturing post at Loughborough Training College while continuing his postgraduate studies at the University of Nottingham, where he completed an MSc in heathland ecology in 1965. In 1972, he earned his doctorate (PhD) in urban ecology from the University of Bradford under the supervision of David Hambler (1930–), with a thesis entitled *Aspects of urban lichen ecology*. Seaward established his academic career at Bradford, ultimately being appointed Professor of Environmental Biology there in 1989. In 1982, he was awarded a higher Doctor of Science (DSc) degree for his thesis, *British lichen flora: historical, chorological and ecological studies*. It was Frank Brightman's 1959 article *Neglected Plants* that first awakened Seaward's interest in lichens, and Brightman (1921–1997) became a lifelong friend and mentor, heavily influencing his pioneering research into environmental pollution monitoring. Seaward subsequently became a leading global expert on the bioaccumulation of heavy metals and radionuclides in lichen thalli. Beyond environmental monitoring, Seaward has made foundational contributions to the history of lichenology, notably writing and editing seminal volumes such as *Lichen Ecology* (1977). He also spearheaded the distribution mapping programme for the British Lichen Society, which culminated in the publication of the first Atlas of the Lichens of the British Isles (1982), co-edited alongside C. J. B. Hitch. His extensive contributions to environmental science earned him numerous international accolades, including an honorary doctorate from the University of Wrocław, Poland, with which he maintained a long and close academic relationship. In 2006, the IAL awarded him the Acharius Medal. The genus *Seawardiella* S. Y. Kondr. *et al.* was named in his honour, and his vast private herbarium is designated to be permanently housed at LIV. Ref.: *Pers. comm.*; Hawksworth & Coppins (2018); Kärnefelt (2009); Richardson (2007).

Senft, Emanuel (1870–1922) – Born in Chotěboř, Bohemia (Böhmen), then part of the Austro-Hungarian Empire (now Czech Republic), where his father owned a pharmacy. After completing his secondary education in Deutschbrod (Německý Brod) and Čáslav, he joined his father's business in 1886 to gain practical training in pharmacy. From 1889 to 1891, he studied pharmacy at the Karl-Ferdinand University in Praha (Prague), qualifying as a *Magister Pharmaciae*. He subsequently worked as a pharmacist in various locations across Bohemia and Moravia until 1906, when he relocated to Budapest as a medical supplies official. In 1909, Senft moved to Vienna to join the chemical laboratory of the Military Medical Officers' Corps. Concurrently, he established a distinguished career as a chief inspector at the State Agricultural-Chemical Experimental Station in Vienna. He was later transferred to Prague, where he assumed a leading position managing military pharmaceutical supplies and directed the experimental station for the cultivation of medicinal plants. Following the collapse of the Austro-Hungarian Empire, he joined the Ministry of Health of the newly formed Czechoslovak Republic. He was awarded the civil rank of *Regierungsrat* (Government Councillor) and tasked with establishing the new State Institute for Drug Control. However, severe heart disease forced his early retirement in 1920. Although his professional duties centered primarily on pharmacognosy and the cultivation of medicinal herbs, Senft made significant contributions to cryptogamic botany. He was an outstanding microscopist who published valuable papers on lichen anatomy, the microchemistry of unique lichen substances, and the identification of lichens growing on medicinal bark. He collaborated closely with the Czech botanist Edvin Bayer (1862–1927) and played an important role in mentoring and supporting amateur lichenologists in Bohemia, most notably Filip Kovář and Václav Kuták. He also described a small number of new infraspecific lichen taxa. His herbarium is housed at PR. Ref.: Poggendorff (1940).



Sernander, Johan **Rutger (1866–1944)** – Born in Viby, Närke, Sweden, Sernander was the son of a county cashier (*länsräntmästare*), whilst his mother, Edla Charlotta (née Wadsten), belonged to a prominent, well-established merchant and civic family from the same region. Displaying a keen interest in the natural world from boyhood, he entered the University of Uppsala in 1889, where he graduated in 1893 and earned his doctorate in 1895. All aspects of plant geography and early nature conservation formed his primary scientific focus. In 1909, he was appointed Professor of Plant Biology at Uppsala, establishing the *Växtbiologiska Institutionen* (Institute of Plant Biology) and developing it into a globally pre-eminent institution. Although primarily celebrated as a phytogeographer, Sernander was a pupil of the distinguished lichenologist Thore Magnus Fries, which sparked a lifelong interest in lichens. The majority of his lichenological papers addressed ecology or sociology, such as his pioneering studies on the distinct zonation of lichens on rocky beaches. A true pioneer in experimental lichen ecology, Sernander coined the term "nitrophilous lichens" in his seminal 1912 publication, *Studier öfver lafvarnes biologi. I. Nitrofila lafvar*, famously verifying this concept by applying manure to selected lichen plots whilst leaving others as controls. Sernander exerted a profound influence as a teacher and mentor to the next generation of Swedish researchers,

including his student and son-in-law, G. Einar Du Rietz. His herbarium is housed at UPS. Ref.: Du Rietz (1945); Skottsberg (1945).



Sérusiaux, Emmanuël (1953–) – Born in Dinant within the Namur region of Wallonia, Belgium, Sérusiaux displayed an early interest in natural sciences. After completing his education locally, he studied biology at the University of Liège, graduating in 1975 with a specialization in botany. The following year, he traveled to the United States on a Rotary International fellowship to study as a special graduate student at Harvard University. Upon returning to his *alma mater*, he conducted extensive research on the lichens of the Kivu province in the Democratic Republic of the Congo (then Zaïre). Supervised by Jacques Lambinon, this research culminated in his doctorate, which he received in 1982. Sérusiaux subsequently worked as a research fellow for the Belgian National Fund for Scientific Research (FNRS). Alongside his academic career, he became heavily engaged in environmental policy, undertaking a prominent political and administrative career in the Walloon government. He served in several high-level cabinet roles, including advisor and deputy chief of staff to the Walloon Minister for the Environment and Agriculture. In 2004, he was appointed Professor at the Department of Biology, Ecology and Evolution at the University of Liège, where he taught until 2017. He then transitioned into a senior advisory role as deputy chief of staff for environmental affairs to the Minister-President of Wallonia, serving until his retirement in 2019. Despite his significant political obligations, Sérusiaux was an influential educator who trained several generations of Belgian and European lichenologists. He has contributed greatly to global lichenology, particularly through his landmark papers on tropical foliicolous lichens from the Congo, Papua New Guinea, and Madagascar. Simultaneously, he co-authored foundational works on the macrolichens and flora of Belgium, Luxembourg, and northern France alongside Lambinon and Paul Diederich, producing an updated regional checklist. He has described numerous new taxa, including the distinct genera *Fellhaneropsis* and *Nyungwea*. The genera *Emmanuelia* Ant. Simon *et al.*, *Serusiauxia* Ertz & Diederich and *Serusiauxiella* S.H. Jiang *et al.*, alongside many species, are named after him. His herbarium is housed at LG. Ref.: *Pers. comm.*; Magain & al. (2020).



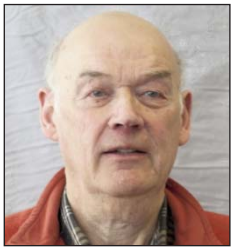
Servít, **Miroslav (1886–1959)** – Born in Kukleny (now part of Hradec Králové), Bohemia (Böhmen, then within the Austro-Hungarian Empire, now in the Czech Republic), Servít was the son of local working-class parents. After completing his secondary education in Nové Město na Moravě, he began studying natural history in 1905 at Charles University in Prague, but later transferred to the Royal Czech Agrarian Academy. From 1910 to 1914, he worked as a research assistant at the Agrarian Academy in Tábor. As an Austrian citizen, he was conscripted during the First World War and was wounded multiple times on the front lines. Despite these wartime disruptions, he completed his studies in 1923, earning a doctoral degree in agronomy with a dissertation focused on agricultural bean varieties. He subsequently served in several

prominent administrative and directorial positions across the Czechoslovak agrarian school and research system. Following his retirement in 1945, Servít had intended to devote himself entirely to lichenology. However, the economic devastation of the Second World War forced him back into teaching. To secure essential free housing, he accepted a position as the headmaster of a primary school in Pětipsy (near Klášterec nad Ohří), where he remained until 1954. He had originally been steered toward lichenology by the Moravian botanist Filip Kovář (1863–1925), a pupil of Emanuel Senft. Servít published numerous papers documenting the regional lichen flora of his collecting grounds, with his first floristic contribution appearing in 1910. His primary scientific focus, however, was the taxonomy of the *Verrucariaceae*. He correctly recognised that many traditional taxa had been too broadly defined; unfortunately, he took an extreme "splitting" approach, describing an excessive number of new families, genera, and species. He was heavily criticised by contemporary and subsequent authors for publishing these taxa too rapidly and without critical evaluation. Nevertheless, his meticulous anatomical work revealed several previously overlooked microscopic characters within the group, particularly regarding the structure of the involucrellum. He described several new genera, including *Amphoroblastia*, *Involucrothele*, and *Paraplacidium,* none of which are currently widely accepted. His herbarium is housed at PRM. Ref.: Černohorský (1957, 1960); Klement (1960).

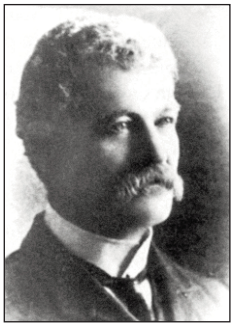


Shear, Cornelius Lott **(1865–1956)** – Born in Coeymans Hollow, Albany County, New York, USA, Shear developed a keen interest in natural history during his youth. After completing his early education, he spent several years from 1888 working as a teacher in secondary schools across New York and Nebraska. While in Nebraska, he met the influential botanist Charles Edwin Bessey (1845–1915), under whose mentorship he began formal botanical studies. Shear graduated with a Bachelor of Science from the University of Nebraska in 1897, followed by a master's degree in 1901. He completed his academic training in 1906, earning a doctorate from George Washington University in Washington, D.C., with a dissertation focused on pathogenic cranberry diseases. Between 1898 and 1901, Shear was employed by the US government as an agrostologist (grass expert), describing new species such as *Bromus arizonicus*. From 1901 onwards, he transitioned fully into plant pathology, embarking on a long and distinguished career within the USDA Bureau of Plant Industry. He became a foundational figure in American plant pathology and played a pivotal role in establishing the American Phytopathological Society in 1908. Although primarily recognised as a mycologist, Shear holds a significant place in the history of lichenology. In 1931, he co-authored the monumental second edition of *The Genera of Fungi* alongside Frederic E. Clements. This influential volume integrated lichenised fungi directly into standard mycological classification and attempted to systematically typify generic names, an effort that, while based on the "*first species rule*" later considered as illegitimate, shaped modern fungal nomenclature. His herbarium is housed at BPI. Ref.: Petrak (1957); Stevenson (1957).

Sheard, John Wilson **(1940–)** – Born in Barnsley, Yorkshire, UK, Great Britain, Sheard was the son of a banker who later transitioned to farming in Aberporth, Wales, during



John's teenage years. This rural upbringing instilled in him a lifelong love for the outdoors. Following his secondary education, he studied botany at Imperial College London, where he served as a student demonstrator from 1961 and graduated with a B.Sc. (ARCS). He immediately pursued postgraduate research and earned his Ph.D. in 1965 with a dissertation on the European species of *Rinodina*. His doctoral work was supervised by Kenneth Kershaw, whose enthusiastic teaching steered Sheard toward lichenology, a passion further nurtured by early proximity and contact with Peter James at the Natural History Museum (BM), located just down the road from the college. Sheard was briefly appointed as an assistant lecturer at Imperial College (1964–1965) and subsequently as a lecturer at Magee University College in Londonderry, Northern Ireland. In 1967, he moved to Canada to undertake a postdoctoral fellowship at the Canadian National Museum in Ottawa (1967–1968) under the guidance of Ernie Brodo. Following this fellowship, he accepted a faculty position at the University of Saskatchewan in Saskatoon, where he rose through the academic ranks to be appointed Professor of Biology in 1978. Throughout his long career, Sheard established himself as an eminent global authority on the crustose members of the *Physciaceae*, specializing heavily in the taxonomically complex genus *Rinodina*. Now holding the rank of Professor Emeritus, his decades of research culminated in his monumental 2010 global monograph, *The Lichen Genus Rinodina in North America, North of Mexico*. He has described numerous new taxa throughout his career, including the genus *Mobergia*. The genus *Johnsheardia* S.Y. Kondr. & A. Thell is named after him. His herbarium is housed at SASK. Ref.: *Pers. comm.*; Hertel & al. (2017).



Shirley, John Francis **(1849–1922)** – Born in Dorchester, Dorset, England, UK, Shirley was educated at the University of London, where he completed a Bachelor of Science under the influential biologist Thomas Huxley (1825–1885), before completing his teacher training at Saltley College, Birmingham. He established a strong reputation as an educator at Bishop Ryder's School in Birmingham, where he taught for eight years. In 1878, he migrated to Queensland, Australia, as part of a targeted recruitment drive by the Queensland Department of Education. He was initially appointed headmaster of the school at Roma; however, his administrative talents led to a swift promotion in 1879 to inspector of schools, a role that required him to travel between 6,500 and 8,000 kilometres annually across the colony. He was promoted to Senior Inspector in 1909. When the Queensland Teachers' Training College was established in Brisbane in 1914, Shirley was chosen as its founding principal, a position he held until his retirement from education in 1919. Following his retirement, his long-standing expertise in malacology led to his appointment as the official State Conchologist, having previously served as an honorary custodian of shells at the Queensland Museum. Shirley's extensive professional travels across the remote regions of Queensland allowed him to "go bush" frequently, heavily cultivating his broad passions for geology, zoology, and botany. He amassed a large personal herbarium and chose to specialize deeply in

lichenology. He corresponded extensively with overseas authorities, sending specimens to Charles Knight, Jean Müller, and James Stirton. Shirley published over forty scientific papers, most notably his monumental *Lichen Flora of Queensland*, issued in four parts between 1888 and 1889, followed by major supplements in 1889 and 1913. This seminal work substantially expanded upon the records published in Frederick Manson Bailey's regional flora. In 1912, at the age of 63, Shirley was awarded a Doctor of Science (D.Sc.) degree by the University of Sydney for his authoritative thesis entitled *The Thallus of the Genus Parmelia*. This milestone represents the first higher degree ever awarded by an Australian university for research dedicated strictly to lichenology. He described some species. His herbarium is housed at BRI. Ref.: Chisholm & White (1922); Waterhouse (1923).



Shushan, Samuel ('Sam') (1922–2002) – Born in New York City, USA, the son of Jewish immigrants, Shushan developed an early fascination with the natural sciences. His interest in lichens was sparked during his college years when he attended meetings of the Torrey Botanical Club and came under the formative influence of Guy Nearing. Although his undergraduate trajectory was interrupted by military service in the South Pacific during the Second World War, he graduated with a Bachelor of Science from the City College of New York in 1943, where he was mentored by biology professor Joseph John Copeland (1908–1990). He subsequently entered Rutgers University, New Jersey, completing a Master of Science in 1947 and earning his doctorate in botany in 1949 under the supervision of Marion A. Johnson (1902–1964). His doctoral thesis focused on the comparative morphology of the vegetative organs within the orchid genus *Cattleya*. In 1949, Shushan accepted a faculty appointment at the University of Colorado, Boulder, serving the institution across numerous academic ranks for over four decades. He became a pioneering figure in the lichenological exploration of the Rocky Mountains, collaborating closely for many years with William A. Weber, until the two broke off any communication. His field expeditions expanded well beyond Colorado, extending into Utah, New Mexico, and as far north as the Queen Charlotte Islands in British Columbia. Shushan was a prolific field collector known for the meticulous curation of his specimens. Alongside his graduate student Roger Anderson, he issued a highly influential exsiccatae series, *Lichens of Western North America*. He retired from academia in 1991 as Professor Emeritus. Beyond his research, he was a key organizer and director of the Colorado State Science Fair. Whilst his early collaborative material with Weber remains at COLO, his personal herbarium was later transferred to BRY. Ref.: Phyllis Sushan *pers. comm.;* Weber (2003).

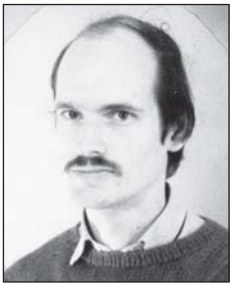
Sierk, Herbert Allen **(1932–2024)** – Born in St. Louis, Missouri, USA, Sierk displayed an early aptitude for the natural sciences. Following his secondary education, he attended Bryan College in Dayton, Tennessee, before transferring to the University of Tennessee, where he graduated with a Master of Science in 1958. His master's thesis provided a comprehensive floristic treatment of the *Collemataceae* of Eastern Tennessee. Immediately after graduating, he was appointed Instructor of Biology at MacMurray College in Jacksonville, Illinois. He pursued his doctoral studies at the University of Wisconsin under the renowned

lichenologist John Walter Thomson, earning his Ph.D. in 1964. His doctoral research culminated in his landmark 1964 publication, *The Genus Leptogium in North America North of Mexico*, which served as the definitive structural reference for the group for decades. Following his doctorate, Sierk returned to MacMurray College, where he was appointed Professor of Biology. He remained dedicated to the institution for his entire academic career, balancing a heavy teaching load with his ongoing research. For many years, he struggled against limited institutional resources to finish a highly anticipated taxonomic revision of Mexican *Leptogium* species. Beyond his macro-monographic work, he contributed significantly to the regional mapping of Illinois and Tennessee lichens. He has described some taxa. His herbarium is housed at TENN. Ref.: None traced.



Singh, Ajay (1926–2017) – Born in Varanasi, Uttar Pradesh, India, Singh was the son of Shri Bindeshwari Prasad Singh and Smt. Chandra Raj Kumari. Following his early education at Udai Pratap College, he studied botany at Allahabad University, graduating in 1951. He subsequently completed his postgraduate studies at Lucknow University. Singh began his professional career as a botany lecturer at the Shia Degree College in Lucknow, teaching there for seven years. In 1958, he joined the National Botanic Gardens, later reorganised as the CSIR-National Botanical Research Institute (NBRI), where he rose through the ranks from Junior Scientific Assistant to Senior Scientific Officer. Following his retirement from active institutional research, he lent his expertise to the National Research Laboratory for Conservation of Cultural Property (NRLC) in Lucknow. Two years after joining the NBRI, Singh shifted his scientific focus to lichenology becoming a pupil of Dharani Dhar Awasthi. He eventually earned his doctorate in 1985 from Lucknow University, submitting a definitive taxonomic monograph entitled "The Lichen Genus *Anthracothecium* and Allied Genera from the Indian Subcontinent". Although he maintained a lifelong fascination with tropical foliicolous lichens, his research spanned numerous macro- and micro-lichen families. He also took a profound interest in the history and bibliography of Indian botany, publishing highly influential bibliographic checklists on Indian lichens in 1964 and 1980. Singh effectively established the Lichen Research Laboratory at the NBRI, mentoring a major generation of Indian lichenologists, including Dalip Kumar Upreti. Over his long career, he described dozens of new pyrenocarpous taxa, particularly within *Anthracothecium* and *Pyrenula*. His impact on the field is commemorated by the lichenicolous fungus genus *Ajaysinghia* Y. Joshi. His herbarium is housed at LWG. Ref.: Nayaka & al. (2019).

Sipman, Henricus ('Harrie') Johannes Maria **(1945–)** – Born in Sittard, Limburg Province, the Netherlands, Sipman was fascinated by the natural world from a young age, initially developing a passion for collecting and studying the morphological variations of fossilised mussel shells. He entered Utrecht State University to study natural history, initially inclining toward zoology before shifting his focus to botany. He completed a major research project on the genus *Smilax* under the supervision of Professor Antonius Stoffers (1926–2003). However, his academic trajectory changed permanently after encountering the prominent bryologist Rob Gradstein (1943–), who steered his interests toward cryp-

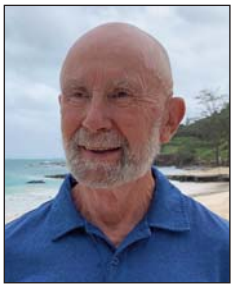


togamic botany. Sipman subsequently became a leading expert on the Dutch species of *Cladonia*, completing his master's degree on the group. Between 1965 and 1972, he worked as a student assistant, and from 1972 to 1976, he was employed as a formal assistant at the Utrecht Cryptogamic Herbarium, where he managed extensive collections arriving from tropical regions. This exposure provided the foundation for his doctoral research, and in 1983, he successfully defended his landmark Ph.D. thesis, *A Monograph of the Lichen Family Megalosporaceae*. Shortly after receiving his doctorate in 1983, Sipman was appointed Curator of Lichens at the Botanical Garden and Botanical Museum Berlin, a prestigious international office he held for nearly thirty years until his formal retirement. Throughout his tenure in Berlin, he specialised deeply in tropical lichenology, conducting extensive and repeated field expeditions to South America, most notably across Colombia and the Guianas, as well as the Galápagos Islands, Costa Rica, and Papua New Guinea. In addition to his field and alpha-taxonomic work, Sipman was a pioneer in biodiversity informatics. He heavily engaged in modernizing historical lichenological records, famously digitizing and making Fritz Mattick's expansive literature card index freely available to global researchers via the internet. Over his prolific career, Sipman has collected more than 75,000 specimens and described hundreds of new tropical taxa., e.g. the genus *Cetrariastrum*. The genera *Sipmania* Egea & Torrente, *Sipmanidea* Xavier-Leite &al. and *Sipmaniella* Kalb are named after him. His herbarium is housed at B. Ref.: *Pers. comm.;* Aptroot (2009); Kärnefelt & al. (2012).



Smith, Annie Lorrain (1854–1937) – Born in Everton, Liverpool, England, UK, but taken to Scotland almost immediately as an infant, and raised entirely in rural Dumfriesshire. Smith was the daughter of a minister in the Free Church of Scotland, and of Annie Lorrain Brown. Following her early education in Edinburgh, she travelled abroad to study French in Orléans and German in Tübingen while supporting herself as a governess. She returned to London in 1888 to study botany at the Royal College of Science under the distinguished palaeobotanist Dukinfield Henry Scott. Although her earliest scientific investigations focused on marine algae, she quickly redirected her focus toward mycology and lichenology. Recognizing her exceptional aptitude, Scott secured an analytical role for her in the cryptogamic herbarium at the British Museum (Natural History). Because institutional regulations strictly barred the formal employment of women at the time, she had to be compensated covertly through a special, non-staff fund. She remained an indispensable fixture in the herbarium from 1892 until 1933. Despite these profound institutional barriers, Smith produced several foundational works that reshaped early 20th-century cryptogamic literature. In 1904, following an historic alteration to the institutional byelaws, she became one of the first fifteen women formally elected as a Fellow of the Linnean Society of London. She was a founding member of the British Mycological Society and was elected its president twice, serving distinct terms in 1907 and 1917. Her crowning scholarly achievement

was her meticulous structural revision of James Crombie's *A Monograph of the Lichens Found in Britain* (issued in two parts between 1911 and 1918), which served as the regional taxonomic baseline for decades. She followed this with her monumental encyclopaedic textbook, *Lichens*, published by in 1921. Smith was widely remembered by contemporaries for her great warmth and generosity toward younger researchers. Notably, she acted as the first definitive mentor to Ivan Mackenzie Lamb, steering his interest directly toward the study of Antarctic lichens. In recognition of her extraordinary, decades-long contributions to British science, she was appointed an Officer of the Order of the British Empire (OBE) in 1934 and granted a Civil List pension, allowing her to officially retire at the age of 79. She described numerous taxa, also from outside the British Isles. Her herbarium is housed at BM. Ref.: Gepp & Rendle (1937); Lister (1938); Ramsbottom (1938).



Smith, Clifford ('Cliff') William **(1938–)** – Born in Hereford, Herefordshire, England, UK, Smith grew up on his parents' farm, where he developed an early affinity for botany whilst roaming the nearby Welsh foothills. After completing his local education, he completed his National Service with the Royal Army Service Corps, a period disrupted by the Suez Crisis. Upon demobilisation, he pursued botanical studies from 1959 to 1962 at the University College of North Wales, Bangor, where the bryologist Paul Richards (1908–1995) introduced him to cryptogamic botany. Fascinated by experimental morphology, Smith moved to the University of Manchester to work under Claude Wardlaw (1901–1985), earning his Ph.D. in 1965 with a doctoral thesis focused on the tissue culture of excised wheat tips. In 1966, Smith accepted a short-term position at Princeton University, New Jersey, USA, but simultaneously received an offer to substitute temporarily for a professor on sabbatical at the University of Hawai'i at Mānoa, subsequently accepting a permanent faculty position within Hawai'i's newly established, integrated biology teaching programme. Finding the local infrastructure unsuitable for his tissue culture research, Smith took up hiking in the Hawaiian mountains, where he discovered a remarkably rich and largely undocumented foliicolous lichen biota. Utilising Rolf Santesson's seminal monograph, he taught himself to identify these species and realised that the Hawaiian lichen biota required urgent academic attention. This field expertise led to his involvement in a comprehensive biotic survey of Haleakalā National Park, drawing him deep into endangered species conservation. He eventually became the long-serving director of the Cooperative National Park Resources Studies Unit (CPSU) at the university, managing major island conservation and alien-species mitigation projects until his retirement in 1998. Throughout his career, Smith built up a vast collection of Hawaiian lichens and collaborated with leading international specialists, most notably Peter James at the Natural History Museum, London. During a sabbatical spent back in the United Kingdom, he initiated a major research project on the lichens of the Azores, an archipelago sharing striking ecological parallels with Hawai'i. Following his retirement as Professor Emeritus, Smith dedicated himself to British lichenology, actively collaborating with Oliver Gilbert and serving as the principal editor and co-author of the monumental volume, *The Lichens of Great Britain and Ireland* (2009). His herbarium is housed at HAW. Ref.*: Pers. comm.*



Smith, David Cecil **(1930–2018)** – Born in Port Talbot, South Wales, UK, Great Britain, Smith was the son of a mining engineer and a schoolteacher. Following the 1926 UK General Strike, his father secured a position managing a vital manganese mine in the Sinai desert. During the Second World War, David and his brother were sent back to the UK to board at Colston's School in Bristol, later moving to St Paul's School in London after his parents settled in Hatch End. At St Paul's, an inspirational sixth-form biology teacher steered him away from a planned medical career and toward botany. He won a scholarship to The Queen's College, Oxford, graduating with first-class honours in botany in 1951. Supported by a Christopher Welch Scholarship, he completed his D.Phil. in 1954 under the supervision of John ("Jack") Harley (1911–1990). Deviating from Harley's mycorrhizal focus, Smith dedicated his doctoral research to the physiology of the lichen symbiosis, investigating carbohydrate absorption. After graduating, Smith completed two years of National Service with the Intelligence Corps (1954–1956) before returning to Oxford on a research fellowship. In 1959, a pivotal institutional scholarship allowed him to work in Uppsala, Sweden, alongside Elias Melin (1889–1979), followed by a productive research period at the University of California, Berkeley. Smith subsequently became a university lecturer at Oxford, where he pioneered the use of radioactive tracer techniques to map nutrient transport between symbionts. His ground-breaking papers, published under the serial title *Studies in the Physiology of Lichens*, proved that algae transfer carbohydrates (such as glucose or sorbitol) directly to their fungal partners. These methodologies revolutionised experimental cryptogamic biology. In 1974, he was appointed to the Chair of Botany at Bristol University, returning to Oxford in 1980 as the prestigious Sibthorpian Professor of Rural Economy. Smith's formidable administrative talents led to his appointment as Principal and Vice-Chancellor of the University of Edinburgh (1987–1994), followed by his election as President of Wolfson College, Oxford, where he served until his retirement in 2000. A foundational figure in British botany, he was a co-founder of the British Lichen Society (BLS) and served as its President. He received numerous accolades throughout his distinguished career, being elected a Fellow of the Royal Society in 1975 and knighted in 1986. Known for his exceptional warmth, approachability, and mentorship, he was awarded the prestigious Acharius Medal by the IAL in 2003. His herbarium is housed at NMW. Ref.: Honegger (2003); Seaward & Richardson (2019).



Smith, James Edward **(1759–1828)** – Born in Norwich, Norfolk, England, UK, Smith was the son of a wealthy wool merchant and draper, whilst his mother came from a highly respected intellectual and clerical lineage based in East Anglia. Because he was a sickly child, he was educated entirely at home, where his mother actively encouraged his interest in botany. He famously claimed that his formal botanical studies commenced on the exact day Carolus Linnaeus died in 1778. In 1781, he enrolled at the University of Edinburgh to study medicine under John Hope, before moving to London in 1783 to attend William Hunter's

Anatomy School. While in London, he studied at St Bartholomew's Hospital under the guidance of Dr. David Pitcairn (1749–1809), whose family botanical gardens provided immense inspiration. He quickly immersed himself in the elite scientific circles surrounding Sir Joseph Banks (1743–1820). In December 1783, Banks received an offer from Linnaeus's widow to purchase the entirety of her late husband's unparalleled books, manuscripts, and biological specimens. Unwilling to buy them himself, Banks prodded the young Smith to seize the opportunity to achieve immediate scientific fame. Smith convinced his father to advance him the staggering sum of 900 guineas, successfully securing the priceless Linnaean Collection in 1784. Armed with this acquisition, he embarked on a grand tour of Europe from 1786 to 1787. During this journey, he stopped at the University of Leiden, completing his medical studies and receiving his doctorate. Upon returning to England in 1788, Smith co-founded the Linnean Society of London, serving as its foundational President until his death. Smith went on to author several seminal botanical texts, none more magnificent than the monumental 36-volume masterpiece *English Botany* (issued between 1790 and 1814). Though James Sowerby conceived and meticulously illustrated the work, Smith authored the comprehensive scientific descriptions. His treatment of macro- and micro-lichens within *English Botany* represents his single greatest contribution to early British lichenology. He was knighted by the Prince Regent in 1814. His herbarium is housed at LINN. Ref.: Gage (1938); Kennett (2016); Ramsbottom (1921); Walker (1988).



Søchting, Ulrik (1947–) – Born in Frederiksberg, Sjælland, Denmark, Søchting was the son of an engineer. During his secondary education, he had the notable Greenland botanist and lichenologist Paul Gelting as a teacher (not of biology, but of religion). Gelting actively encouraged the young Søchting's curiosity, helping him identify various lichens collected during regional hiking expeditions. Søchting subsequently studied natural history at the University of København, where he met Mogens Skytte Christiansen, a pupil of Olaf Galløe, who firmly steered him toward specializing in lichenology. For his master's degree, completed in 1972, he pioneered environmental research using lichens as bioindicators, mapping the structural degradation of the lichen flora across København between 1936 and 1972. Immediately following his graduation, he was employed by the University of København, serving as a dedicated lecturer, researcher, and eventually Professor until his formal retirement in 2015. Initially, Søchting focused his research on the complex *Cladonia* species of Denmark, and he has maintained a lifelong commitment to documenting the Danish lichen flora through updated checklists, national red lists, and comprehensive floras. Over time, his scientific influence expanded globally, focusing intensely on the taxonomy, secondary chemistry, and molecular phylogenetics of the *Teloschistaceae*. Working both in the field and the laboratory, in collaboration with Swedish researchers Ulf Arup and Patrik Frödén (1971–), Søchting pioneered the modern multi-locus gene restructuring of this massive family, which culminated in their landmark 2013 monograph, *A new taxonomy of the family Teloschistaceae*, which completely overhauled the polyphyletic genus *Caloplaca* by breaking it apart into distinct, chemically and genetically defined monophyletic genera. Another hallmark of his research was his extensive investigation into anthraquinones that

characterize the family. By employing high-performance liquid chromatography he demonstrated that variations in pigment composition are correlated with genetic lineages. His field research has specialised heavily in bipolar biogeography, leading him on extensive expeditions across both the Arctic and sub-Antarctic regions. Søchting has described many new species. His herbarium is housed at C. Ref.*: Pers. comm.*

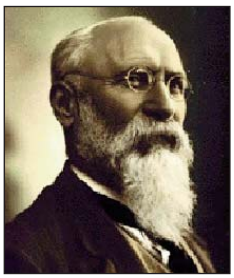


Sommerfelt, Søren Christian (1794–1838) – Born at Sukkestad in Toten, Norway (at that time in personal union with Denmark), Sommerfelt was the son of Christian (1746–1811), a prominent district governor, whilst his mother, Anna Sophie (née Hagerup) (1775–1821), belonged to a highly influential, elite family of theologians, civil servants, and regional governors. From early childhood, he displayed an extraordinary aptitude for the natural sciences, a passion that was recognised and actively nurtured by his private tutor. Despite his scientific inclinations, he pursued theology as a vocational path at the University of København, though he consistently cross-attended lectures in the natural sciences to maintain his botanical training. He had anticipated becoming the founding Professor of Botany at the newly established Royal Frederick University in Christiania (Oslo) in 1814; however, the King instead appointed Christen Smith **(**1765–1816**)**. Following the completion of his theological degree, Sommerfelt entered the clergy to support himself. In 1818, his clerical duties took him to the ecologically diverse and botanically rich parish of Saltdalen in Nordland, Norway. This remote posting allowed him to conduct exhaustive field surveys of the local flora. He published his extensive findings in 1825 in his landmark treatise *Physisk-oeconomisk Beskrivelse over Saltdalen i Nordlandene*, which contained detailed descriptions of cryptogams, including several lichen species entirely new to science. His most significant contribution to northern European botany came the following year with the publication of his *Supplementum florae lapponicae* (1826), a meticulous critical update to Göran Wahlenberg's foundational 1812 work, *Flora lapponica*. Between 1826 and 1830, Sommerfelt also distributed the very first Norwegian cryptogamic exsiccatae series, titled *Plantarum cryptogamicarum Norvegicarum*. Regarded as the first true home-grown cryptogamist and mycologist in Norway, Sommerfelt maintained highly productive, lifelong collaborations with prominent contemporary Swedish botanists, most notably E. M. Fries and G. Wahlenberg. His herbarium is housed at O, often with duplicates in UPS because of his close association with contemporary Swedish botanists. Ref.: Eckblad (1995); Jørgensen (2007).



Sowerby, James (1757–1822) – Born in London, England, UK, Sowerby was the son of a lapidary who passed away when James was just nine years old, meaning his mother, who came from a modest artisan background, had to raise their five children on a limited family income. Displaying an exceptional precocious talent for drawing, he initially undertook a formal apprenticeship under the marine painter Richard Wright (c. 1735–1775), which was abruptly cut short when Wright suffered a stroke. After a very

brief, unsuccessful trial with William Hodges (1744–1797), which Sowerby quickly abandoned due to poor treatment and the unclean state of the studio, he entered the Royal Academy Schools in 1777 to study miniature painting. He gravitated strongly toward botanical art and was subsequently hired by William Curtis to illustrate early volumes of *The Botanical Magazine* from 1787 onwards, where his vivid, highly accurate plates quickly earned him international recognition as a pre-eminent natural history illustrator. Crucially, Sowerby developed a deep personal understanding of cryptogams, studying them microscopically to ensure structural accuracy. Obsessed with capturing true botanical hues, he even formulated a highly detailed, pioneering color-charting system. In 1790, Sowerby conceived a monumental publishing venture to illustrate the entire British flora, partnering with James Edward Smith, the founder of the Linnean Society. This colossal collaboration resulted in the iconic 36-volume masterpiece, *English Botany* (issued between 1790 and 1814). It is within this work that Sowerby's contribution to lichenology is most remarkable, as he personally etched and hand-colored hundreds of extraordinarily detailed lichen plates. Historically, because of Sowerby's lower trade status, Smith was initially reluctant to associate his name with the venture, and the accompanying technical texts were published anonymously, universally credited to Smith alone. However, modern nomenclatural and historical analyses have revealed that Sowerby actively drafted portions of the descriptions and habitat notes; consequently, new lichen taxa described within the work are now formally attributed to both authors. Sowerby went on to publish foundational illustrated works in mineralogy and conchology. His herbarium as well as drawings are housed at BM. Ref.: Henderson (2015).



Spegazzini, Carlo ('Carlos') Luigi **(1858–1926)** – Born in Bairo near Torino, Kingdom of Sardinia (now Piedmont, Italy), Spegazzini was the son of a vine grower, whilst his mother, of Piedmontese origin, worked as a schoolteacher. He was educated as a viticulturist and oenologist at the prestigious School of Viticulture and Enology in Conegliano Veneto, graduating in 1879. During his youth, he studied cryptogamic botany closely with the world-renowned mycologist Pier Andrea Saccardo (1845–1920), publishing early papers on the parasitic fungi affecting grapevines. In late 1879, he decided to emigrate to South America. His ship initially attempted to dock in Brazil, but a severe outbreak of yellow fever prevented passengers from landing, prompting him to continue onward to Argentina. Settling in Buenos Aires, he quickly secured a position as an assistant to the Chair of Botany within the Faculty of Natural Sciences, rising so rapidly in prominence that he was appointed a full Professor by 1881. Between 1881 and 1882, Spegazzini served as the principal official botanist on the high-profile scientific expedition to Patagonia and Tierra del Fuego commanded by the Italian captain Giacomo Bove. Although globally celebrated as the undisputed "Father of Argentine Mycology" for describing over 4,000 new Latin American fungal species, this voyage also established his footprint in lichenology. He collected extensively across the sub-Antarctic channels, personally describing several new regional lichens while shipping duplicates to leading European historical authorities, most notably Antonio Jatta and Jean Müller (Müller

Argoviensis), who published extensively on his collections. Spegazzini maintained a deep professional focus on agricultural botany, eventually serving as a high-level official within the national National Department of Agriculture. When the National University of La Plata was organised, he became a founding academic figure, serving as the first head and curator of the botanical collections at the Museo de La Plata. Upon his death, he bequeathed his private estate, library, and laboratory instruments to the university. This gift led to the establishment of the dedicated *Instituto de Botánica Carlos Spegazzini.* His herbarium is housed at LPS. Ref.: Molfino (1929); Murrill (1924); Parodi (1926).



Spitzner, Václav (Wenzel) (1852–1907) – Born in Beraun (Beroun), Bohemia, within the Austro-Hungarian Empire (now Czech Republic), Spitzner received his secondary education in Slaný and Prague before entering Charles University in Prague to study natural history. During his university years, he studied closely under the prominent botanists Ladislav Josef Čelakovský (1834–1902) and Heinrich Moritz Willkomm (1821–1895), both of whom maintained active research interests in cryptogamic botany and inspired Spitzner to pursue regional floristics. Following his military service, he accepted a permanent teaching position in 1877 as a secondary school professor at the Czech state high school (*reálka*) in Prossnitz (Prostějov), Moravia, where he remained active until his death. In Prostějov, Spitzner established a massive private regional herbarium and dedicated his leisure time to natural history, acting as a pioneer by becoming the very first botanist to publish comprehensive scientific texts on the Moravian flora written exclusively in the Czech language. He developed a deep specialization in lichenology during the 1890s, actively providing expert identification assistance to contemporary regional collectors, including the malacologist Josef Uličný (1850–1913) and the young Filip Kovář. He founded and directed the Prostějov Natural Science Club (*Klub přírodovědecký v Prostějově*) and was eventually awarded the honorary title of Personal Professor in recognition of his pedagogical and scientific contributions to the region. Today, his local conservation legacy is commemorated by the Spitzner Park (*Spitznerovy sady*) in Prostějov. He described a few taxa. His herbarium is housed at BRNU. Ref.: Halda (2008).



Sprengel, Kurt (Curtius) Polycarp Joachim von **(1766–1833)** – Born in Boldekow, Pomerania (Pommern), Kingdom of Prussia (now Germany), Sprengel was the son of a local vicar and the nephew of the noted pollination ecologist Christian Konrad Sprengel (1751–1816), whilst his mother belonged to a highly intellectual and academically distinguished Pomeranian family. He initially entered the University of Halle in 1785 to study theology but quickly pivoted to medicine, earning his doctoral degree in 1787. He actively practiced as a physician while climbing the academic ranks in Halle, being appointed Adjunct Professor in

1789 and advancing to full Professor of Medicine and Botany in 1797. Under his energetic direction, the Halle Botanical Garden achieved international renown. A man of expansive intellectual breadth, he was a close personal friend of Johann Wolfgang von Goethe, with whom he frequently corresponded and conducted comparative plant morphology studies. He developed a profound research focus on West Indian and Neotropical cryptogams despite never visiting the Americas himself, relying instead on material sent by international correspondents. Recognizing the value of his exotic collections, Sprengel forwarded many of these West Indian lichen vouchers to Erik Acharius; these valuable types are now split between the historical collections in Helsinki H and UPS. Following his death, his herbarium was fractured and distributed. The 12,000 species of the *Müller-Sprengel Herbarium* were eventually acquired by the Botanical Garden and Botanical Museum Berlin (B), where the bulk of it was tragically destroyed during the Second World War. However, several duplicates survive at BAS and NY. Ref.: Kärnefelt & al. (2012); Wunschmann & Pagel (1893).



Spribille, Toby (1975–) – Born in Brainerd, Minnesota, USA, he was raised in the temperate-boreal forest transition zone in Minnesota until the age of 12, where he first encountered lichens. This was followed by time in Colorado and teenage years in Montana. Spribille was removed from public school by his parents for religious reasons after the fourth grade. Largely self-taught, he never completed his private secondary education, but challenged and passed the General Education Diploma, earning a qualification that unlocked higher education. During his teenage years he became fascinated by European phytosociological methods and set out to learn the vascular plants, bryophytes and lichens of his region of northwest Montana, with encouragement of Bill Weber from the University of Colorado. Despite his lack of formal schooling, his expertise in the local flora caught the attention of local Forest Service biologists and when he was 19 he was offered his first job as as a seasonal biological technician for the US Forest Service, where he ended up working for 10 years. He was subsequently invited to visit Germany by a Ph.D student from the University of Göttingen (Christian Damm) working on the phytosociology of alpine communities in Glacier National Park, near where he lived, and was ultimately accepted to study in Göttingen based on an exemption to the requirement for high school transcripts. He completed a Diplom (Master of Science) at the University of Göttingen in 2006 with a thesis on the complex lichen flora of western North America, under the supervision of Erwin Bergmeier (1957–). His association with Bergmeier unlocked possibilities to work in the Mediterranean, and in 2004 and 2005 he collected extensively on Crete and in northern Greece, the latter as part of a collaboration with the University of Agrinio. In 2011, he completed his Ph.D. at the University of Graz, Austria, with a regarded phylogenetic dissertation on the genus *Mycoblastus* under the guidance of H. Mayrhofer. During his Ph.D. he completed extensive fieldwork in the Russian Far East, as well as boreal regions of eastern and western North America. Spribille subsequently divided his time between postdoctoral research stays at the University of Montana, Missoula, where he worked with John McCutcheon, and the University of Graz. Throughout this period, he

produced extensive floristic and conservation-oriented benchmarks across distant geographies, and wrote a global monograph of the genus *Xylographa*, which launched his interest in the role of carbohydrate-active enzymes in the relationship between lichens and their substrates. His primary research focus pivoted from classical alpha-taxonomy toward general evolutionary biology, comparative genomics, and symbiosis biology. In 2016, Spribille achieved global scientific prominence as the lead author of a landmark paper published in the journal *Science*. His team discovered that most parmelioid macrolichens include, in addition to a single ascomycete fungus and a photosynthetic partner, basidiomycete yeasts belonging to the newly erected order *Cyphobasidiales*. This discovery suggested that microbes in addition to the "canonical" symbionts can be involved in shaping lichen phenotype. Following this breakthrough, Spribille was awarded the 2016 Aino Henssen Award by the IAL. He subsequently accepted a permanent faculty position at the University of Alberta, Canada, where he serves as an Associate Professor and Canada Research Chair in Symbiosis. He has described numerous new taxa, including the genera *Atrophysma*, *Carneothele*, *Steineropsis* and *Violella*. His early collections prior to moving to Europe are mostly at COLO and UBC; he also has extensive collections at B, BG, CANL. Ref.: *Pers. comm.*; Hertel & al. (2017).



Stahl, Christian **Ernst (1848–1919)** – Born in Schiltigheim, Alsace, France, Stahl showed an early aptitude for natural history at the gymnasium in Strasbourg, where he had the eminent bryologist Wilhelm Philipp Schimper (1808–1880) as his biology teacher. Inspired by Schimper, he pursued botanical studies at the University of Strasbourg under Pierre-Marie-Alexis Millardet (1838–1912), before moving to the University of Halle to work under the pioneering mycologist Anton de Bary. Stahl earned his doctorate from Halle in 1873 with a developmental thesis investigating the anatomy and history of lenticels. Following his graduation, he was appointed primary research assistant to Julius von Sachs (1835–1892) at the University of Würzburg in Bayern. After a brief return to Strasbourg, he accepted a permanent chair in 1881 as Professor of Botany at the University of Jena in Thuringia, where he also served as director of the botanical garden until his death. Although principally celebrated as a founding father of evolutionary plant ecophysiology, pioneering seminal research into foliar asymmetry, mimicry, and the defensive role of plant hairs, Stahl holds a place in the history of lichenology. In 1877, while working in Würzburg, he set out to provide definitive experimental validation for Simon Schwendener's controversial dual-nature hypothesis of lichens. In a series of brilliant, meticulous culture experiments, Stahl succeeded in synthesising a complete, mature lichen thallus from isolated components. By sowing the fungal spores of *Endocarpon pusillum* onto colonies of its free-living green algal partner, he observed the mechanical steps of lichenisation in real time. This breakthrough provided the very first physical proof that lichens were composite organisms rather than autonomous entities. Because his ultra-pure micro-culturing techniques were incredibly difficult to replicate, contemporary critics initially viewed his results with suspicion; however, his work fundamentally altered the trajectory of 19th-century cryptogamic biology. He described several

new taxa and developmental stages throughout his career. His herbarium is housed at JE. Ref.: Gerhardt (1920); Kärnefelt & al. (2012); Kniep (1920).



Stamatin, Mihail (1875–1922) – Born in Mălini within the Suceava region of Moldavia, Austro-Hungarian Empire (now Romania), into a family of traditional Romanian Orthodox priests, Stamatin showed an early passion for nature. Following his secondary education in Fălticeni and Iași, he studied natural history and botany at the University of Iași, graduating in 1900. He subsequently served as a dedicated research assistant at the university's botanical laboratory until 1905, during which academic tenure he turned his attention to regional cryptogams, recognising that the rich lichen flora of Romania had remained completely unstudied since the pioneering historical checklists compiled by August Kanitz in 1880. Stamatin launched aggressive field surveys, collecting initially across the Black Sea coastal territories and subsequently throughout the challenging Carpathian Mountains, discovering an exceptionally diverse flora and exponentially increasing the number of recorded species for the country. To verify his complex collections, he maintained a productive correspondence with A. Zahlbruckner in Vienna, who provided critical taxonomic assistance. In 1906, Stamatin transitioned into secondary education, accepting a position as a senior professor at the prestigious Lyceum in Fălticeni. He later relocated to Piatra Neamț to join the faculty of the Petru Rareș High School, where he went on to serve as its director and famously founded the Cozla Regional Museum in 1920 before his passing in 1922. Throughout his career, he remained a passionate regional botanist, publishing landmark floristic papers such as *Contribuție la flora lichenologică a României* (1904), *Contribuție la flora stepelor din România* (1906), and *Contribuție la flora phanerogamelor din România* (1907). His works effectively integrated new micro-lichens and vascular plant records into the national literature, laying the groundwork for future generations of Romanian cryptogamists. His herbarium is housed at IAG/I. Ref. Bartók (1992).



Stein, Berthold (1847–1899) – Born in Breslau, Schlesien (Silesia), Kingdom of Prussia (now Wrocław, Poland), Stein displayed an early aptitude for horticulture and botany. Around 1861, he entered the University of Breslau Botanical Garden as a young garden apprentice, before further developing his skills at the Botanical Garden in Berlin in 1865. In 1873, he relocated to Austria, having been appointed Garden Superintendent (*Obergärtner*) at the Innsbruck Botanical Garden, a position he held until 1880. He then returned to his native alma mater in Breslau, serving as the Royal Garden Inspector from 1880 to 1890. During this highly productive decade, he collaborated closely with the famous director Adolf Engler (1844–1930), completely remodelling and modernising the garden's public and research exhibitions. Despite his intensive daily horticultural obligations and separate expertise as an orchid cultivation specialist, Stein carved

out a distinguished reputation in cryptogamic botany. He studied lichenology as a dedicated pupil of Gustav W. Körber, absorbing the regional traditions left behind by J. von Flotow. Stein's crowning scientific achievement was his exhaustive 1879 masterwork, *Flechten*, published as the definitive second volume (second half) of Cohn's *Kryptogamen-Flora von Schlesien*. Beyond his regional floristic benchmarks, Stein revised complex exotic lichen collections shipped to Europe from the Arctic, East Africa, Madeira, the Orient, and the Philippines. He described numerous new species, erecting the genus *Koerberiella* in honour of his mentor. The genus *Steinia* Körb. is named after him. His herbarium is housed at WRSL. Ref.: Frahm & Eggers (2001); Pax (1929).

Steiner, Julius (1844–1918) – Born in Bludenz, Vorarlberg, Austrian Empire (now Austria), Steiner was educated locally before entering the University of Wien (Vienna) to study natural history, mathematics, and physics. He completed his academic training in 1874, earning a doctoral degree. Although a highly capable researcher, a severe and progressive hearing impairment from his youth limited his ability to pursue a standard university lecture career. Instead, he entered the secondary school system, serving for decades as a distinguished Gymnasial-Professor at the prestigious *K.K. Staatsgymnasium* in Wien, eventually receiving the honorary imperial title of *Regierungsrat* before his retirement. Steiner found his true calling in laboratory-based cryptogamic botany, integrating himself into the elite scientific circle surrounding A. Zahlbruckner at the Natural History Museum of Wien. His early 1881 research, *Über die Entwickelung des Flechtenthallus*, investigated the anatomical development of crustose lichen thalli, but his interests rapidly expanded into global floristics, pyrenocarpous taxonomy, and microchemistry. Steiner became the pre-eminent early 20th-century authority on the complex lichen flora of the Balkans, the Near East (including Greece, Turkey, and Persia), and North and East Africa, publishing extensive, detailed monographs on materials brought back by various imperial expeditions. His single greatest structural contribution to lichenology was his pioneering, microscopic work on pycnoconidia, detailing their hidden variations and establishing their importance as reliable characters for modern generic taxonomy. Steiner was a prolific taxonomist who described hundreds of new taxa, and the genus *Steinera* Zahlbr. was named in his honour. His private herbarium was bought by W, with additional material in KL and WU. Ref.: Maiwald (1901).



Stenhammar, Christian (1783–1866) – Born in Västra Ed, Småland, Sweden, Stenhammar was the son of Adolf Niels (1727–1798), a local vicar, whilst his mother, Fredrika (née Bremmer) (1736–1796), belonged to a distinguished, highly educated Swedish family with deep roots in the nobility and public administration. He displayed a profound early inclination towards classical reading and natural history; however, the premature death of his father forced him to accept a position as a private tutor to two young noblemen, whom he accompanied to the University of Uppsala in 1801. At Uppsala, he forged a lifelong friendship with his fellow countryman, the mycologist Elias Magnus Fries, who deeply admired Stenhammar's vast polymathic intelligence, famously referring to him as a true

polyhistor. Stenhammar completed his early studies in 1809, earning a master's degree before being appointed as a docent in physics in 1810, passing his pastoral examinations, and being ordained as a Lutheran vicar in 1813. He embarked on a highly prominent clerical and political career, serving for decades as a Member of the Swedish Parliament (*Riksdag*) between 1834 and 1850, and later being elevated to Dean (*kontraktsprost*) in Östergötland. Alongside his close friend Leonard Fredrik Rääf (1786–1872), he was a foundational driving force behind the establishment and scientific activities of the Östergötland Botanical Society. In recognition of his theological scholarship, he was awarded an honorary Doctorate of Divinity in 1845. Remarkably, Stenhammar balanced these heavy civic and religious obligations with prolific scientific research, establishing himself as both a world-class entomologist, pioneering the study of Swedish shore flies (*Diptera*: *Ephydridae*), and a premier lichenologist. His single greatest contribution to lichenology was his meticulous management of the monumental exsiccatae series, *Lichenes Sueciae Exsiccati*. Originally initiated by Fries, Stenhammar assumed curatorial control, editing later fascicles of the original series and completely masterminding the expanded *editio altera*, which was issued in eight parts between 1856 and 1866. These specimens were accompanied by his microscopically verified descriptive booklets, the *Schedulae criticae*. Even into his eighties, he maintained an extraordinarily sharp mastery of microscopic analysis, publishing vital revisions on challenging crustose groups. The genera *Stenhammara* Flot. ex Körb. and *Stenhammarella* Hertel are named after him. His herbarium is housed at S. Ref.: Arvidsson (1999); Fries (1866); Tjerneld (2011); Wahlberg (1870).



Stenroos, Soili (1958–) – Born in Helsinki, Finland, she was the daughter of a shipyard director and a bank employee. In her youth, Soili possessed a deep passion for the fine arts; although she initially aspired to a career in art, her trajectory shifted during her secondary education in Espoo, inspired by a dynamic biology teacher who ran an extracurricular nature club. In 1977, she entered the University of Helsinki to study biology. She completed her master's degree in 1983, conducting a meticulous floristic treatment of lichens collected from the Aletschwald Preserve, Switzerland, under the joint supervision of bryologist Timo Koponen (1939–) and lichenologist Teuvo Ahti. She subsequently undertook a major taxonomic revision of the genus *Cladonia* in Melanesia, a project that permanently established her scientific career. She frequently reflects that her initial attraction to *Cladonia* was deeply rooted in their unique aesthetic and sculptural qualities. Stenroos went on to build an international reputation as a leading authority on the genus, employing a multidisciplinary toolkit that combined field exploration with microchemistry and, later, advanced DNA sequencing techniques. She earned her PhD in 1989 with a doctoral dissertation focusing on the distribution, and chemotaxonomy of the *Cladonia coccifera* group, which featured beautiful lichen illustrations drawn by her own hand. Her subsequent molecular phylogenetic research restructured the evolutionary framework of the family *Cladoniaceae*, continuing a rich national tradition of excellence in the group that stretches back to Edvard August Vainio. She also studied the taxonomy of muscicolous fungi and lichen phycobionts. Throughout her career, Stenroos held numerous prominent research

and curatorial positions at the University of Helsinki's Botanical Museum and the University of Turku. Her administrative and academic contributions culminated in her appointment to the honorary title of Professor, as well as Head of the Mycology Unit at the Finnish Museum of Natural History (H). Her most celebrated achievement for the wider community was serving as the lead editor of the book *Suomen jäkäläopas* (*The Finnish Lichen Guide*, 2011), which received the prestigious Tieto-Finlandia Prize for Non-Fiction. She went on to edit three further books on Finnish lichens and microfungi. Her extensive foreign field trips included expeditions to Argentina, Chile, Uruguay, Brazil, Guyana, the Azores, New Zealand, Australia, Norway, Canada, and the United States. She has described numerous new lichen taxa, and her herbarium is housed at H. Ref.: *Pers. comm.*



Stevens, Gweneth **Nell** (née Cole) **(1934–2017)** – Born in Brisbane, Queensland, Australia, Stevens was the daughter of a professional forester and of a schoolteacher. Immersed in the natural environment from early childhood, she developed a lifelong passion for field botany. Following her secondary education, she entered the University of Queensland in 1953 to study biology; though her undergraduate career was interrupted by a period of international travel, she returned to complete her Bachelor of Science in 1968. In 1974, she embarked on a Master of Science under the supervision of Roderick Rogers, investigating the highly specialised, unmapped lichen communities adapted to the mangrove environments of Moreton Bay. Conducting much of this strenuous fieldwork from a canoe, her surveys yielded a treasure trove of unusual and previously overlooked coastal micro-lichens, culminating in her degree in 1975. During her mangrove surveys, Stevens became fascinated by the variations of the fruticose genus *Ramalina*, prompting her to undertake a massive, continent-wide taxonomic overhaul of the group that earned her a PhD in 1985. This seminal research was published as a major monograph, which stood as the definitive taxonomic treatment and for the genus in Volume 56A of the *Flora of Australia* (2004). Appointed a Research Fellow in the Department of Botany at the University of Queensland, she subsequently focused on the challenging genus *Usnea*. She described some taxa. Her herbarium is housed at BRI. Ref.: J. Elix, R. Stevens *pers. comm.*

Stirton, James (1833–1917) – Born in Coupar Angus, Perthshire, Scotland, UK, Stirton was the son of a wood merchant who operated a regional sawmill, whilst his mother came from a well-rooted Scottish family in Fife. He studied medicine at the University of Edinburgh, where he attended the highly popular botanical lectures delivered by John Hutton Balfour (1808–1884), a teacher who also trained the early cryptogamists James Crombie and William Lauder Lindsay. Stirton earned his Doctor of Medicine (M.D.) in 1858 and subsequently specialised in obstetrics and gynaecology. Moving to Glasgow, his clinical and academic success culminated in his appointment in 1889 as Professor of Midwifery at Anderson's College Medical School, a prestigious medical chair he occupied for about fifteen years. Throughout his medical career, Stirton balanced his heavy clinical duties with a prolific, world-class passion for cryptogamic botany, establishing an international reputation in both bryology and lichenology. He spent his holidays conducting

intense field exploration across the Scottish Highlands, significantly clarifying the exceptional montane flora of Ben Lawers and adding over fifty new lichen species to the British flora. However, Stirton's greatest taxonomic impact was achieved through his analysis of exotic collections from territories he never personally visited, including the Amazon, India, South Africa, and New Zealand. He became the primary European analytical partner for Frederick Manson Bailey in Brisbane, single-handedly describing hundreds of new tropical Australian and Pacific taxa. He was widely recognised for his distinctively elegant and legible handwriting, which adorned thousands of small manila specimen packets shipped across the globe. His herbarium is housed at GLAM. Ref.: Boyd (1921).



Stizenberger, Ernst (1827–1895) – Born in Konstanz, Grand Duchy of Baden (now Baden-Württemberg, Germany), Stizenberger was the son of a physician. In 1844, he entered the University of Freiburg to study medicine, where he attended the influential botanical lectures delivered by Alexander Braun. After completing further medical studies in Wien and Praha (Prague), he earned his doctorate from the University of Zürich in 1851 with a palaeontological dissertation. In 1851, he settled permanently in his native Konstanz, operating a highly successful medical practice across several clinical capacities. A man of diverse talents, he was also heavily engaged in regional politics and local musical societies. Although initially drawn to geology, he maintained a profound passion for botany from his student days, famously writing that during his scarce leisure hours he relaxed with "the loveliest of all sciences, botany", treasuring the cryptogams above all else. Stizenberger initially focused his botanical research on algae, but from 1861 onwards, reconnecting with the mentorship of Alexander Braun, he shifted his focus entirely to lichenology. Unlike many of his German contemporaries who focused strictly on domestic flora, he adopted a remarkably broad geographic and taxonomic perspective. He maintained a close friendship with Ludwig Rabenhorst, contributing heavily to his famous exsiccatae series, and published several critical papers tackling taxonomically difficult species complexes in Central Europe, particularly within the genera *Alectoria*, *Bacidia*, *Lecidea*, and *Opegrapha*. One of his most significant scientific achievements was his extensive research into the lichen flora of Africa, culminating in his monumental, two-part phytogeographical index, *Lichenaea Africana* (1890–1891). He also published an authoritative monograph on the genus *Sticta* and formally described numerous global taxa, including the distinct genus *Anzia*. Alongside Joseph Bernhard Jack (1818–1901) and Ludwig Leiner (1830–1901), he edited and distributed the highly influential regional exsiccatae series, *Kryptogamen Badens*, taking individual responsibility for all included lichen specimens. His herbarium is housed at ZT. Ref.: Cramer (1896); Jack (1896); Kärnefelt & al. (2012).

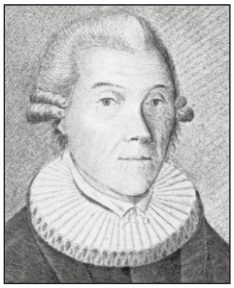
Stocker-Wörgötter, Elfriede (1951–) – Born in Austria, Stocker-Wörgötter pursued her higher academic training in the biological sciences at the Paris Lodron University of Salzburg, where she developed an early, profound interest in mycology and plant physiology. She earned her doctoral degree (PhD) and subsequent habilitation from the same institution, establishing her entire academic career in Salzburg as an Associate Professor and

Leader of the Lichenology and Fungal Cultures Research Group within the Department of Organismic Biology. While her broader scientific interests encompass comparative metabolomics and the pharmaceutical bioprospecting of bioactive compounds, she specialised in the complex *in vitro* manipulation, resynthesis, and artificial cultivation of lichen bionts. She is globally recognised as the pioneer international authority on lichen laboratory culture techniques, having developed revolutionary protocols that allowed slow-growing species to be raised outside their natural habitats and inducing the synthesis of their secondary metabolites under controlled conditions. She has published over a hundred high-impact papers and definitive methodological chapters, notably for the *Protocols in Lichenology* series, collaborating with prestigious laboratories worldwide to unravel the chemical and morphogenetic secrets of the symbiosis. Following her retirement from active university teaching, she continues to serve as an international scientific consultant, and her clonal reference strains, archived cell cultures, and extractive vouchers are preserved within the plant physiology and biotechnology laboratories at the University of Salzburg. Ref.: Nimis, *pers. comm*.



Streimann, Heinar (1938–2001) – Born in Tartu, Estonia, Streimann endured a highly disruptive childhood shaped by the devastation of the Second World War. His father, a member of the Estonian Air Force, was killed in action, forcing the remaining family to flee their homeland near the end of the conflict. They lived for several years as displaced persons in Oldenburg, Germany, where Heinar commenced his primary schooling, before permanently emigrating to Australia in the winter of 1950. The family settled in Seymour, Victoria, where he completed his matriculation at Seymour High School before relocating to Melbourne in search of employment. Following several transient occupations, he worked as a technical assistant at the Bureau of Meteorology from 1959 to 1961. Seeking a change of environment, he accepted a position with the Department of Forests in Bulolo, Morobe Province, Papua New Guinea. From 1964 onwards, Streimann was employed by the Bulolo Forestry College as a surveyor and road planner for the expanding timber industry. His extensive engineering expeditions into the most remote, uncharted corners of the island ignited a deep passion for cryptogamic botany. He subsequently transitioned into teaching botany to student foresters and, from 1971 to 1972, worked at the Division of Botany in Lae, accumulating massive collections of tropical lichens and bryophytes. In 1972, he moved to Canberra to join the herbarium of the Canberra Botanic Gardens, which later merged into the Australian National Herbarium (CANB). He served with distinction as a primary collections manager there until his retirement in 2000. He returned to Papua New Guinea from 1981 to 1983 on a targeted research assignment as a visiting lecturer, a tenure which culminated in his landmark 1986 volume, *Catalogue of the Lichens of Papua New Guinea and Irian Jaya*. A prolific field collector who amassed over 66,000 botanical numbers, Streimann conducted intensive field surveys across Australia and its remote oceanic territories, including Norfolk, Christmas, and Lord Howe Islands, as well as Vanuatu and Fiji. He collaborated closely with J. Elix, contributing significantly to the chemical and floristic mapping of the Australasian macrolichen flora. He was also an eminent bryologist, complet-

ing a Master of Science at the University of New South Wales in 1991 with a taxonomic revision of the moss family *Meteoriaceae* in Australia. He described several new taxa. The genus *Streimanniella* S.Y. Kondr. *et al.* is named after him. His herbarium is housed at CANB. Ref.: Elix (2001); Elix & Craven (2002); Ramsay (2002).



Strøm, Hans (1726–1797) – Born in Borgund, Sunnmøre, Norway (at that time in personal union with Denmark), Strøm was the son of a local Lutheran vicar, whilst his mother belonged to a highly influential, multi-generational dynasty of Norwegian and Danish clergy, scholars, and public officials. He was a notoriously shy and withdrawn child, famously recorded as having developed a mastery of drawing and playing the flute before he could properly speak. His intellectual curiosity was awakened by a private tutor who conducted lessons entirely within the natural environment. Following his early education in Bergen, he entered the University of København, Denmark, completing his theological examinations in 1745 at the remarkably young age of nineteen. Reluctant to immediately assume the full responsibilities of a parish minister, he returned to Borgund to serve as a curate under his father until the latter's death in 1754; in 1759, he was officially ordained as the parish vicar of Volda in Sunnmøre. Throughout his decades in Volda, Strøm dedicated his extensive leisure hours to a meticulous, pioneering study of regional natural history, specialising heavily in cryptogams, marine biology, and entomology. His monumental two-volume topographical masterwork, *Physisk og Oeconomisk Beskrivelse over Fogderiet Søndmør* (issued in 1762 and 1786), contained detailed descriptions of the Norwegian environment based strictly on his own empirical field observations. Carl Linnaeus was so profoundly impressed by the rigour of Strøm's work that he incorporated several of his observations into his own publications; however, Strøm's debilitating modesty prevented him from continuing their early correspondence. His scientific reputation was such that it deeply inspired the young botanist Martin Vahl, who traveled to Volda to study the regional flora alongside him. Amidst recurring crop failures, Strøm published a highly influential economic treatise, *Afhandling om de i Norge bekiendte huus-holdnings- og farve-laver* (1782), which detailed the practical and culinary uses of native lichens as emergency foodstuffs and fabric dyes; this work was repeatedly reprinted to mitigate regional famines. In 1780, the King of Denmark-Norway awarded Strøm the honorary title of Professor and transferred him to the wealthier, prestigious parish of Eiker in Buskerud. He continued his regional surveys there, publishing a comprehensive physical-economic description of Eiker in 1784. An important figure in early Norwegian science, he co-founded the Royal Norwegian Society of Sciences and Letters. His moss herbarium is housed at TRH, and a set of his drawings (mainly insects) is kept in the Royal Library in København. Ref.: Frøyland (2010); Jørgensen (2010a).

Sulma, Tadeusz Ignacy **(1905–1993)** – Born in Niepołomice, Galicia, within the Austro-Hungarian Empire (now Poland), Sulma developed an early inclination towards field biology. In 1924, he entered the Jagiellonian University in Kraków, where he became a close academic associate of Władysław Szafer **(**1886–1970) and chose to specialise in



plant geography and cryptogamic botany. He completed his early university studies with a phytosociological doctoral dissertation focused on the dwarf mountain pine communities of the Gorgany Mountains, which was submitted for publication in 1929. Remaining at the university as an active researcher, his subsequent extensive field surveys culminated in his landmark 1935 publication on the ecology and distribution of lichen communities across the Lublin Upland. His early scientific research focused on mapping the environmental variables and geographical elements dictating the distribution of lichens across Poland and neighbouring regions of Romania, particularly the Czywczyn Mountains. Sulma's scientific trajectory was severely disrupted by the outbreak of the Second World War, during which he actively participated in the defensive campaigns. Following the war's conclusion in 1945, he relocated to the devastated Baltic coast, settling in Gdańsk, where he accepted a permanent appointment at the Medical Academy of Gdańsk. Serving for decades as the Head of the Department of General and Pharmaceutical Botany, he eventually advanced to the rank of full Professor in 1970. Because he was one of the few high-level botanists left in the war-torn region, his energies were largely consumed by heavy administrative and educational reconstruction duties; he became a primary driving force behind the 1947 initiative to establish the city's integrated academic botanical gardens, and consequently published very few standalone lichenological papers during his middle career. Later in life, Sulma was profoundly inspired by a brilliant young student in Gdańsk, Wiesław Fałtynowicz. This mentorship prompted him to return enthusiastically to active field lichenology, embarking on major collaborative projects that re-evaluated the Polish distribution of the *Parmeliaceae* and *Pertusariaceae*. He described a few new taxa. His herbarium is housed at UGDA. Ref.: Faltynowicz (1994); Majewski & Mirek (1994).



Suza, Jindřich (1890–1951) – Born in Třebíč, Moravia, within the Austro-Hungarian Empire (now in the Czech Republic), Suza was the son of a local book printer from a family deeply rooted in practical gardening traditions, whilst his mother came from a family centred on artisan trade and local education. During his gymnasium education in Třebíč, he attended natural history lectures delivered by František Dvorský (1846–1917) and Josef Uličný (1850–1913), developing a fascination with Uličný's malacological and botanical work. Initially a broad regional naturalist, he rapidly chose to specialise in field botany. Guided by his teacher Rudolf Dvořák (1846–1915), he joined the Prostějov Natural History Society, where he met the pioneering Moravian lichenologist Filip Kovář (1860–1925), an analytical partner of Emanuel Senft (1870–1922) with whom he studied cryptogamic taxonomy. In 1910, Suza enrolled in the teacher's training college in Brno, subsequently teaching at various regional secondary schools. During this period, he encountered Josef Podpěra (1878–1954), who was organising the botanical mapping of Moravia. When Masaryk University was established in Brno in 1919, Podpěra was appointed to the chair of botany and selected Suza as his very first research assistant in 1921. Suza published his earliest lichenological papers between

1913 and 1916, and earned his doctoral degree in systematic botany from Masaryk University in 1924. Throughout his career, he remained deeply dedicated to the biogeographical, geobotanical, and ecological aspects of lichenology. In 1932, he relocated to Praha (Prague) to serve as a senior assistant to Karel Domin (1882–1953) at Charles University. In 1936, he was formally habilitated as an Extraordinary Professor of Systematic Botany at the institution. Suza conducted intensive, physically demanding field surveys across the montane regions of Bohemia, the Sudetes (including the Riesengebirge/Krkonoše), the Tatra Mountains, and the wider Western Carpathians. He maintained close collaborative ties with local amateur naturalists and teachers, including R. Dvořák, F. Nováček, and F. Veselský. A highly prolific author who published nearly two hundred scientific contributions, Suza rarely focused on flora outside Czechoslovakia, with his 1929 treatment of the lichens of Bulgaria standing as his only standalone foreign volume. The vast majority of his floristic papers were written in Czech, while his sweeping biogeographical syntheses, such as his landmark overview of Moravian lichen distribution, were published in German. Between 1926 and 1933, he issued a highly valued exsiccatae series comprising 300 numbers, titled *Lichenes Bohemoslovakiae Exsiccati*. He described several taxa. His herbarium is mainly housed at PRC. Ref.: Domin (1940); Fott (1953); Podpěra (1940).



Swartz, Olof (1760–1818) – Born in Norrköping, Östergötland, Sweden, Swartz was the son of a wealthy tobacco manufacturer, while his mother belonged to an aristocratic, noble family of Swedish and Baltic-German lineage. Following his early education from a private tutor, in 1778, he entered the University of Uppsala, arriving just after the death of Carl Linnaeus. He immersed himself in the institution's botanical legacy, and in 1781 he defended his doctoral dissertation, *Methodus muscorum illustrata*, under the chairmanship of Carl Linnaeus the Younger. Although primarily a bryological treatise, the text integrated critical notes on several lichens; most notably, it included the formal description of *Lichen filix* (now *Sticta filix*)—the very first lichen described from the Southern Hemisphere, which had been collected in New Zealand by Georg Forster and sent to Carl Peter Thunberg in Uppsala. In 1783, Swartz embarked on a self-financed scientific expedition to the New World. He reached the Boston region in the autumn of 1783, conducting autumn and winter surveys before sailing to Jamaica in early 1784. Over the next two years, he amassed extensive botanical collections across Jamaica, making brief but hazardous transit visits to Cuba and Haiti. On his return journey to Sweden, he spent a highly productive period in London (1786–1787) studying within the elite Banksian circle. Sir Joseph Banks was so profoundly impressed by the young Swede that he famously wrote to James Edward Smith, declaring Swartz to be the finest botanist he had encountered since Daniel Solander. His West Indian cryptogamic discoveries eventually culminated in his finely illustrated volume, *Lichenes Americani* (1811), which served as the taxonomic foundation for all subsequent lichen research in the Caribbean basin. In 1791, Swartz was appointed the foundational Director of the Bergius Botanical Garden (*Bergianska trädgården*) in Stockholm, affiliated with the Royal Swedish Academy of Sciences, an institution

he later served as Permanent Secretary from 1811 until his death. Among his diverse civil roles, he heavily assisted in compiling the updated Swedish Pharmacopoeia in 1817. An exceptionally amiable and generous researcher, Swartz maintained a life-long professional alliance with Erik Acharius, whom he actively inspired to specialize in lichens and with whom he continuously debated structural taxonomy. He was the first Swedish botanist to systematically adopt Johann Hedwig's bryophyte and Christiaan Hendrik Persoon's fungal taxonomy, actively steering Acharius toward these modern frameworks during the drafting of his lichen system. His herbarium is housed at S. Ref.: Galloway (2013b); Nordenstam (1991); Sprengel (1823).



Swinscow, Thomas **Douglas ('Dougal')** Victor **(1917–1992)** – Born in Minchinhampton, Gloucestershire, England, UK, Swinscow was the son of a physician, whilst his mother came from the well-connected British Alleyne family, featuring a mixture of international upbringing and professional civil service. He pursued medical studies at St Thomas' Hospital Medical School in London, qualifying in 1940. He immediately commissioned into the Royal Army Medical Corps, serving as a medical officer throughout the Second World War and participating in the Allied landings in Algiers and the legendary airborne assault at Arnhem (1944). Following demobilisation, he joined the editorial staff of the *British Medical Journal*, rising to the position of Deputy Editor in 1964. It was during this post-war medical career that he embraced field botany, taking up lichenology as a rigorous amateur pursuit. In 1958, Swinscow became a driving force behind the establishment of the British Lichen Society, serving as its initial Curator and assistant editor, and publishing his first lichenological paper on new Arctic-alpine lichens in England that same year. He was subsequently elected President of the Society for the 1962–1963 term. Swinscow specialised in anatomically challenging pyrenocarpous lichens; his extensive microscopic and field revisions of British species, particularly within the genus *Porina*, culminated in a Master of Science degree awarded by the University of Bristol in 1965. During a vacation to East Africa, Swinscow began collecting tropical lichens and discovered that Norwegian lichenologist Hildur Krog was independently investigating the flora of neighbouring regions. They combined forces in a celebrated, two-decade long partnership, publishing a series of critical papers on East African macrolichens which culminated in their landmark volume, *Macrolichens of East Africa* (1988). In 1989, he detailed his colourful military and scientific life in his autobiography. He described several taxa. The genus *Swinscowia* S.H. Jiang, Lücking & Sérus. is named after him. His herbarium is housed at BM. Ref.: James (1993), Swinscow (1989).

Szatala, Ödön (1889–1958) – Born in Görbeszeg, Austro-Hungarian Empire (now Uličské Krivé, Slovakia), Szatala developed an early affinity for field botany. From 1909 to 1913, he studied natural history at the University of Budapest under Sándor Mágócsy-Dietz (1855–1945), a former pupil of Frigyes Hazslinszky who maintained a strong academic interest in cryptogamic plants. Szatala completed his doctoral dissertation in 1916, providing a critical updated treatment of the lichen flora of Hungary. He spent his early



career as a research assistant at the university's botanical institute before transitioning into applied agricultural science at the Hungarian Seed Control Station, where he served for decades as a senior botanist and section director while continuing his intensive private lichenological studies. In 1952, Szatala was appointed Head of the Cryptogamic Collection at the Hungarian Natural History Museum in Budapest (BP), dedicating immense energy to revitalising the institutional herbarium, which had completely lacked a dedicated specialist since Vilmos Kőfaragó-Gyelnik was tragically killed in a wartime bombing raid in 1945. Szatala served as a vital bridge for Hungarian science, rigorously training Klára Verseghy, who took over the curatorship following his death. Although he had been a close colleague of Gyelnik's, accompanying him on an influential research trip to Sweden in the 1930s, Szatala's taxonomic approach was considerably more conservative and stable than Gyelnik's extreme splitting. Szatala's primary lifetime project was to publish a definitive, multi-volume lichen flora of the complete Carpathian Basin; though he never lived to complete this grand synthesis, his floristic output was immense. Globally, he is celebrated for his pioneering monographs on the Eastern Mediterranean, most notably his landmark 1943 treatments of the lichens of Crete and the Aegean archipelago. He also revised complex exotic materials shipped to Budapest from Morocco and New Guinea, describing several new taxa. His herbarium is housed at BP. Ref.: Verseghy (1963).



Tabernaemontanus (orig. **Müller), Jacob(us)** Theodor(us) **(1520–1590)** – Born in Bergzabern, within the Palatinate (now Bad Bergzabern, Rheinland-Pfalz, Germany), his Latinised surname represents a compressed contraction of his hometown's Latin name, *Tabernae Montanae*. He received his early education in Strasbourg and, from 1538, was engaged as an active field plant collector for a prominent pharmacy in Wissembourg (Weißenburg), Alsace. In 1540, he travelled south to study medicine at the University of Padova in Italy, and later at the University of Montpellier in France under Guillaume Rondelet (1507–1566), the celebrated teacher of Carolus Clusius. Returning to Germany, Tabernaemontanus settled in Wissembourg to practise as a pharmacist until 1557; during this formative period, he met the pioneering botanist Hieronymus Bock (Tragus), formally entering his inner circle as a dedicated student (*Discipel*) and collecting specimens across regional ecosystems. In 1553, he was appointed private physician to Count Philipp II of Nassau-Saarbrücken (1509–1554). Following the Count's death, Tabernaemontanus accepted a prestigious appointment in 1561 as personal physician to Marquard von Hattstein (1529–1581), the Prince-Bishop of Speyer, while simultaneously acting as the city physician (*Stadtarzt*) to the free imperial city of Worms. As his early foreign university courses were not legally recognised in Germany, he matriculated at the University of Heidelberg in 1562, successfully defending his medical doctorate there in 1573. He concluded his long medical career serving as the personal court physician to Count Palatine Johann Casimir (1543–1592) in Heidelberg. Tabernaemontanus achieved lasting scientific

fame as one of the definitive "German Fathers of Botany" through the publication of his monumental illustrated herbal, *Neuwe Kreuterbuch* (1588). This sweeping, widely distributed folio documented over 3,000 distinct plants; crucially, within this text and his subsequent volume, *Icones* (1590), he integrated far more structural and ecological descriptions of lichens than any of his Renaissance predecessors, including Bock, accurately documenting crustose and fruticose species encountered during his lifelong botanical excursions along the Rhine. His herbarium is unknown. Ref.: Bergdolt (1992); Roth (1899).



Tavares, Carlos das Neves **(1914–1972)** – Born in Tomar, Centro Province, Portugal, Tavares entered the University of Lisbon in 1932 to study natural sciences. He worked closely under the pioneering geobotanist Ruy Telles Palhinha (1871–1957), completing his licentiate degree in 1938. Immediately following graduation, he was appointed a research assistant at the university's Botanical Institute, climbing the academic ranks to become a full Professor in 1953 and ultimately serving as Director of the Botanical Museum and Laboratory from 1967 until his untimely death. Tavares initially focused his research on laboratory microbiology and plant physiology, co-publishing an early 1948 paper with A. Gonçalves da Cunha (1902–1986) on the embryology of flowering plants, followed by technical studies on plant viruses. He maintained a broad interest in lower plants, publishing regional bryological checklists on hepatics. Tavares published his first standalone lichenological paper in 1939, quickly realising that the rich lichen flora of Portugal had been profoundly neglected. Encouraged by Palhinha, he embarked on a systematic taxonomic overhaul of the country's macrolichens. In 1947, he successfully defended his doctoral thesis, *Contribuição para o estudo das Parmeliáceas portuguesas*, and for his formal habilitation in 1950, he published his monumental masterwork, *Líquenes da Serra do Gerês*. Tavares single-handedly modernised Portuguese lichenology, establishing an expansive network of international correspondents and elevating his department into a globally recognised centre of research. He conducted extensive field surveys across mainland Portugal, most notably within the Serra do Gerês, and pioneered the exploration of Macaronesia, publishing seminal papers on the unique, threatened lichen flora of Madeira and the Azores. Between 1951 and 1968, he distributed the highly influential exsiccatae series, *Lichenes Lusitaniae Selecti Exsiccati*. He described numerous taxa, including the genus *Gorgadesia*, and many species are named in his honour. His herbarium is housed at LISU. Ref.: Antunes (1974); Ferri (1972); Poelt (1974);



Taylor, Thomas (1786–1848) – Born on a boat on the River Ganges, India, Taylor was the son of an Indian noblewoman known as Poor Begum and an Anglo-Irish officer, Joseph Irwin Taylor (1765-1811), who served as a major in the Bengal Artillery of the East India Company. Sent back to Ireland as a young boy for his formal education, he entered Trinity College, Dublin, graduating with his medical degree in 1814. He worked as a physician in ordinary at Sir Patrick Dun's Hospital until his appointment as

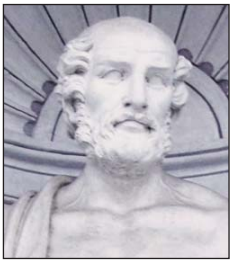
professor of botany and natural history at the Royal Cork Scientific Institution. He subsequently contributed the comprehensive treatment of cryptogams (comprising ferns, mosses, and lichens) to James Mackay's *Flora Hibernica* (1836), with the editor generously noting in the introduction that Taylor was the most qualified of all Irish botanists for the task. Following the withdrawal of the government grant for the Cork Institution around 1830, he retired to his family estate at Dunkerron, near Kenmare, where he continued to practise medicine while actively revising cryptogamic collections. He was closely associated with the Hookers (W. J. and J. D.); he was a warm personal friend of William, who stayed at Taylor's house with his wife during their honeymoon in 1815. Taylor contributed extensively to the cryptogamic sections of their floristic works, notably William J. Hooker's *Muscologia Britannica* (1818) and, most importantly in this context, Joseph D. Hooker's *Flora Antarctica*. He described numerous taxa, including the lichen genus *Syncesia*. The genus *Taylorellina* S.Y. Kondr. *et al.* is named in his honour. His herbarium and drawings were bought by John A. Lowell (1789–1881) in Boston and are now housed at FH. Ref.: Boulger (1898); Hooker (1848).

Tchou, Y. T. see **Zhu**

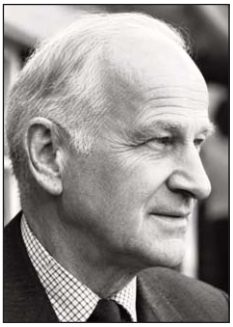


Tehler, Anders (1947–) – Born in Stockholm, Sweden, the son of a pilot, he developed an interest in the natural environment during his school years and later studied natural history at the University of Stockholm. In 1983, he was awarded a doctorate for his thesis on several genera within the *Roccellaceae*, supervised by R. Santesson; Tehler subsequently became the leading global expert on this family, noting that he was initially drawn to the group for aesthetic reasons. Adopting cladistic theory, to which he had been introduced by Kåre Bremer (1948–), he proposed a new system for the Ascomycetes in 1988. Supported by a special grant, he worked from 1992 to 1993 in the laboratory of John W. Taylor (1950–) at the University of California, Berkeley, where he trained in molecular techniques. During this period, he contributed to a groundbreaking paper published in *Science* that provided molecular proof for the polyphyletic origin of lichen-forming fungi. In 1994, he was serving as a lecturer and researcher at the University of Stockholm, where he immediately established a molecular laboratory. He became Head of the Cryptogamic Department at the Swedish Museum of Natural History (*Naturhistoriska Riksmuseet*) in Stockholm in 1996, a position he held until his retirement. Throughout this latter period, he worked extensively on the taxonomy of the *Arthoniales* in close collaboration with D. Ertz. Tehler has described numerous taxa, including the genus *Sigridea*, and together with G. Odelvik, he issued additional fascicles to Malme's exsiccatae. His herbarium is housed at S. Ref.: Hertel & al. (2017); Wedin (2015); *pers. comm.*

Theophrastos (orig. Tyrtamos) **(372–286 B.C.)** – – Born in the village of Eresos on the island of Lesbos (now Greece), he travelled to Athens in 347 B.C., where he studied under both Platon (428–348 B.C.) and Aristoteles (384–322 B.C.). In 322 B.C., he succeeded the latter as head of the peripatetic school in Athens, in accordance with Aristoteles's own



wishes; it was Aristoteles who bestowed upon him the name Theophrastos, meaning "he who speaks like a god", in recognition of his remarkable eloquence. Regarded as the founder of botany as a science, Theophrastos compiled the monumental works *Historia plantarum* and *De causis plantarum*, where he documented and analysed approximately 500 different plants in detail, detailing their structures and reproduction. This empirical approach was entirely novel, as contemporary Greek herbalists (*rhizotomi*) focused almost exclusively on the medicinal application of flora. He classified these plants within a straightforward system based primarily on growth-form, and while the few lichens known to him were lumped among mosses (such as *Usnea* species) and algae (such as *Roccella*), he was the first to introduce the word λειχήν, later latinised into *lichen* by Plinus the Elder, to describe certain outgrowths on tree bark, likely adapting a medical term used for skin eruptions. This designation was centuries later adopted as a formal generic name by Joseph Pitton de Tournefort in 1700 and subsequently sanctioned by Carl Linnaeus in 1753. Ref.: Fortenbaugh & al. (1992).



Thomas, Eugen Adolf **(1912–1986)** – Born in Zürich-Wollishofen, Switzerland, he attended the *Literaturgymnasium* before studying biology at the *Eidgenössische Technische Hochschule* (ETH Zürich), where he graduated in 1935. Between 1936 and 1937, he visited Uppsala, establishing contact with the lichenologists G. Degelius and G. E. Du Rietz, as well as the plant physiologist Elias Melin (1889–1979). He then produced a prize essay entitled *Die Flechtenpilze als Grundlage der Flechtensystematik*, for which he was awarded an ETH silver medal. Following his graduation, he served as an assistant in special biology between 1937 and 1939 under the physiologist Otto Jaag (1900–1978). In 1939, he earned his doctorate with a thesis entitled *Über die Biologie von Flechtenbildnern*, supervised by Ernst Gäumann (1893–1963). In this work, he proposed appending the suffix *-myces* to the names of fungal genera within lichen thalli, recognising 21 such genera, a nomenclatural practice later expressly prohibited by the Paris Code (1954). More significantly, he successfully resynthesised a lichen thallus (*Cladonia pyxidata*) under laboratory conditions from its free-living fungal and algal partners. Following this breakthrough, his career shifted predominantly towards limnology, hydrobiology, and water pollution control (*Gewässerschutz*). His herbarium is housed at ZT. Ref.: Müller (1986); Thomas (1939); Schanz (1987).

Thomson, John Walter **(1913–2009)** – Born in Cockenzie, East Lothian, Scotland, UK, he emigrated to the USA with his parents in 1922, settling in the Midwest. As an undergraduate at Columbia University, New York, he attended meetings of the Torrey Botanical Club and became acquainted with local botanists, most notably Raymond Torrey (1880–1938), who inspired him to study *Cladonia*. He continued to work on this genus throughout his long life, publishing numerous articles as well as a dedicated monograph on the



group. In 1935, he moved to the University of Wisconsin as a teaching assistant, initially intending to study bogs; however, under the influence of Norman Fassett (1900–1956), he shifted his focus to prairie vegetation, earning his doctorate on the subject in 1939. Following a brief tenure at Pennsylvania State University, he returned to the University of Wisconsin-Madison in 1945, where he spent the remainder of his career in various positions, becoming a full Professor in 1962. During this period, he increasingly focused his research on lichens despite the scant literature available, developing his expertise through extensive fieldwork across the country and publishing floristic and taxonomic papers on this neglected group. He gradually turned his attention to the Arctic, beginning in the 1950s with a modest grant from the Arctic Institute of North America to study lichens near Churchill, Manitoba. In 1958, he spent a summer at Point Barrow, Alaska, and later co-authored with Sam Shushan the first summary of the lichens of the Alaskan Arctic Slope (1979). This work served as a precursor to his monumental, two-volume lichen flora of the American Arctic (1984, 1997), for which he revised extensive historical material, including specimens he personally examined in European herbaria. Although this flora stands as his most significant scientific publication, his greatest legacy was the revival of North American lichenology, achieved through his profound influence as a teacher and mentor to the next generation of leading lichenologists, including William Culberson and Mason Hale. Culberson famously remembered him as an exceptionally generous mentor, dubbing him the "*Dean of American lichenology*". He was a prolific collector and described numerous taxa. He distributed two exsiccatae series: one of lichens from Wisconsin (a region he studied until late in life, publishing an account in 2003 at the age of 90) and his widely known collection of Arctic lichens. Thomson was awarded the Acharius Medal by the IAL in 1992, and the Thomson Memorial Prairie Reserve stands today as a testament to his family's environmental legacy, established to commemorate his late son, Douglas. His herbarium is housed at WIS. Ref.: Brodo & Bennett (2009).



Thor, Göran (1953–) – Born in Stockholm, Sweden, he completed his education locally before studying chemistry at the KTH Royal Institute of Technology, graduating in 1977. He subsequently majored in biology at the University of Stockholm in 1978, and went on to earn a doctorate in 1990 with the thesis *The lichen genus Chiodecton and allied genera*. In this monographic work, he extensively revised this predominantly tropical group, a research direction suggested to him by Rolf Santesson, redefining generic boundaries and later contributing to the reinstatement of the related genera *Cryptothecia* and *Herpothallon*. From 1994 to 1996, he was a postdoctoral fellow working alongside Yoshihiro Kashiwadani in Tokyo, where he contributed to regional floristic studies; these included inventories of the old-growth forest within the Tokyo Imperial Palace Grounds, one of the few remaining natural woodlands in the metropolitan area. His primary research subsequently focused on conservation biology at the Swedish University of Agricultural

Sciences (SLU), where he established an international reputation for his work on the lichens of rapidly changing forest ecosystems alongside his ongoing taxonomic work within the *Arthoniales*. He has described numerous new taxa. His herbarium is housed at UPS. Ref.*: Pers. comm.*

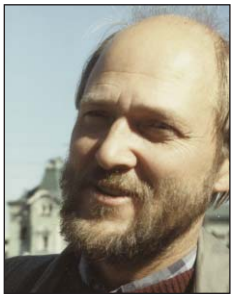


Thrower, **Stella** Lavinia (née Beckett) (**1925**– **2015**) – Born in Colac, Victoria, Australia, where her father Raymond was a postmaster, whilst his mother Stella Catherine (née Pitt) came from an established regional Victorian family. Thrower started her education as an optician after completing her basic local schooling, obtaining a Licentiate in Optometry. She married in 1948, but later, for unknown reasons, began studying biology at the University of Melbourne; she divorced her first husband and, in 1960, married the botanist Lyle Boyce Thrower (1923–2021), who was then a lecturer at the university where she specialised in plant physiology. She was awarded a doctoral degree in 1961 for a thesis entitled '*Factors influencing translocation in soybeans*', thereafter remaining affiliated with the university's School of Botany until the couple relocated to London, where she continued her physiological work at Birkbeck College. She had apparently already started collecting lichens in Australia, and over one hundred specimens from her years there are held at the Natural History Museum (BM), with her eventually joining the British Lichen Society (BLS) as late as 1967. In 1973, her husband was appointed professor at Hong Kong University, prompting their relocation to the city where she gradually became a leading figure in the conservation of its valuable but threatened surrounding forests. Because lichens play an important role in this vegetation, she paid particular attention to them, publishing several works on their importance, including their use as pollution indicators in 1980. A visit by Mason Hale triggered the idea to produce a regional guide, and assisted by him and two Australian colleagues, John Elix and Patrick McCarthy, she published a richly illustrated work in 1988, which was the first of its kind for the region. Recognizing that the naming of these organisms was complicated, she wisely documented the illustrated species with herbarium specimens so they could be revised when their taxonomy was better understood. Upon retirement in 1987, the couple moved to the Isle of Man in the Irish Sea, where Stella continued her environmental studies, published a paper on Manx lichens in 2006, and developed a special interest in the lichens of tombstones at St Sanctain's churchyard, an activity that was a particular speciality of the BLS, where she was by then an active member. She also cultivated an interest in entomology, specifically studying butterflies and beetles, and though she described no new taxa, her lichen collections are preserved in several herbaria, principally BM for Australian and British material, and HKU (M) for her Hong Kong material. Ref.: Benbow & Bellamy (2026).

Thwaites, George Henry Kendrick **(1812–1882)** – Born in Bristol, England, UK, Thwaites possessed a profound interest in the natural environment. Unable to afford university studies, he initially trained as an accountant and public notary, dedicating his spare time to botany. He developed a particular expertise in cryptogams, especially algae, as well as entomology, focusing on *Lepidoptera*. Through meticulous microscopy, he demonstrat-



ed that diatoms are algae rather than animals as was then widely believed. In 1839, he was appointed secretary to the Botanical Society of London. He later became a lecturer in botany and vegetable physiology at the Bristol School of Pharmacy and Medicine in 1846. In 1849, Thwaites demonstrated that the "gonidia" of *Collema* were actually chains of *Nostoc* surrounded by anastomosing filaments. Although he mistakenly believed these filaments were the remnants of sheets rather than fungal hyphae, his discovery significantly predated Simon Schwendener's landmark 1867 demonstration of the dual nature of lichens. Unfortunately for lichenology, Thwaites did not pursue this line of research further. Later that same year, he moved to Ceylon (now Sri Lanka) to become superintendent, and later director, of the Royal Botanic Gardens, Peradeniya, which he transformed into one of the finest botanical institutions in Asia. Between 1858 and 1864, he published his monumental work, *Enumeratio Plantarum Zeylaniae*. This achievement led to his election as a Fellow of the Royal Society of London in 1865, having already been made a Fellow of the Linnean Society in 1854. Thwaites described several lichens, including the genus *Cystocoleus*. He amassed vast and high-quality lichen collections, which were later examined and documented by William Nylander. These specimens are currently preserved at BM. Ref.: Britten (1882); Thistleton-Dyer (1882).

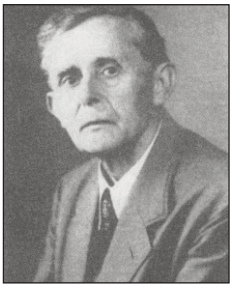


Tibell, Leif (1944–) – Born in Göteborg, Sweden, the son of a joiner and instrument maker, Tibell developed a keen interest in natural history during his boyhood. Professor Ivar Segelberg (1914–1987) first introduced him to lichens, and as a college student, he met Gunnar Degelius, who generously shared his expertise and mentored the young naturalist. Tibell began his formal botanical studies at the University of Uppsala, where he became acquainted with Rolf Santesson, who subsequently accepted him as a doctoral student. In 1975, Tibell defended his thesis on the *Caliciales* of the boreal region of North America; he subsequently went on to study this lichen family on a global scale, utilising detailed electron microscopy to significantly improve and revolutionise the group's taxonomy. Leif Tibell spent his entire distinguished academic career at Uppsala University, starting as a research scientist (1974–1987) and eventually serving as professor of systematic botany. Throughout his career, he has described numerous new taxa, including the genus *Nadvornikia*, and has made fundamental contributions to the study of lichen biology and the application of crustose lichens as bioindicators of forest continuity. He was awarded the Acharius Medal by the IAL in 2012. The genera *Leifidium* Wedin and *Tibellia* Vězda & Hafellner are named after him. His herbarium is housed at UPS. Ref.: *Pers. comm.*; Thor & al. (2004).

Timdal, Einar (1957–) – Born in Oslo, Norway, the son of an engineer, Timdal developed a keen interest in the natural environment during his school days, initially focusing on bird watching. Consequently, he chose to study biology upon entering the University of



Oslo, where he was taught botany by Hildur Krog and quickly became fascinated by lichens. For his cand. scient. degree, completed in 1983, he revised the genus *Hypocenomyce*; finding the group to be non-uniform, he later collaborated with Mika Bendiksby (1971–**)** on molecular studies to divide it into several distinct genera. In 1992, he earned his doctoral degree with a monograph on the genus *Toninia*. His primary research interests centre on squamulose lecideoid lichens, such as *Phyllopsora*, *Psora*, and *Solenopsora*, as well as the genus *Rhizocarpon*. He was appointed curator of the lichen herbarium at the Botanical Museum in Oslo in 1992, and in this role, he has taken a particular interest in applying information technology (IT) to collection curation, alongside producing conservation red lists and managing comprehensive bibliographies, notably the *Recent Literature on Lichens* database. Timdal is also an accomplished lichen photographer, showcasing his work via an online photo gallery. Throughout his career, he has described numerous taxa, including the genera *Anamylospora*, *Boreoplaca*, *Krogia*, *Porpidinia*, and *Romjularia*; in partnership with Bendiksby, he has also established *Carbonicola*, *Toensbergia*, *Fulgidia*, and *Xylopsora*. The genus *Timdalia* Hafellner is named after him. His herbarium is housed at O. Ref.: *Pers. comm.*; Hertel & al. (2017).



Tobler, Friedrich (1879–1957) – Born in Berlin, Kingdom of Prussia (now Germany), the son of Adolf (1835–1910), a Swiss Romance linguist, and Ottilie Wilhelmine (née Hirzel) (1838–1908), the daughter of the publisher Salomon Hirzel. Tobler studied natural sciences at the universities of Heidelberg and Leipzig, eventually completing his studies under Simon Schwendener in Berlin. In 1901, he earned his doctoral degree with a thesis on the fibres of tree stems, and spent the following two years investigating marine biology at the research stations in Napoli, Italy, and Bergen, Norway. He subsequently moved to Münster, where he was appointed assistant to Wilhelm Zopf and redirected his scientific focus towards lichens; following Zopf's death, Tobler was awarded a personal professorship at the university in 1911. He later became involved in German colonial botany, undertaking a research expedition to East Africa between 1912 and 1913, and during the First World War, he served as a military officer and was decorated for his efforts. In 1920, Tobler founded the Research Institute for Bast Fibres in Sorau, Brandenburg (now Żary, Poland), serving as its director until 1924, when he was appointed professor of botany at the *Technische Hochschule* (Technical University) of Dresden and director of its botanical gardens, which he built into an institution of outstanding excellence. Deeply influenced by Schwendener, Tobler's primary contributions to lichenology focused on general biology rather than strict taxonomy; his textbooks *Biologie der Flechten* (1925) and *Die Flechten* (1934) were landmark publications of their era. During the National Socialist regime, Tobler faced severe political harassment due to his marriage to the Jewish biologist Gertrude (née Wolff, 1877–1948), who had also been a student of Schwendener and wrote her doctoral thesis on the development of lichen apothecia. Because Tobler held Swiss citizenship and his natural

fibre research was deemed crucial to the wartime economy, he initially managed to retain his academic post; however, just two months before the end of the war, he was forcibly removed from his position by the local *Gauleiter* (nazi-leader). Sadly, his extensive herbarium was entirely destroyed during the Allied bombardment of Dresden. Following the war, he settled permanently in Switzerland, holding modest research positions in Zürich and St Gallen, where his final publications focused exclusively on textile fibres. He described a small number of new taxa, most notably establishing the genus *Herpothallon*. Ref.: Kärnefelt & al. (2012); Petschel (2003); Ulbricht (1958).



Tobolewski, Zygmunt Robert **(1927–1988)** – Born in Grodzisk Wielkopolski, western Poland, Tobolewski completed his local education before studying natural sciences at the University of Poznań. In 1960, he earned his doctorate with a pioneering thesis on the lichens of the Pieniny Mountains. Although completed under the official supervision of the bryologist Zygmunt Czubiński (1912–1967), his work was closely supported by two eminent foreign lichenologists, A. H. Magnusson and J. Poelt. This international collaboration deeply irritated the senior Polish lichenologist Józef Motyka, causing their professional relationship to remain severely strained thereafter. Tobolewski maintained a keen interest in plant geography and phytosociology, and was also active as a bryologist. In 1982, he was appointed full professor at the university's Institute of Plant Systematics and Plant Geography. He is best known for his introductory identification key to Polish lichens (1953), which was later vastly expanded into a comprehensive nationwide flora co-authored with Jan Nowak in 1975. He also distributed an important series of exsiccatae of Polish lichens, compiled partly in association with Kazimierz Glanc. Together, this landmark flora and the accompanying exsiccatae inspired and guided a new generation of Polish botanists to study lichens, an achievement of major national and scientific importance. His collections are at POZ and WA. Ref.: Cieśliński & Seaward (1990); Olech (1988).



Tønsberg, Tor (1948–) – Born in Oslo, Norway, the son of an editor, Tor Tønsberg grew up on the outskirts of the city, where he developed a lifelong fascination with the natural world. He chose to study natural history upon entering the University of Oslo in 1966, and his specific interest in lichens was later sparked during a course on cryptogams delivered by Professor Per Størmer (1907–1991). Under the supervision of Hildur Krog, Tønsberg completed a floristic and biogeographic thesis on the lichens of Børgefjell National Park, Nordland, in 1975. The following year, he was employed as a botanical assistant at the University of Trondheim, later holding a research scholarship at the university museum. In 1983, he was appointed curator of cryptogams at the University of Bergen herbarium (BG), where he earned his doctorate in 1992 with a seminal thesis on the sterile, isidiate or sorediate lichens of Norway, before being awarded a personal chair in 1999. He has since become a

pre-eminent authority on these challenging sterile crusts, including the genus *Lepraria* and its complex secondary chemistry, which was famously reflected in the naming of an aliphatic lichen diacid from this genus as toensbergianic acid. Alongside describing numerous new taxa, including the genus *Japewia*, Tønsberg distributed the exsiccatae series *Lichenes isidiosi et sorediosi crustacei exsiccati*. The genus *Toensbergia* Bendiksby & Timdal is named in his honour. His herbarium is housed at BG. Ref.: *Pers. comm.*; Jørgensen & Holien (2023).



Tomaselli, Ruggero (1920–1982) – Born in Trento, Italy, Tomaselli studied natural sciences at the University of Pavia, graduating in 1943 before serving as an assistant to Professor Raffaele Ciferri. In 1946, he began postgraduate studies in botanical cytology at the Sorbonne in Paris, later moving to Montpellier, where in 1948 he earned a doctorate in natural sciences for his research into regional phytosociology and vegetation dynamics. Plant phytosociology and phytogeography remained fields of intense interest to him throughout his life, and he is widely credited with introducing modern phytosociological studies to Italy. Between 1952 and 1953, he held a research scholarship at the University of Kansas, USA, specialising in vegetation mapping under Professor Albert W. Küchler (1907–1999). Upon returning to Italy, Tomaselli held professorships at the universities of Urbino and Catania; in 1964, he returned permanently to the University of Pavia, where he was appointed director of the Botanical Institute, the Botanical Garden of Pavia, and the associated cryptogamic laboratory. His primary research interest lay in the relationship between lichens and non-lichenised fungi, and he made numerous contributions to this field, including pioneering axenic growth experiments. Tomaselli and Ciferri strongly advocated for a separate taxonomic nomenclature for the fungal partner (the mycobiont) within the lichen thallus; although their proposal was formally rejected at the 8th International Botanical Congress in Paris in 1954, they nevertheless coined a considerable number of separate generic names for mycobionts, usually ending in *-myces*, which are accordingly invalid. His herbarium is housed at PAV. Ref.: Balduzzi (1982); Dibben (1982).



Tomin, Mikhail Petrovich **(1883–1967)** – Born in the village of Sharovichi in the Kaluga Governorate, Russian Empire, Mikhail Petrovich Tomin graduated from the Moscow Agricultural Institute in 1912. He was subsequently employed at the Voronezh Agricultural Institute in southwestern Russia, where he conducted extensive research into the lichens and vegetation inhabiting the region's arid soils. Following brief academic appointments in Arkhangelsk and Orenburg, he accepted a professorship in Minsk, Belarus, in 1934. In Minsk, Tomin embarked on compiling a comprehensive lichen flora of Belarus, which he completed in 1936. The following year, he expanded this foundational research to encompass all of European Russia, producing the very first definitive lichen flora for that vast

geographic territory. He received his Doctorate of Biological Sciences in 1937 and went on to describe numerous new lichen taxa. Tomin's extensive pre-war herbarium collections were tragically destroyed in Minsk during the Second World War, though some duplicate specimens survived in other regional herbaria, while his post-1945 specimens are at MSK. Ref.: Gorbach & Parfenov (1967); Savicz (1968).



Tornabene Roccaforte, **Francesco (1813–1897)** – Born in Catania, Kingdom of Sicily (now Italy), into an influential patrician family that provided him with significant financial security and an elite education, Francesco was guided towards a career within the Church in accordance with the customs of the era for younger noble sons. He entered the Monastery of *San Nicolò l'Arena* in Catania, a monument of the Cassinese Benedictine Congregation and one of the most advanced scientific and literary hubs in Southern Europe. The defining figure of Tornabene's early botanical career was Ferdinando Cosentini (1764–1840), Professor of Botany and *Materia Medica* in Catania, who took the young monk under his wing, teaching him Linnaean taxonomy, field collection safety, and herbarium preservation techniques. Under Cosentini's guidance, Tornabene began using early compound microscopes, laying the groundwork for his future focus on cryptogams and lichens. When Cosentini passed away, the university's botanical chair became vacant, and Tornabene, backed by years of intensive research conducted between his monastery cell and field excursions on Mount Etna, entered the fierce public competition for the position. In 1843, aged just thirty, he successfully secured the Chair of Botany, setting the stage for his decades-long transformation of Sicilian natural science. While celebrated for organising the *Orto Botanico dell'Università di Catania* and its specialised *Hortus Siculus* to protect Mediterranean endemic flora, his early intellectual rigour left an important mark on nineteenth-century Italian cryptogamic botany, specifically within lichenology. The milestone of his lichenological career was the publication of *Lichenografia Sicula* in 1848–1849, the very first systematic attempt to index and describe the lichens of Sicily. Tornabene was among the earliest Italian scholars to emphasise the observation of reproductive characters under microscopy rather than relying solely on macroscopic features. In his later monumental works, such as the *Flora Aetnea* (1889–1890), he integrated his lichenological expertise into broader ecosystem dynamics, documenting how pioneer lichens colonize bare lava flows on Mount Etna, initiating biological weathering and soil formation for higher plants. The genus *Tornabea* Østh. is named in his honour. His herbarium is housed at CAT. Ref.: Pavone & al. (2014); Trovato (2013).

Tournefort, Joseph **Pitton de** (1656–1708) **–** Born in Aix-en-Provence, France, into a noble family, Joseph Pitton de Tournefort was educated at a Jesuit seminary, indicating that his family intended him for a clerical career. He demonstrated an early fascination with plants, with school records noting his frequent absences due to wandering off to collect specimens. Following his father's death in 1676, he abandoned his religious studies to pursue botanical excursions across the region, partnering in 1678 with the botanist Charles Plumier (1646–1704). Between 1679 and 1680, he studied under Pierre Magnol (1638–



1715) at Montpellier, ultimately graduating with a medical doctorate from the University of Orange in 1681. In 1683, Tournefort was engaged as an assistant to Guy-Crescent Fagon (1638–1718) at the *Jardin du Roi* (now the *Jardin des Plantes*) in Paris, where he was subsequently appointed Professor of Botany, a position he held until his untimely death following a carriage accident near the gardens. He undertook numerous botanical expeditions, the most famous being a royal mission to the eastern Mediterranean (the Levant) that extended to the borders of Armenia and Georgia between 1700 and 1702. Although he showed no specialist interest in lichens, Tournefort secured a permanent place in the history of lichenology by becoming the first taxonomist to define and formalise the generic name *Lichen*, a concept later adopted by Carl Linnaeus. He introduced this genus in his monumental work *Institutiones rei herbariae* (1700), an expanded Latin edition of his earlier *Éléments de Botanique* (1694). This publication played a foundational role in early lichenology, as both Pier Antonio Micheli and Linnaeus based their subsequent lichen classifications upon it. Tournefort's historic herbarium (a term he actively promoted instead of the usual *Hortus siccus*) is kept at P. Ref.: Becker & al. (1957); Fontenelle (1709); Leroy (1956); Ségur (1825).



Tragus (orig. Bock), Hieronymus (1498–1554) – Born in either Heidersbach or Heidelsheim, near Heidelberg, Germany, Tragus left little documentation regarding his early life or education. To the despair of his parents, who wished him to enter a cloister, he refused to become a monk, though he is known to have studied theology. Although there is no surviving archival record of him taking formal examinations at established universities, he is believed to have attended the University of Heidelberg and later pursued medical and botanical studies in Strasbourg. In 1523, he settled in Zweibrücken, Rheinland-Pfalz, where he was employed as a schoolteacher and director of the gardens of Ludwig II, Duke of Palatinate-Zweibrücken (1502–1532), remaining there until the Duke's death. He was subsequently appointed to a position at the Church of St Fabian in Hornbach, where he ministered as a Lutheran pastor and studied the regional flora, whilst also serving as the personal physician to Count Philipp of Nassau-Saarbrücken (1504–1559). Despite suffering from severe consumption, which ultimately caused his death, Bock produced one of the most influential Renaissance herbals, the *New Kreuterbuch*. First published unillustrated in 1539, it achieved widespread fame with its 1546 edition, which featured detailed woodcuts by the artist David Kandel (1520–1592). Bock broke with tradition by categorising plants according to his own structural classification system based on natural similarities rather than alphabetical order. In the later Latin translation of his work, *De stirpium... commentariorum libri tres* (1552), translated by David Kyber, he included pioneering descriptions of several lichens and other cryptogams, which represented a remarkable novelty for the era. His original herbarium collections have not survived. Ref.: Greene (1983); Ziegenspeck (1955).



Trass, Hans-Woldemar **(1928–2017)** – Born in Tallinn, Estonia, Trass completed his basic education in Nõmme (a district of Tallinn), where he and his classmate, the future mycologist Erast Parmasto (1928–2012), first began studying the natural environment. Trass continued his education at the University of Tartu, earning a master's degree with a thesis entitled *Cladoniae of the Estonian SSR* under the supervision of Professor August Vaga (1893–1960). Because there were no local specialist lichenologists in Estonia at the time, he sought academic assistance abroad, primarily from experts in Finland and Russia, before subsequently completing his PhD on the vegetation of western Estonia. In 1969, he defended a higher doctoral thesis at the Komarov Botanical Institute in Leningrad (now St Petersburg) under the mentorship of Vsevolod Savicz; titled *The Analysis of the Estonian Lichen Flora*, this work successfully defined the geoelements of the region's lichen flora. In 1971, Trass was appointed Head of the Department of Plant Taxonomy and Phytogeography at the University of Tartu, a position he held until his retirement. He was a versatile botanist whose work frequently spanned vegetation ecology and phytogeography, notably contributing to Robert Whittaker's *Handbook of Vegetation Science*. He also developed a pioneering Index of Poleotolerance (IP) to evaluate urban pollution levels based on the environmental sensitivity of local lichen communities. Trass collected specimens extensively across the Soviet Union, organising expeditions to remote regions including Kamchatka, the Sikhote-Alin Range, the Taimyr Peninsula, and Lake Baikal, and publishing his most significant floristic findings from these travels. He played a vital role in maintaining scientific contact and exchange between Soviet lichenologists and Western colleagues during the politically challenging years of the Iron Curtain. He described several new taxa, and the genus *Hanstrassia* S.Y. Kondr. was named in his honour. He was awarded the Acharius Medal by the IAL in 1992. His herbarium is housed at TU. Ref.: Ahti (1993); Martin & Martin (2017).



Tretiach, Mauro (1964–) – Born in Trieste, Italy, Tretiach completed his university education at the University of Trieste, graduating with the highest honours in Biological Sciences in 1988. He then pursued doctoral studies in plant systematics and ecology at the University of Pavia, earning his Ph.D. in 1992. He returned to his *alma mater* in Trieste, establishing his academic career first as a university researcher in 1995, advancing to Associate Professor in 2001, and ultimately being appointed Full Professor of General Botany in 2018. Parallel to his academic growth, he took on significant institutional roles, serving as Director of the Department of Life Sciences from 2018 to 2024 and later as Deputy Rector of the university. He was a driving force behind the Italian Lichen Society, serving on its board and acting as its President from 1999 to 2008. His research centres on the biology of lichen symbiosis, ecophysiology, and floristics. He specialised extensively in the ecophysiology of calcicolous endolithic lichens, providing pioneer data on their gas exchange rates and chlorophyll content. A substantial branch of his research has been dedicated to the biodeterioration and conservation of cultural heritage, specifically focusing on

lichen growth on outdoor stone monuments. He monitored lichen recolonisation on restored calcareous statues, demonstrating the limitations of traditional water repellents and chemical biocides. To overcome the toxicity and environmental hazards of standard chemical treatments, he pioneered an innovative, eco-friendly conservation method utilising mild heat-shock treatments. A prominent portion of his broader career has also been dedicated to lichen biomonitoring, using these organisms to evaluate atmospheric pollution and airborne heavy metals, alongside assessing the ecotoxicology of two-dimensional nanomaterials on plant structures. He has described several new species. Alongside Pier Luigi Nimis, he is the primary collector and curator responsible for accumulating the extensive modern collection of the TSB Lichen Herbarium, which holds roughly 50,000 specimens and forms the largest modern lichen collection in Italy. Ref.: Nimis *pers. comm.*



Trevisan di San Leon**, Vittore** Benedetto Antonio **(1818–1897) –** Born in Padova, Regno Lombardo-Veneto (now Veneto**,** Italy), into a wealthy noble family, Trevisan (Count of Saint-Léon) was initially educated privately at the family estate of Mason Vicentino in the province of Vicenza. He later returned to Padova to attend high school and subsequently the University of Padova, graduating with a degree in philosophy in 1842. During his student years, he developed a deep interest in botany and was gifted the large herbarium of the priest Girolamo Romano (1765–1840), which became the foundational nucleus of his extensive private collection. Trevisan belonged to the academic circle surrounding Professor Roberto de Visiani (1800–1880), where he met the young Abramo Massalongo. Trevisan held various positions in Padova, serving as a *libero docente* (free professor) of Natural History and "Popular" Physics until 1852. Following his father's death, he retired to his estate in 1853 to devote his time entirely to cryptogamic botany, with a primary focus on lichens. He published the majority of his lichenological papers between 1851 and 1869, with a final synopsis on the generic taxonomy of cyanolichens appearing much later, in 1880. His prolific output was galvanised by Massalongo's landmark 1853 paper on crustose lichens, which adopted Giuseppe De Notaris' approach of defining genera by spore morphology. Trevisan published a vast number of new lichen genera, often in direct and bitter competition with Massalongo, whom he heavily criticised for working too hastily; in one publication, Trevisan went so far as to list typographical errors in Massalongo's recent works and accused him of backdating privately printed papers to claim taxonomic priority. Though deeply frustrated by Massalongo's speed, Trevisan's work was arguably more meticulous. In 1860, the year of Massalongo's untimely death, Trevisan published *Conspectus Verrucarinarum*, a seminal treatise providing an overview of pyrenocarpic lichens. Written in an extremely concise, telegraphic style, the work was packed with nomenclatural modifications and hidden taxonomic detail. Trevisan played an important role in reforming mid-nineteenth-century lichen taxonomy, and among the numerous taxa he circumscribed are the genera *Brigantiaea*, *Eschatogonia*, *Speerschneidera*, *Stigmidium*, and *Tornabenia*. He also edited and issued a famous exsiccatae set of regional specimens, the *Lichenotheca Veneta* (1869). After his death, his massive private herbarium was bought by G. B. de Toni for the Institute of Botany of the University of Genova (GE), where it was

tragically destroyed by fire during the Second World War. Ref.: de Toni (1897); Nimis (1993); Nimis & Hawksworth (1994).



Triebel, Dagmar (1957–) – Born in Essen, Nordrhein-Westfalen, Germany, she completed her basic education locally before studying biology at the *Ludwig-Maximilians-Universität München*, specialising in botany. Following her graduation in 1983, she was appointed as an assistant at the university's botanical institute. Under the supervision of Hannes Hertel, she conducted research into lichenicolous fungi, focusing particularly on lecideicolous taxa, and earned her doctorate on the subject in 1989. From that year onwards, she was employed at the *Botanische Staatssammlung München* in various academic positions, eventually being appointed leading curator of its mycological collection in 2010. As a researcher, she authored numerous influential papers on microfungi and lichen parasites, introduced several names and combinations for fungal taxa, and served as a longtime co-editor of the *Mycological Progress* journal. Alongside her taxonomic work, Triebel pioneered the application of biodiversity informatics and data science to research and collections management, driving the development of global descriptive platforms such as the LIAS (Lichen Information System) database. In 2006, she became the Deputy Director of the *Botanische Staatssammlung*, role she held until her retirement from administrative duties in 2023. She has been highly active internationally in coordinating global database networks and biodiversity data infrastructures for fungi and lichens. Her herbarium is housed at M. Ref.*: Pers. comm.;* Kärnefelt & al. (2012).

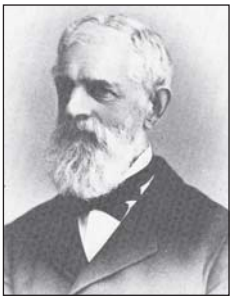


Tschermak-Woess, Elisabeth (1917–2001) – Born in Znaim, Austro-Hungarian Empire (now Znojmo, Czech Republic), she studied botany and chemistry at the University of Wien, completing her doctorate there in 1941, writing her thesis on the relationship between fungi and algae in the lichen thallus, a theme she developed further and later using electron microscopy. In 1948, she turned her attention to cytology under the guidance of Professor Lothar von Geitler (1899–1990), and in 1970 she was appointed Ordinary Professor of Botanical Cytology and Genetics at the University of Wien (Vienna). She was an exceptionally sharp-eyed microscopist who investigated the physical contact between the mycobiont and photobiont within lichen thalli, making important contributions to our understanding of lichen symbiosis. However, she is probably best known for her research on the algal partners of lichens. She described several new taxa and famously demonstrated that lichen-associated *Trebouxia* algae differ from free-living strains. She was awarded the Acharius Medal by the IAL in 1994. The genus *Woessia* D. Hawksw. & Poelt is named after her. Her herbarium is housed at WU. Ref.: Gärtner (2001); Hesse (2001); Ott (1994); Poelt (1988); Schweizer (1988).

Tucker, Shirley Cotter **(1927–)** – Born in Minneapolis, Minnesota, USA, where her father was a professor of plant pathology, she grew up in a botanical environment and nat-



urally chose to study botany when enrolling at the University of Minnesota. She had already begun collecting lichens, but upon starting her graduate studies at the University of California, Davis, she specialised in anatomy, becoming a student of the renowned plant anatomist Katherine Esau (1898–1997). She earned her doctorate in 1956 with a thesis on the ontogeny of the inflorescence of *Drimys winteri*. She initially worked on projects funded by various research grants before being appointed Assistant Professor at Louisiana State University (LSU) in Baton Rouge, where she rose to become a Boyd Professor of Botany in 1982. Following her retirement in 1995, she returned to Santa Barbara, California, where she became heavily involved with the local botanic gardens and continued her Californian lichenological research. During her tenure at Baton Rouge, she pioneered lichenological research in Louisiana and published the state's first lichen checklist in 1981. She held numerous prestigious positions within American botany, including serving as President of the Botanical Society of America (1987–1988). Following her husband's death, she established a generous endowment at LSU, where the herbarium was officially renamed *The Shirley C. Tucker Herbarium* in her honour. She has described several new taxa. Her herbarium is housed at LSU. Ref.*: Pers. comm.*



Tuckerman, Edward (1817–1886) – Born in Boston, Massachusetts, USA, he was the son of a wealthy merchant, whilst his mother belonged to one of the most prominent, long-established colonial families of Massachusetts. He was educated at the Boston Latin School, where he developed an interest in philosophy, theology, and history, as well as classical languages. Tuckerman had wished to continue his studies at Harvard University but, on his father's advice for religious reasons, he instead entered the second-year class at Union College in Schenectady, New York, in 1834. During his time there, an interest in the natural sciences manifested itself, and he was appointed curator of the college museum before earning his BA degree in 1837. The following year, he became interested in lichens, inspired by the botanist William Oakes (1799–1848) and the biologist Thomas William Harris (1795–1856), both of whom he botanised with as fellow members of the newly organised Boston Society of Natural History. In December 1838, he presented his first major lichenological paper, which was published shortly after; the following year, in 1839, he received a degree in law from Harvard. In 1841, he left for Europe, where his most significant encounter was with Elias Fries in Uppsala, Sweden. Fries was reportedly highly impressed by the young American, particularly after Tuckerman discovered a lichen species new to Sweden on an oak tree that Fries himself had walked past daily for years. This association proved to be the pivotal event of Tuckerman's scientific career; he remained in close contact with Fries for the rest of the latter's life, and subsequently with his son, Thore Magnus Fries. Following his return to America in 1842, he resumed his studies at Harvard, earning an additional degree from the Divinity School there in 1852. He subsequently accepted a position as Lecturer in History

at Amherst College in western Massachusetts, and in 1855 he was appointed Professor of Oriental History, a subject he pursued with great enthusiasm. Despite his historical appointment, Tuckerman worked principally on lichens after moving to Amherst. In 1858, he was finally appointed Professor of Botany, a title he retained even after increasing deafness forced him to retire from classroom teaching. He did not restrict his research to the lichens of New England, but also revised collections from all across North America, as well as material gathered from expeditions to foreign regions. He produced the first synopsis of North American lichens in 1882; the second part was completed by his pupil Henry Willey and published posthumously in 1888. Rightly regarded as the father of American lichenology, Tuckerman described numerous new taxa, including the genus *Conotrema*, and issued a celebrated exsiccatae series of North American lichens. The genera *Tuckermanella* Essl. and *Tuckermannopsis* Gyeln., alongside many species, are named after him. His herbarium is housed at FH. Ref.: Culberson (1964); Farlow (1887); Fink (1906).



Türk, Roman (1945–) – Born in Richterhof, Kalsching (the German names for Střemily, a now-abandoned village near Chvalšiny in the Czech Republic) close to the Austrian border, he received his early education in Steyr, Austria, before studying biology at the University of Wien (Vienna). In 1971, he defended his doctoral thesis, an ecophysiological study focusing on the water potential of higher plants. Following this, he collaborated with the research group of Otto Ludwig Lange at the University of Würzburg in Bayern, where he turned his attention to cryptogams, focusing primarily on the pollution tolerance and gas exchange of mosses and lichens. From 1975, he was employed as an assistant at the University of Salzburg, Austria, where he was appointed Head of the Department of Ecology and Ecophysiology of Plants in 1982, and later became Director of the Institute of Plant Physiology until its closure in 1996. He subsequently served as Chairman of the "Ecology and Diversity of Plants" research group, participated in a scientific expedition to Antarctica, and contributed extensive field research to the National Parks of Austria. While his principal research focus has been the ecophysiology of plants and lichens, he has also conducted numerous floristic surveys of lichens, particularly across Austria and the Alps. Most notably, he served as a central organizer for Austrian lichen mapping; he co-authored the foundational national bibliography with Josef Poelt in 1993, and subsequently collaborated with Johann Hafellner to author the definitive national checklists of Austrian lichenised fungi (2001, 2016). His publications are frequently illustrated with his own photography. His herbarium is housed at SZU. Ref.: Hertel & al. (2017); Kärnefelt & al. (2009); Speta (1986).

Tulasne, Étienne ('Edmond') Louis **René (1815–1885)** – Born in Azay-le-Rideau, Indre-et-Loire, France, he studied law in Poitiers and practised as a lawyer during his early years. He devoted his free time to botanical, and particularly anatomical, studies, collaborating closely with his brother Charles (1817–1884), a medical doctor who also became a talented mycological illustrator and co-author. Tulasne eventually developed a profound



interest in parasitic fungi, including those growing on lichens, a field in which he is considered one of the foremost pioneers. From 1842, he served as an assistant at the *Muséum National d'Histoire Naturelle* in Paris. He was instrumental in helping William Nylander establish himself in Paris and is widely believed to have taught Nylander how to utilise iodine when studying hymenial sections, a technique that revolutionised lichen taxonomy. The fungal genus *Tulasnella* J. Schröt. was dedicated to him. His herbarium is housed at PC. Ref.: Cornu (1886); Jouvet-Ast (1984); Magnus (1886); Van Tieghem (1886).



Turner, Dawson (1775–1858) – Born in Great Yarmouth, Norfolk, England, UK, he was the son of James Turner (1743-1794), head of the Gurney and Turner's Yarmouth Bank, while his mother, Elizabeth (née Cotman), came from a family which had connections to the most influential political and artistic circles in Norfolk. He received his early education in North Walsham before studying privately at Barton Bendish under the botanist the Reverend Robert Forby (1759–1825). In 1793, he entered Pembroke College, Cambridge, but his father's terminal illness and subsequent death in 1794 forced him to leave university without graduating so that he could join the family banking business, which he later spearheaded. Despite his demanding career as a wealthy banker, Turner devoted his leisure time to botanical research. This scientific pursuit increasingly occupied him, particularly after his daughter Maria (1797–1872) married the prominent botanist William Jackson Hooker (1785–1865), later Director of the Royal Botanic Gardens, Kew, and gave birth to his celebrated grandson, Joseph Dalton Hooker (1817–1911). Turner held a deep interest in cryptogams, publishing extensively on algae and bryophytes. Around 1810, he began accumulating data for a comprehensive work on British lichens. Upon learning of this, fellow gentleman botanist William Borrer suggested they collaborate. This joint effort resulted in the *Specimen of a Lichenographia Britannica*, the first attempted British lichen flora, which Turner had printed for private circulation in 1839. Turner also contributed descriptions to James Edward Smith's landmark publication, *English Botany.* His herbarium is housed at BM and K. Ref.: Boulger (1899); Praeger (1949).



Ulzijn, Cogt (=Tsogt) **(1940–1996)** – Born in Khyargas in the northern Uvs Province of Mongolia, he was the son of a nomadic family. He spent his youth learning to ride horses and herding livestock on the Mongolian steppes in the tradition of his forefathers, while also attending school in the provincial capital of Ulaangom. He subsequently pursued his higher education in the national capital, Ulaanbaatar, graduating in 1963 with a thesis focused on plankton. Following his graduation, he worked as a botany lecturer at the Mongolian State University of Education before joining the Mongolian Academy of Sciences as a research

fellow in 1969. Recognising that the country's rich lichen flora was critically understudied, he chose to specialise in the discipline. To advance his training, he moved to Leningrad (now St Petersburg) in 1975, where he defended a thesis on the terrestrial lichens of Mongolia in 1977 under the supervision of Nina Golubkova. This initiated a highly productive collaboration, culminating in several joint papers and his definitive checklist, *Die Flechten der Mongolei*, published in 1995. Cogt also collaborated extensively with the German chemist Siegfried Huneck on the secondary metabolites of Mongolian lichens. Supported by a research grant to Germany in 1991, he worked under the guidance of Rudolf Schubert (1927–2022) at the Martin Luther University Halle-Wittenberg, where he defended a comprehensive doctoral dissertation on Mongolian lichens to earn his higher doctorate. Upon returning to his homeland, he was appointed Professor at the National University of Mongolia. As Mongolia's only professional lichenologist at the time, his premature death was a profound loss to the cryptogamic botanical community of Central Asia. His herbarium is housed at UBA and LE. Ref.: Huneck (1998).

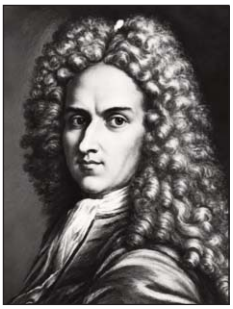


Upreti, Dalip Kumar **(1958–)** – Born in the village of Kujouli in the Pithoragarh district of Uttar Pradesh (now Uttarakhand State), India, he was the son of an army serviceman. After completing his early education locally, he pursued higher studies at the postgraduate college of Kumaun University in Nainital. He later moved to the University of Lucknow, where he made the acquaintance of the father of Indian lichenology, Dharani Dhar Awasthi, who hailed from the same region. Upreti became Awasthi's student and earned his doctorate in 1983 with a thesis on the family *Cladoniaceae* of India and Nepal. In 1988, Upreti joined the CSIR-National Botanical Research Institute (NBRI) in Lucknow as a scientist, subsequently taking charge as the leader of its lichenology laboratory and later serving as the institute's Director. He dedicated his primary career to the institution, becoming a highly influential mentor to numerous students who went on to pursue lichenology, and he continues his research today as a CSIR-Emeritus Scientist. Throughout his career, he revised the material of numerous Indian lichen families, as well as specimens gathered from Antarctica, which he visited as a member of the 11th Indian Antarctic Expedition. In addition to his extensive taxonomic work, which includes describing roughly one hundred new taxa, Upreti has investigated the ecophysiological responses of lichens to environmental changes. He has also maintained a keen research interest in broader disciplines, such as lichen biology and biodiversity conservation. The genus *Upretia* S.Y. Kondr. *et al.* is named after him. His herbarium is housed at LWG. Ref.: *Pers. comm.*

Vahl (Rasmussen)**, Martin (1749–1804)** – Born in Bergen, Norway (then in union with Denmark), he was the son of Henrich Rasmussen (1720–1794), a merchant, whilst his mother Elisabeth (née Friis) (1726–1765) came from a highly respected merchant family deeply embedded in the Hanseatic trade networks of Bergen. Vahl demonstrated a profound interest in plants from his schooldays, a passion nurtured by his neighbour, the apothecary Johan Carl de Besche (1737–1787), who owned Norway's largest herbarium at the time. Although Vahl was initially sent to København to read theology, he found himself



irresistibly drawn to botanical lectures. His disapproving father intervened, forcing him to take a sabbatical in Norway under the supervision of the vicar Hans Strøm (1726–1797) in Volda, Sunnmøre. However, rather than steering Vahl back towards theology, Strøm, an accomplished naturalist, further ignited the young man's passion for botany, particularly cryptogamic studies. Following this formative period, and with the assistance and recommendation of de Besche, Vahl successfully arranged to move to Uppsala, where he became a dedicated private student of Carl Linnaeus from 1769 to 1774. In 1785, Vahl was appointed editor of the prestigious *Flora Danica*. In this monumental work, he included and described numerous new lichens, such as *Lichen hypnorum*, which later became the type species for the genus *Psoroma* Ach. ex Michx. From 1786, he served as a professor at the Natural History Society (*Naturhistorieselskabet*) in København, a role that culminated in his appointment as Professor of Botany at the University of København in 1801. Vahl's premature death prevented the publication of his intended magnum opus, a comprehensive update of Linnaeus's *Species Plantarum*. Beyond his publications, Vahl was a highly influential educator who shaped the next generation of Scandinavian and international botanists, counting Jens Wilken Hornemann (1770–1841), Christen Smith (1785–1816), and Nathanael Wallich (1786–1854) among his pupils. The genus *Vahliella* P.M. Jørg. is named after him. His herbarium is housed at C. Ref.: Espelid (2000); Jørgensen (1999b).



Vaillant, Sébastien (1669–1722) – Born in Vigny, Seine-et-Oise (now Val-d'Oise), France, he studied medicine and surgery at the hospital in nearby Pontoise. After qualifying, he practised in Évreux, Normandie, from 1688, and briefly served as an army surgeon during the Battle of Fleurus (1690). He then moved to the Paris region, establishing himself as a surgeon in Neuilly and working at the Hôtel-Dieu. From 1691, his focus shifted heavily towards botany when he began attending courses at the *Jardin du Roi* under Joseph Pitton de Tournefort, walking into the city from Neuilly at dawn to catch the lectures. His dedication caught the attention of Guy-Crescent Fagon (1638–1718), chief physician to King Louis XIV, who appointed Vaillant as his secretary and, in 1700, secured his position as curator of the living collections at the *Jardin du Roi*. Vaillant was instrumental in constructing the garden's first heated greenhouses in France, which allowed him to cultivate and study exotic tender succulents. He gained widespread scientific renown for his groundbreaking 1717 lecture demonstrating plant sexuality. His ultimate botanical achievement was the *Botanicon Parisiense*, a pioneering, comprehensive flora of the Paris region based on over thirty years of field observations. Following his death, a brief preliminary *prodromus* of the work appeared in 1723, followed by the celebrated, definitive fully illustrated edition in 1727, which was edited and published by his close friend Herman Boerhaave (1668–1738). The magnificent plates were prepared by the prominent botanical artist Claude Aubriet (1662–1742), who meticulously rendered the numerous lichen images integrated into the work. Vaillant's herbarium is housed at P. Ref.: Fée (1866); Jouvet-Ast (1984); Rousseau (1970).



Vainio (Wainio, orig. Lang**), Edvard** August **(1853–1929)** – Born in Pieksämäki in the province of Savonia (Savolax), Finland, he originally bore the Swedish family name Lang, which he legally changed to the Finnish Vainio in 1876. Prior to 1919, he consistently spelt his name with the "foreign" W, a series of orthographic adjustments that closely mirrored his fierce Finnish nationalist convictions. He was the son of a bailiff, whilst his mother's Finnish family had a background firmly rooted in the scholarly and theological traditions of eastern Finland. Vainio befriended a neighbour's older son, Johan Petter Norrlin, who later became a distinguished Finnish plant geographer. Norrlin, a former pupil of William Nylander, introduced the young Vainio to cryptogams. During the summers of 1868 and 1869, Vainio dedicated himself to collecting specimens for inclusion in Norrlin's flora of the Tavastland region. He read natural history at the University of Helsinki from 1870 under Norrlin's guidance, through whom his early collection efforts were brought to the attention of the exiled Nylander in Paris, who via correspondence urged him to specialise in lichenology. Vainio earned his doctorate in 1880 with a Finnish-language dissertation examining the general characteristics of the genus *Cladonia*. In it, he argued that the podetium developed as an extension of the apothecial base. Although the thesis faced severe academic criticism for its integration of Darwinian ideas, it passed due to its exceptionally precise descriptions and observations, qualities that would define all his future work. Following his appointment as a lecturer in botany, Vainio successfully applied to the Alexander Fund. This financial support enabled him to travel across Europe during the 1880s, visiting major lichenological centres in Berlin, Genève, London, and Paris, where he finally met Nylander in person. Captivated by Carl Friedrich Philipp von Martius's Brazilian flora, Vainio utilised his grant to mount an expedition to Brazil in 1884–1885. Collecting heavily in the Minas Gerais province, he published a monumental revision of his material in 1890, using the text to advance highly original taxonomic systems. Notably, Vainio was one of the few contemporary scholars to accept Simon Schwendener's dual-organism theory. He took this theory to its logical systematic conclusion, treating lichens as a parallel group to the Ascomycetes and placing primary taxonomic weight on the characteristics of the fruiting body. Simultaneously, he distributed a celebrated exsiccatae series of these Brazilian specimens. Vainio later revised several exotic collections from around the globe, most notably producing a substantial lichen flora of the Philippines (1909–1923), based on specimens collected by Elmer Drew Merrill and colleagues at the Manila Bureau of Science. He also produced a monumental, multi-volume monograph on the notoriously difficult genus *Cladonia*, widely praised as a masterpiece of clarity and completeness. He remained equally dedicated to his homeland's flora, culminating in a comprehensive, multi-volume lichen flora of Finland (*Lichenographia Fennica*). The fourth volume, treating the *Lecideaceae*, was left unfinished at his death and posthumously completed by Bernt Lynge. Vainio was a sharp-eyed, exceptionally industrious lichenologist possessing an unparalleled global knowledge of the discipline. Tragically, he never secured a major permanent position at the University of Helsinki. After failing to win the professorship in 1890, largely due to a damning, dismissive

review by Nylander, whose relationship with Vainio had fractured over evolutionary theory, and desperate to secure a stable income for his growing family, Vainio made the compromise of accepting a post at the Board of Press Service. This was the official censorship body used by Tsar Nikolai II (1868–1918) to suppress nationalist sentiment in the Grand Duchy of Finland. When Finland achieved independence in 1918, Vainio was promptly dismissed from this post and viewed by his peers with deep political suspicion and contempt. He lived in extreme poverty until 1919–1922, when the newly established University of Turku (Åbo) rescued his research career by purchasing his vast collection of 22,000 specimens and personal library, whilst granting him an honorary scholarship to continue his work. This funding allowed him to advance his final twin projects on the Philippines and Finland, though neither was fully completed. While on his deathbed, he received word that he had been granted a formal state pension, a belated political pardon that arrived too late to alter a scientific legacy achieved through immense personal sacrifice. A deeply private, withdrawn man who found solace chiefly with his French wife and five children, he was nonetheless warm to visiting colleagues and spent his final years mentoring younger talents, most famously helping the self-taught Norwegian researcher Johan Havaas with critical identifications. He described many new taxa, including the genus *Pseudocyphellaria.* The genera *Vainiona* Werner, *Vainionia* Räsänen and *Vainionora* Kalb, alongside many species, are named after him. His primary herbarium is housed at TUR. Ref.: Alava (1986); Collander (1965); Linkola (1934); Magnusson (1930).



Van Haluwyn, Chantal (1947–) – Born in Maubeuge, Nord, France, she graduated with a degree in pharmacy from the University of Lille in 1970 and subsequently earned her State Doctorate in Pharmacy in 1973, focusing her thesis on the distribution of epiphytic lichens in northern France as a direct indicator of industrial air pollution. She spent her entire thirty-year academic career at the University of Lille's Laboratory of Botany and Cryptogamy, progressing to the rank of University Professor in September 1994. As a pioneer in the field of environmental biomonitoring, her field studies expanded across Haute-Normandie, Lorraine, and into Annaba, Algeria. In the mid-1980s, alongside her former doctoral student Michel Lerond, she co-developed the influential Van Haluwyn–Lerond method, which systematically mapped lichen community distribution to assess global ecological equilibrium and environmental quality. She initiated the creation of an environmental biomonitoring committee for AFNOR, the French standardisation body, and under her chairmanship, the standard 'Determination of the Biological Index of Epiphytic Lichens' was developed. An active leader within the *Association Française de Lichénologie*, she dedicated much of her career to bridging academic research with public outreach, notably co-authoring the multi-volume field guide series, *Guide des lichens de France*, alongside J. Asta, M. Bertrand, and J.-C. Boissière. In recognition of her lifelong contributions to French lichenology, she was awarded the prestigious Prix Gandoger by the *Société botanique de France* in 2016. Her herbarium is to be deposited at BAIL. Ref.: *Pers. comm.*; de Foucault (2018).

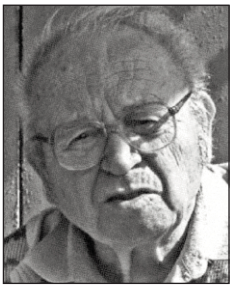


Vareschi, Volkmar (1906–1991) – Born in Innsbruck, Tyrol, Austro-Hungarian Empire (now Austria), he was the son of a postmaster. During his secondary education in his native city, he was expelled from his school for establishing a student club in support of Darwinism; as a result, he was forced to complete his schooling in Dornbirn, Vorarlberg, graduating in 1927. He inherited from his biology teacher a copy of the seminal work on ecological plant geography by the Danish botanist Eugenius Warming (1841–1924), a text that kindled an ecological passion he cherished throughout his life. Encouraged by the botanist Adolf Sperlich (1879–1963), Vareschi read botany at the University of Innsbruck, completing a doctoral thesis on the forest types of the upper Isar Valley to earn his degree in 1932. Until 1935, he held a research position at the Rübel Geobotanical Institute in Zürich, where he pioneered the use of epiphytic lichen communities as bioindicators of environmental health, culminating in his landmark 1936 paper. In 1936, he relocated to München, focusing his research on alpine ecology and glacier dynamics. In a brilliant methodological breakthrough during this period, Vareschi pioneered the pollen analysis of glacier ice, utilizing stratigraphical pollen layers to trace glacier movement and structural formation. During the Second World War, he was conscripted into an agricultural project tasked with developing high-altitude cereal crops by crossing European strains with Tibetan varieties. Following the war, when the project was disbanded, he faced severe employment difficulties due to his political associations with the Nazi regime. After a brief, unsettled period back at the University of Innsbruck, Vareschi emigrated to Venezuela in 1950. He was appointed Head of the Department of Plant Ecology at the Central University of Venezuela (UCV) in Caracas, attaining a full professorship in 1978. In South America, he developed an early interest in the urban lichens of Caracas and their correlation with atmospheric pollution. He later expanded his fieldwork to the remote tepuis and high-altitude páramos, conducting extensive cryptogamic surveys and later utilizing lichenometry to date glacial retreats in the Andes, all of which culminated in his publication of Venezuela's first-ever lichen checklist in 1973. His South American collections are at VEN**,** his earlier European material at M. Ref.: Hertel & al. (2017); Mägdefrau (1992); Medina & al. (2013); Vareschi (1981).



Verseghy, Klára Anna **(1930–2020)** – Born in Budapest, Hungary, she studied natural sciences at the Eötvös Loránd University from 1949 to 1953. She was a student of the renowned Hungarian lichenologist Ödön Szatala, whom she succeeded as curator of the Lichen Collection at the Hungarian Natural History Museum in Budapest, a post she held from 1958 until 1985. In 1958, she defended her doctoral thesis on the genus *Ochrolechia* at the University of Debrecen. She became a leading international authority on this challenging genus, publishing numerous papers on its taxonomy, and also revised an important historical lichen collection from South Africa gathered by the Norwegian botanist Ove Arbo Høeg. When Verseghy took charge of the herbarium following Szatala's death in 1958, she undertook a

massive reorganization of the repository. She systematically separated the type specimens, publishing a comprehensive type catalogue in 1964 that clarified the status of over a thousand specimens. Furthermore, she successfully integrated two immense personal herbaria received by the museum, those of Szatala and Ferenc Fóriss, arranging them into Zahlbruckner's taxonomic system. Verseghy continued the publication of Vilmos Gyelnik's exsiccatae series, *Lichenotheca Parva*, and also distributed an independent series of her own titled *Lichenes exsiccati*. The genus *Verseghya* S.Y. Kondr. *et al.* is named after her. Her herbarium is housed at BP. Ref.: Farkas & al. (2021); Verseghy (1963).



Vězda, Antonín (1920–2008) – Born in Brno, Czechoslovakia (now the Czech Republic), he had just completed his secondary education when the German occupation of Moravia (Mähren) in 1939 forced the closure of Czech universities, making further academic studies impossible until 1945. Following the war, he began working as an assistant to the forest biologist Alois Zlatník (1902–1979) at the Faculty of Forestry of the University of Agriculture in Brno, where he read natural history and developed a profound interest in lichens. Through the generosity of the widow of Vladimír Kuták, Vězda was granted access to Kuták's extensive personal library of lichenological literature. During this formative period, he was also championed by the Austrian botanist Josef Poelt, initiating a lifelong friendship and scientific collaboration that proved pivotal to the development of lichenology in Central Europe. In 1951, Vězda completed his forestry studies, receiving the professional title of Forest Engineer. This practical qualification proved providential when, in 1958, he was stripped of all his academic positions by the communist authorities for political reasons, forcing him to earn his living as a manual forest worker. Despite these hardships, he continued his private research. In 1967, he successfully defended his doctoral dissertation on the lichen family *Gyalectaceae* at Charles University in Praha, instantly establishing himself as a foremost global authority on the group. In 1968, Vězda was finally appointed as a research scientist at the Botanical Institute of the Czechoslovak Academy of Sciences in Průhonice (Brno branch), allowing him to fully commit to publishing extensive monographs, floristic treatments, and pioneering papers on foliicolous lichens. Together with Poelt, he co-authored two major taxonomic supplements to Poelt's 1969 flora: *Bestimmungsschlüssel europäischer Flechten* in 1977 and 1981. He also edited and distributed the widely acclaimed monumental exsiccatae series *Lichenes Selecti Exsiccati* and *Lichenes Rariores Exsiccati*. Vězda described numerous new taxa, including several dozen genera, and was awarded the prestigious Acharius Medal by the IAL in 1992. The genera *Vezdaea* Tscherm.-Woess & Poelt and *Vezdamyces* Xavier-Leite *et al.*, alongside many species, are named after him. His monumental personal herbarium is housed at PRA, with duplicates at PRC. Ref.: Farkas & al. (2010); Poelt (1995); Wirth (2009).

Vieillard, Eugène (1819–1896) – Born in Caen, Normandie, France, he studied medicine and botany before serving as a naval surgeon with the French merchant navy. In this capacity, he took part in several maritime expeditions to the Pacific, remaining in Tahiti from 1855 to 1857, where he collected extensively alongside the gardener-botanist Jean



Armand Isidore Pancher (1814–1877), and visiting New Zealand in 1861. Most significantly, he undertook prolonged botanical investigations in New Caledonia between 1858 and 1867, amassing vast collections of the colony's unique and highly endemic flora. In Nouméa, he established an experimental garden and collaborated closely with his colleague, the naturalist and fellow naval surgeon Émile Deplanche (1824–1874), with whom he co-authored the *Essais sur la Nouvelle-Calédonie* (1863). While Vieillard prepared several major works on phanerogams, his close association with the prominent norman cryptogamist René Lenormand (1796–1871) inspired him to turn his attention to cryptogams as well. He collected numerous New Caledonian lichens, which were subsequently studied and described by European authorities, most notably William Nylander. These historical collections remain fundamental to the understanding of the lichen flora of New Caledonia. Upon returning to France, Vieillard was appointed Director of the Botanic Garden in Caen (*Jardin des Plantes de Caen*), a position he held from 1871 until his retirement in 1895. His collections are in CN (herb. Lenormand), P and PC, with many lichens also in H (through herb. Nyl.). Ref.: McKee & McKee (1981).

Villars (as **Villar** until 1785)**, Dominique (1745–1814)** – Born in Le Noyer-en-Champsaur in the Hautes-Alpes, France, he worked as a shepherd in his youth before his father Pierre (1719–1760), a clerk to the local seigneurial court, provided him with private lessons and encouraged his academic potential despite severe financial hardship. These economic struggles were resolved when his widowed mother, Marguerite (née Dastrevigne) (1722–1790), arranged an early marriage in 1763 to a wealthy orphaned girl from a neighbouring village. While shepherding, Villars developed a keen interest in botany, learning to identify local plants with the assistance of a regional herbalist. The Abbé Dominique Chaix (1730–1799) later introduced him to the sexual system of Carl Linnaeus, and in 1769 Villars met the established local botanists Clappier and Pierre Liottard, frequently joining them on mountain botanical excursions. Following his marriage, Villars read medicine in Grenoble from 1771 to 1774, receiving his medical doctorate in 1778, eventually being appointed Director and Professor of Botany at the Botanic Garden of Grenoble in 1782. Shortly thereafter, in 1782, he was made Chief Physician at the Military Hospital of Grenoble, in which capacity he successfully treated, in 1788, the young French soldier Jean-Baptiste Bernadotte (1763–1844), a medical success that became famous when Bernadotte later ascended the Swedish throne as King Carl XIV Johan. Following political and administrative reorganisations, Villars moved to Alsace in 1803, serving as Professor of Medicine and Botany at the University of Strasbourg until his death. His monumental publication, *Histoire des plantes du Dauphiné* (1786–1789), is a remarkably detailed regional flora including nearly 3,000 species, featuring pioneering descriptions of several alpine lichens. His historic herbarium, manuscripts, and personal library are preserved at GRM. Ref.: Dayrat (2003); Rochas (1860).

Vitikainen, Orvo Johannes **(1940–)** – Born in Taipalsaari, Karelia (Karelen), Finland, he was the son of a farmer and developed an early passion for botany at his local school



during field excursions led by an inspiring young teacher who encouraged the identification and naming of cryptogams. Following his secondary education, he began reading biology at the University of Helsinki in 1961, where, while seeking a research topic, he was introduced to the newly appointed docent and lichenologist Teuvo Ahti. Under Ahti's guidance, Vitikainen completed his Candidate of Philosophy degree (equivalent to an M.Sc.) in 1966 with a thesis focusing on the epiphytic lichen communities growing on *Populus tremula*, before advancing his academic standing in 1971 by earning his Licentiate of Philosophy degree with a dissertation on the *Lecanora subfusca* group in Finland. Vitikainen subsequently turned his taxonomic attention to the *Peltigeraceae*, and in 1994 he successfully defended his doctoral dissertation, a monumental global monograph of the genus *Peltigera* that significantly clarified the complex and historically misunderstood taxonomy of this widespread group. Alongside his global monographs, he remained deeply committed to Fennoscandian botany, publishing valuable insights into the *Lecanora subfusca* complex (partially in collaboration with Irwin M. Brodo), co-authoring the *Checklist of the lichens and lichenicolous fungi of Finland*, and describing numerous new taxa. He spent his entire professional career, from 1966 until his retirement, at the Botanical Museum of the University of Helsinki, advancing through various curatorial roles to become Head Curator of the cryptogamic collections. Possessing a deep interest in the history of botany, Vitikainen also published extensively on the museum's invaluable historical assets, shedding light on the lives and collections of pioneering figures such as E. Acharius, W. Nylander, and E. A. Vainio. He has described numerous new taxa. His herbarium is housed at H. Ref.: *Pers. comm.*; Myllys & al. (2020).

Vobis, Gernot (1946–) – Born in the Odenwald region of Hessen, Germany, he was the son of a pharmacist and grew up deeply immersed in botanical surroundings. Upon enrolling at the *Philipps-Universität Marburg* in 1968, he read biology and attended advanced courses in phycology and mycology led by the prominent lichenologist Aino Henssen; a scientific field expedition to Lapland in 1970 subsequently sparked his fascination with lichens. This pivotal experience determined his future research direction, culminating in his doctoral dissertation on the anatomy, ultrastructure, and ontogenetic development of lichen pycnidia and conidia, which he successfully defended in July 1979. Vobis's connection with South America began early in his career, having already participated in a major research expedition to Argentina with Henssen in 1973. Following his PhD, he worked as a research assistant in Germany on a government taxonomic project focused on conidial development in *Actinomycetes,* a group of filamentous bacteria that became his second major field of expertise. In 1986, Vobis was invited to deliver a specialised lichenology course at the *Universidad Nacional de La Plata* near Buenos Aires, a successful venture that led to an invitation to replicate the course at the *Universidad Nacional del Comahue* in San Carlos de Bariloche. The university subsequently offered him a permanent academic position, and he eventually rose to become a Full Professor. As an influential educator in Patagonia, Vobis established a dedicated cryptogamic research group, inspiring students to study both the regional lichen flora and plant-beneficial acti-

nobacteria while serving as a key contributor to the regional project dedicated to compiling the first comprehensive cryptogamic flora of Patagonia. His herbarium is housed at CRUB. Ref.: *Pers. comm.;* Kärnefelt & al. (2012).



Vouaux, Léon (1870–1914) – Born in Baccarat, Meurthe-et-Moselle, France, he studied theology at the *Petit Séminaire de Pont-à-Mousson* from 1887 to 1892 before completing his clerical and linguistic training in Nancy, where he was appointed Professor of Literature at the *Collège Ecclésiastique de la Malgrange* in 1892 and formally ordained as a Roman Catholic priest the following year. Alongside his heavy educational duties as an *agrégé* of the university, he pursued rigorous scholarly research in both Christian antiquity and the natural sciences, eventually working in close collaboration with his prominent regional colleague the Abbé Jean-Nicolas Harmand to become a pioneer in the study of fungi that grow exclusively on lichens. He compiled his landmark findings into a monumental monograph series, *Synopsis des champignons parasites de lichens*, which was published in seven exhaustive parts between 1912 and 1914, though his brilliant scientific career was tragically cut short at the outbreak of the First World War. In August 1914, Vouaux temporarily moved to the border town of Jarny to substitute for his younger brother, the local parish priest who had been mobilised into the French army; following the German occupation of the town, Vouaux was falsely accused of firing upon invading troops from the church tower, taken prisoner, and summarily executed by a German firing squad alongside other civilian hostages. In recognition of his intellectual legacy, his name was posthumously inscribed in the *Panthéon* in Paris among the fallen writers of France, and the genera *Vouauxiella* Petr. & Syd. and *Vouauxiomyces* Dyko & D. Hawksw., alongside many fungal species, are named after him. While a portion of his early co-studied material held by other collectors was lost during wartime bombardments, his herbarium is now housed at MARSSJ. Ref.: Hariot (1915); Vuillemin (1915).



Waghorne, Arthur Charles **(1851–1900)** – Born in London, England, UK, little is known of his early life until he entered St Augustine's College, Canterbury, an institution dedicated to training missionary clergy for the Society for the Propagation of the Gospel. Ordained as a deacon in 1875, he was promptly dispatched to the colony of Newfoundland, where he served for seventeen years principally in the parish of New Harbour in Trinity Bay, whilst also ministering to remote districts encompassing Fortune Bay, Notre Dame Bay, the Bay of Islands, and the French territory of Saint-Pierre and Miquelon. Despite lacking formal scientific training, Waghorne developed a profound passion for the subarctic flora of his new home, and as a self-taught botanist, he undertook perilous journeys across Newfoundland and the inhospitable coast of Labrador to collect thousands of plant and cryptogamic specimens. His ultimate ambition was to compile a definitive botanical registry of the region, which led to the publication of his pioneering *Flora of Newfoundland, Labrador, and St.*

Pierre and Miquelon in a series of papers starting in 1893. Waghorne's primary contribution to science was as a remarkably prolific field collector who, to identify his cryptogams, sent extensive material to leading international authorities; his principal lichenological collaborators included Ferdinand Arnold in München, the Swedish lichenologist Johan Hulting, and the American John Eckfeldt. Reflecting the challenges of early Arctic taxonomy, one species described from his collections, *Pannaria waghornei*, was later discovered to be identical to *Pannaria arctophila*, which Thore Fries had already named based on material collected by earlier Moravian missionaries. In late 1899, shattered by twenty-five years of physical deprivation in the harsh northern climate, Waghorne travelled to Jamaica in an attempt to recover his failing health, but he died shortly after his arrival. His collections are at LD, M and US. Ref.: Brassard (1980).



Wagner, Johann **Jakob (1641–1695)** – Born in Tägerwilen in the canton of Thurgau, Switzerland, he was the son of Johann Jakob, the local parish pastor, and the grandson of the prominent physician Jacob Ziegler (1591-1670), his mother Susanna (née Ziegler), was the offspring from one of the oldest, wealthiest, and most politically prominent families in Zürich. He received his early education in Zürich before pursuing extensive medical and scientific studies across several German universities, eventually obtaining his medical doctorate in 1667 from the historic Protestant University of Orange in Vaucluse, France, with a dissertation examining the pathology of intermittent fevers. Following his graduation, Wagner established a successful practice as a physician in Zürich, where he was also appointed Director of the Zürich City Library (*Stadtbibliothek*) in 1677. Possessing a profound passion for the natural sciences and geography, Wagner dedicated much of his leisure time to surveying the Swiss landscape, culminating in the 1680 publication of his landmark *Historia naturalis Helvetiae curiosa*, which contains an unprecedented, detailed inventory of the country's natural features and includes the earliest known written record of lichen species from Switzerland. Wagner is also celebrated for compiling some of the earliest systematic guidebooks to the region, publishing his Latin topographical index in 1681, followed by an expanded German version, *Index Helvetiae*, in 1684, a body of research that ultimately led to his highly influential and historically important regional guide, *Mercurius Helveticus*, published in 1688. No herbarium appears to have existed. Ref.: Schwarzenberger (1952).



Wahlenberg, Georg (Göran) (1780–1851) – Born at the Skarphyttan ironworks (*bruk*) in Kroppa, Värmland, Sweden, where his father served as director (*brukspatron)*, he lost his mother when he was only eight years old; however, his foster-mother, the nanny Lisa, took excellent care of the children, nurturing a supportive home environment where Göran was known to constantly sing folk songs and demonstrate a childhood fascination with the natural world. Following private tuition and a brief period of schooling in Karlstad, he was exceptionally matriculated at the University of Uppsala in 1792 at the age of twelve, initially

reading natural history before focusing his attention on medicine and earning his medical doctorate in 1806. Drawn to the vibrant botanical tradition remaining at Uppsala, where he was mentored by Samuel Liljeblad (1761–1815), Wahlenberg undertook extensive, often perilous, scientific expeditions through northern Sweden and Norway between 1800 and 1810, field studies that culminated in his groundbreaking *Flora Lapponica* (1812), which included the first sophisticated phytogeographical map of northern Scandinavia and effectively laid the foundations for the discipline of plant geography in the Arctic region. He subsequently extended his phytogeographical research into Central Europe between 1811 and 1813, surveying the Carpathians and the Alps, and in 1814 he was appointed *Botanices demonstrator* at Uppsala, the same year he published his celebrated *Flora Carpatorum Principalium* (1814). In 1829, he succeeded Carl Peter Thunberg (1743–1828) as Professor of Medicine and Botany at the university, a historic, undivided chair he held until his death, though his primary significance for lichenology lies in his extraordinary skill as a field collector and his meticulous observations on lichen ecology and zonation. He contributed vast amounts of detailed geographic and taxonomic data to Erik Acharius's seminal *Methodus lichenum* (1803), and described several new lichen species himself. The genus *Wahlenbergiella* Gueidan & Thüs is named after him. His herbarium is housed at UPS. Ref.: Palmblad (1852); Wikström (1853).

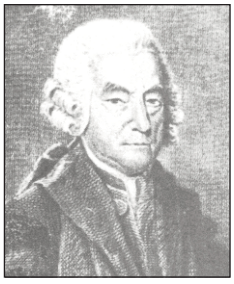


Wallroth, Karl Friedrich **Wilhelm (1792–1857)** – Born in Breitenstein, Countship of Stolberg-Roßla (now Sachsen, Germany), he was the son of a vicar, and though sent to a strict monastery school where classical languages and religious instruction predominated, he preferred the study of natural history and was actively encouraged by the headmaster, Abbot Wilhelm, to undertake botanical excursions in the surrounding countryside. The polymath Kurt Sprengel, during a joint excursion, was so profoundly impressed by the young Wallroth that he suggested he read medicine and botany at the University of Halle, which he did in 1810 before migrating to the University of Göttingen to study under Heinrich Adolph Schrader, ultimately obtaining his medical doctorate in 1816. Wallroth initially worked as a general practitioner in Heringen, but his appointment as District Physician (*Kreisphysikus*) of Nordhausen, Thüringen, in 1822 provided a stable administrative role that allowed him to intensively cultivate his botanical interests, particularly cryptogams. His field research and taxonomic revisions culminated in his monumental publication, *Flora cryptogamica germanica* (1831–1833); heavily influenced by the theoretical frameworks of Georg Friedrich Wilhelm Meyer, Wallroth focused extensively on the internal biology, anatomy, and structural morphology of lichens. Unfortunately, this work was criticised even in his own time (by von Martius, for example) as his presentation was clouded by an enthusiastic, romantic view of the natural world and dense with unfamiliar, theoretically derived terminology of Greek origin; nevertheless, he made enduring contributions to lichenological terminology, famously introducing the fundamental structural concepts of heteromerous and homoiomerous thalli to describe the distribution of the algal layer within the fungal matrix. He described numerous new taxa, including the genus *Thrombium*, and issued a celebrated exsiccatae series of German

lichens, a legacy honoured by the fungal genus *Wallrothiella* Sacc. His collection of vascular plants is at PR, while significant lichen specimens and duplicates are at STR and GOET. Ref.: Irmisch (1857); Kärnefelt & al. (2012); Nees von Esenbeck (1857).



Watson, Walter (1872–1960) – Born in Kirkby Overblow near Sicklinghall, Wetherby, Yorkshire, England, UK, he was the son of a schoolmaster, whilst his mother came from a traditional working-class family of artisans. Not long after his birth, his family moved to Greenfield near Oldham, where he grew up helping in his father's business whilst attending night school in the evenings. He subsequently studied at the University of London, where he took his B.A. degree, before entering a career in education that saw him teach biology for a short time at Larne and later at Sexey's School in Bruton. He then moved to Somerset to join the staff at Taunton School as biology master, serving with such distinction that in 1925 he was appointed Head of the Science Department, a position he held until his retirement in 1939. Botany was Watson's principal scientific interest; alongside his demanding teaching schedule, he undertook intensive, pioneering investigations into the ecology and distribution of bryophytes and lichens on calcareous soils, which earned him a Doctor of Science (D.Sc.) degree from the University of London in 1918. He later expanded his ecological surveys to include arctic-alpine habitats, lowland beechwoods, and freshwater communities, publishing numerous floristic treatments and keys. Watson played a vital role in keeping the discipline of lichenology alive in the British Isles during the early to mid-20th century, a period marked by a significant decline in institutional backing, and in 1929 he proposed an innovative, independent system of lichen classification based heavily on fungal characteristics. His enduring contribution to British botany was his *Census Catalogue of British Lichens*, published by the British Mycological Society in 1953, which served as the definitive national standard registry for decades. He described some new taxa, with his legacy honoured by the fungal genus *Watsoniomyces* D. Hawksw. *et al.* His herbarium is housed at BM (ex K). Ref.: Ainsworth (1960).



Watson, William (1715–1787) – Born in London, England, UK, he was trained as an apothecary and from his early years was passionately interested in botany, frequently exploring the countryside around London and publishing numerous botanical papers in the *Philosophical Transactions of the Royal Society,* an institution to which he was elected a Fellow in 1741. Watson played a monumental role in introducing continental botanical advancements to Britain, notably publishing a highly influential review and summary of Carl Linnaeus's landmark *Species Plantarum* in 1754. By championing the Linnaean system of binomial nomenclature and classification, including its treatment of cryptogams, Watson profoundly shaped the work of the next generation of British botanists, most notably William Hudson and William Withering. In recognition of his outstanding contributions to natural history, Watson was awarded an MD *in absentia* by the University of Halle on 6 September 1757

(receiving a similar diploma from Wittenberg around the same time), which subsequently enabled him to be formally admitted to the Royal College of Physicians in 1759 and begin practising as a doctor. From 1762, he served as a physician at the Foundling Hospital in London, whilst simultaneously turning his scientific attention to natural philosophy, conducting pioneering research into electricity, and becoming a close associate and advocate of Benjamin Franklin (1706–1790). Watson was knighted for his scientific and medical achievements in 1786. While his herbarium has not survived intact, some specimens are preserved within the Sloane collection at BM. Ref.: Feltham (1976); Pulteney (1790).



Wawra (Ritter von Fernsee), Heinrich (1831–1887) – Born in Brünn in the Austrian Empire (now Brno, Czech Republic), he was the son of a miller, whilst his mother's family was rooted in the trade and manual craftsmanship networks of Brünn. Raised under strict parental guidance, he developed a passionate interest in botany during his youth while attending the local *gymnasium*. He commenced his medical studies at the University of Vienna in 1849, while simultaneously attending botanical lectures delivered by the eminent scholars Eduard Fenzl (1808–1889) and Franz Unger **(**1800**–**1870**)**. After earning his medical doctorate in 1855, he was commissioned as a ship surgeon in the Imperial Austrian Navy. Wawra brilliantly utilised his naval postings to assemble extensive botanical and cryptogamic collections from across the globe. Following early cruises in the western Mediterranean, he served as the principal naturalist on the global cruise of the Austrian corvette *Carolina* (1857–1858), collecting extensively on the Atlantic islands (including Ascension), South Africa, and the coast of Angola. He later took part in a major naval mission to the Pacific (1868–1871), amassing invaluable scientific specimens from the Hawaiian Islands and Southeast Asia. Wawra's remarkable reputation as an explorer led to his selection as the personal physician and botanist to the Princes of Saxe-Coburg and Gotha. He accompanied them on an extensive world tour between 1872 and 1873, and subsequently returned with them to Brazil during a dedicated botanical expedition in 1879. These South American collections formed the basis of his monumental publication *Itinera Principum S. Coburgi* (1883). Shattered by the physical tolls of tropical exploration, he took early retirement from the navy on health grounds. Ennobled by the Emperor as Ritter von Fernsee for his scientific achievements, Wawra was universally regarded by his contemporaries as a modest, deeply generous, and amiable scholar. He is celebrated as one of the most prolific and important collectors of exotic lichens of the 19th century; his cryptogamic material was exhaustively studied and described by A. von Krempelhuber. His collections are in M and W. Ref.: Knapp (1887); Wawra (1881); Wunschmann (1896).

Weber, Georg **Heinrich (1752–1828)** – Born in Göttingen, Electorate of Brunswick-Lüneburg (now Germany), he was the son of the philosopher Andreas Weber. He read medicine at the University of Göttingen, obtaining his medical doctorate in 1774. He subsequently moved to the University of Kiel, where he was appointed Associate Professor of Medicine in 1777, before advancing to Full Professor of Medicine and Botany in 1780. Alongside implementing significant local hospital improvements and founding a new site



for the Kiel Botanic Garden, Weber pursued rigorous taxonomic work on cryptogams. In 1778, he published his landmark volume, *Spicilegium florae Gottingensis*, which focused extensively on the cryptogamic plants of the lower Harz Mountains. In this work, he treated lichens as a distinct group and described several species new to science. In his later decades, Weber remained a staunch traditionalist; he was highly critical of Erik Acharius's revolutionary 1803 lichen taxonomy, and actively influenced his pupils, including his son, the entomologist and botanist Friedrich Weber (1781–1823), to retain a more conservative arrangement of cryptogams. His herbarium is housed at KIEL. Ref.: Wagenitz (1988).



Weber, William ('Bill') Alfred **(1918–2020)** – Born in New York City, USA, into a family of German immigrants; his mother, Emilie Agnes (née Rilke) was related to Aino Henssen whose paternal grandmother was born Rilke, a famous, culturally influential family. William was fascinated by the natural world from early childhood and was introduced to mosses while attending high school. He studied natural history at Iowa State University, graduating with a Bachelor of Science (B.S.) degree in 1940. He then moved to Washington State University, where he completed his Master of Science (M.S.) degree in 1942 with a thesis on the historic collections of Wilhelm Nikolaus Suksdorf (1850–1932). Remaining at Washington State for his doctoral research under the taxonomist Marion Ownbey (1910–1974), he successfully defended his Ph.D. dissertation in 1946. In 1946, Weber joined the faculty of the University of Colorado, Boulder, where he spent his entire remaining academic career. From 1962, he served as a Full Professor and Head Curator of Botany at the University of Colorado Museum. In this role, he single-handedly founded and expanded a massive regional repository that now officially bears his name: the William A. Weber Herbarium (COLO). Weber initially specialised in vascular plants, authoring the standard field guides to the Rocky Mountain flora, but in 1951, under the mentorship of John W. Thomson, he initiated a productive research track in lichenology. He expanded his cryptogamic expertise during a research fellowship in Scandinavia, and later served as a guest professor at the Australian National University (1967–1968). This Southern Hemisphere work culminated in his landmark publication, co-authored with Clifford Wetmore, *Catalogue of Australian Lichens* (1972), alongside several crucial floristic discoveries in Tasmania and New Guinea. An authority on global plant geography, bryophytes, and systematic lichenology, Weber amassed field collections from all seven continents. He also edited and distributed the critically important exsiccatae series *Lichenes Exsiccati COLO*, which became a major asset for global taxonomy exchange. Weber described numerous new plant and cryptogamic taxa, and over thirty species have been named in his honour. He received the Acharius Medal from the IAL in 2018. He passed away in Longmont, Colorado, at the age of 101. The genus *Wawea* Henssen & Kantvilas was named after him. His herbarium is housed at COLO. Ref.: *Pers. comm.*; Menz (2020).



Weddell, Hugh Algernon **(1819–1877)** – Born in Painswick near Gloucester, England, UK, he moved with his parents to France as a child and received his education there. After graduating from the prestigious *Lycée Henri IV* in Paris, he studied medicine and earned his medical doctorate in 1842. Botany was Weddell's true scientific passion. He studied under the supervision of Adrien-Henri de Jussieu (1797–1853) and contributed extensive field data to a new flora of the Paris region organised by E. Saint-Charles Cosson (1819–1898) and J. N. E. Germain de Saint-Pierre (1814–1882). Weddell's primary botanical reputation rests on his extensive exploration of South America. In 1843, he was appointed as a naturalist to Francis de Laporte de Castelnau's major state expedition, spent over five years exploring Paraguay, Bolivia, and Peru (where he married), and conducted seminal research on the malaria-treating genus *Cinchona* (quinine). During these travels, he also amassed significant South American lichen collections, which were later studied and integrated into the publications of W. Nylander. Upon retiring from demanding overseas expeditions, Weddell settled in Poitiers and turned his sharp analytical focus to regional and coastal cryptogams. He conducted meticulous field studies on the lichens of the Poitou region, Agde, and the Île d'Yeu, culminating in a landmark 1875 publication on littoral lichens and their ecological zonation. His herbarium is housed at PC. Ref.: Abbayes (1954); Fournier (1880).



Wedin, Mats (1963–) – Born in Frösö parish, Jämtland, Sweden, he was brought up in Hudiksvall, Hälsingland, where his parents were high school teachers who encouraged his interest in nature. He joined the youth nature organisation *Fältbiologerna* (The Swedish Association for Nature and Youth) in his youth, which is where his lifelong fascination with lichens started. While completing his teacher training degree in chemistry, biology and physics at Uppsala University, he was encouraged by Roland Moberg to undertake a study on a group of *Cladonia* on Öland. He subsequently accompanied Leif Tibell on extensive scientific field expeditions to southernmost South America and New Zealand; the vast collection of cryptogamic specimens gathered during this journey formed the empirical basis for his doctoral thesis on the mazaediate lichen genus *Sphaerophorus*, which he successfully defended in 1994. Following his doctorate, Wedin pursued international research tracks, briefly pursuing a postdoc in Graz (1995) and obtaining a post as senior scientific officer/researcher at the Natural History Museum in London (BM) where he worked from 1996 to 1999. In 2000, he was appointed Lecturer at Umeå University. In 2002, his research excellence was recognised with a prestigious Senior Researcher position from the Swedish Research Council. He maintained his academic affiliation with Umeå until 2006, at which point he transferred his laboratory and research program to the Swedish Museum of Natural History (*Naturhistoriska riksmuseet*) in Stockholm, as Senior Curator. In 2012 he was promoted to Professor of Cryptogamic Botany. His career track culminated in 2022 with his appointment as Head of the Department of Botany at the Swedish Museum of Natural History. Wedin's principal scientific focus lies in the field of molecular phyloge-

netics, evolutionary biology, and the systematics of Ascomycetes, particularly clarifying the evolutionary transitions of the lichenised lifestyle and the study of different aspects of fungal symbiosis and lichen biology. Working closely with international colleagues and students, he has utilised DNA sequence data to restructure high-level fungal classifications, in particular regarding several lichenised and lichenicolous groups. He has contributed to describing numerous new taxa, including one class, three orders, five families and 16 genera, and many species. His herbarium is housed at UPS and S. Ref.: *Pers. comm.*



Wei, Jing-Chun (1931–) – Born in Xianyang, Shaanxi Province, China, he was the son of farmers. After completing his early education locally, he studied at the Northwest Agricultural College in Xianyang, graduating with a Bachelor of Science (B.Sc.) degree in agriculture in 1955, with a primary research focus on the fungal diseases of agricultural plants. From 1956 to 1958, he worked as an assistant researcher specializing in rust fungi at the Institute of Microbiology of the Chinese Academy of Sciences (CAS). Recognising a critical institutional deficit in cryptogamic botany, his supervisor, Professor Fang Chong-Xian (1893–1973), identified the need for a dedicated lichen specialist and arranged for Wei to pursue postgraduate studies abroad. Wei was sent to Leningrad (now St Petersburg) from 1958 to 1962 to study lichenology under the supervision of Vsevolod Savicz. During this period, he conducted extensive field research on the lichen flora of the Karelian region and successfully defended a breakthrough doctoral thesis on the family *Umbilicariaceae* of China. Upon returning to Beijing, Wei rose to become a Full Professor at the Institute of Microbiology, CAS. He was appointed Chief Editor and Director of the *Flora Cryptogamarum Sinicarum*, publishing numerous papers describing several dozen new taxa, and issuing a widely distributed exsiccatae series of Chinese lichens. Celebrated as the founding father of modern Chinese lichenology, he was the first Chinese botanist to specialize entirely in the discipline and mentored generations of students who built China's modern lichenological infrastructure. His herbarium (c. 100,000 specimens) is at HMAS. Ref.: *Pers. comm.*

Weis(s) (orig. **Weisz), Friedrich** Wilhelm **(1744–1826)** – Born in Göttingen, Electorate of Brunswick-Lüneburg (now Niedersachsen, Germany), he was the son of a surgeon. Following his early education, he read medicine at the University of Göttingen, where he obtained his medical doctorate in 1770. His innovative doctoral dissertation, *Plantae cryptogamicae florae Gottingensis*, focused entirely on the lower plants of the Göttingen region; it stands as one of the earliest highly specialised regional studies of cryptogams and features detailed descriptions of numerous local lichen species. Weis subsequently worked as a lecturer (*Privatdozent*) at the Göttingen medical faculty until 1784. He then relocated to Hesse after being appointed court physician to the Landgrave of Hesse-Rotenburg, receiving the prestigious title of *Fürstlicher Rotenburgscher Hofrat* (Princely Court Councillor). Alongside his medical and botanical achievements, Weis was also an accomplished composer who published several volumes of *Lieder*. His herbarium was sold by his son and appears to have been lost. Ref.: Grummann (1962, 1974).



Werner, Roger-Guy (1901–1977) – Born in Mulhouse, Alsace (now in Haut-Rhin, France), he later held French citizenship. He graduated with a Licentiate in Science from the University of Strasbourg in 1922, where he studied cryptogamic botany under the supervision of Charles Killian (1887–1957). In 1925, he joined the staff of the *Station centrale de phytopathologie* in Paris. He completed his doctoral degree in 1927 with a pioneering dissertation that investigated the isolation, culture, and biology of the fungal partners (mycobionts) within lichen thalli. Following a brief period of research at the University of Strasbourg, Werner relocated to North Africa in 1928. He was appointed Professor at the *Institut Scientifique Chérifien* in Rabat, Morocco, where he remained until 1948. During these two decades, he conducted extensive field exploration across North Africa, the Levant, and the Mediterranean, publishing numerous papers on the phytogeography and taxonomy of Moroccan, Algerian, and Syrian lichens. From 1948 to 1963, he was affiliated with the University of Nancy, where he was awarded a personal chair in botany. Werner described numerous new taxa, including the distinctive cyanobacterial lichen genus *Tingiopsidium*, as well as several lichenicolous fungi. The genus *Wernera* Zschacke ex Werner was named after him. His herbarium was bequeathed to his colleague Xavier Llimona and is now housed at BC**.** Ref.: Llimona (1979); Pierre & Werner (1977).



Westring, Johan Peter (1753–1833) – Born in Linköping, Östergötland, Sweden, he was the son of a shoemaker, whilst his mother came from a traditional working-class within Sweden's early urban trade class. Recognised as an exceptionally studious pupil, he secured a vital scholarship that enabled him to read medicine and natural history at Uppsala University. In 1775, he successfully defended a medical thesis on the marsh rosemary (*Ledum palustre*) under the direct supervision of Carl Linnaeus, subsequently earning his full medical degree in 1779. Westring established a highly successful practice as a physician in Norrköping, eventually rising to become First Physician to the King of Sweden in 1809, and was formally ennobled in 1822. Throughout his medical career, Westring maintained a deep scientific interest in economic botany and cryptogams. He formed close lifelong friendships with Erik Acharius and Olof Swartz. During the 1790s, he accompanied Acharius on numerous field excursions, collecting crucial data while Acharius compiled his landmark volume *Lichenographiae Suecicae Prodromus* (1798). In 1791, Westring initiated a pioneering series of papers on the economic application of lichen-based dyes. This exhaustive practical and chemical research culminated in his celebrated, beautifully hand-coloured magnum opus, *Svenska lafvarnas färghistoria* (1805–1809), which was uniquely illustrated by Acharius himself. Following Acharius's death, Westring was chosen to deliver the official memorial eulogy before the Royal Swedish Academy of Sciences. Although Westring largely deferred complex systematic taxonomy to Acharius, he did validly describe a few taxa himself. His lichen collections are partly in the Acharius herbarium (UPS) and partly in Swartz's (S). Ref.: Pontin (1833); Sandeman-Olsen (1997); Tehler *pers. comm.*



Wetmore, Clifford Major **(1934–2020)** – Born in Akron, Ohio, USA, he completed two years of undergraduate study at Kent State University, Ohio, where he developed a keen interest in biology. He subsequently transferred to Michigan State University, graduating with a Bachelor of Science (B.S.) degree in Park Management and Municipal Forestry in 1956. He initially conducted ecological fieldwork in Isle Royale National Park, working as a seasonal fire lookout. However, his scientific trajectory shifted towards cryptogamic botany after attending an inspiring lichenology course delivered by Henry Imshaug. Under Imshaug's guidance, Wetmore embarked on a rigorous bibliographical project that culminated in his landmark *Catalogue of the Lichens of Tasmania* (1963). Wetmore earned his Master of Science (M.S.) degree from Michigan State University in 1960 with a revisionary study of the genus *Nephroma* in North and Middle America. He then completed his Ph.D. at the same institution, successfully defending a doctoral dissertation on the lichen flora of the Black Hills of South Dakota and Wyoming. From 1964 to 1970, he taught and conducted research at Wartburg College in Waverly, Iowa. In 1970, he was appointed Professor of Botany at the University of Minnesota, St Paul, where he served with distinction until his retirement. Wetmore was an exceptionally prolific field collector with an unparalleled macro-level knowledge of North American lichen distributions. He conducted extensive taxonomic, ultrastructural, and chemotype studies across various groups, establishing himself as the foremost North American authority on crustose *Teloschistaceae*. Throughout his career, he described numerous new taxa, issued two important exsiccatae series, and expanded the University of Minnesota Herbarium (MIN), curating it into one of the premier lichen repositories in the United States. The lichen genus *Wetmoreana* Arup *et al.*, along with several species, is named in his honour. Ref.: *Pers. comm.*; Brodo & Egan (2021).



Willdenow, Carl Ludwig (1765–1812) – Born in Berlin, Kingdom of Prussia (now Germany), he was the son of the apothecary Johann Carl, who owned the prominent pharmacy on the *Unter den Linden* boulevard, whilst his mother, Louise (née Gleditsch) came from an influential and highly respected medical and academic family. He developed an early fascination with botany under the active encouragement of his maternal uncle, the celebrated botanist Johann Gottlieb Gleditsch (1714–1786). Following his early education in Berlin, he studied chemistry and pharmacy in Bad Langensalza from 1783 to 1785 at the private institute managed by the renowned chemist Johann Christian Wiegleb (1732–1800). He subsequently moved to the University of Halle in 1785 to read medicine, completing a botanical doctoral dissertation on the genus *Achillea* to earn his medical degree in 1789. Following his father's death later that year, Willdenow took over the family pharmacy, operating it until 1793 when he relinquished his pharmaceutical business to focus entirely on medical practice and botanical research. In 1798, Willdenow was appointed Professor of Natural History at the *Collegium Medico-Chirurgicum* in Berlin. In 1801, he was chosen as the Director of the Botanic Garden in Berlin, a role he held until his death. During his

tenure, he transformed the garden into one of the premier botanical centers in Europe, heavily cultivating exotic species brought back by explorers. A pioneer of early phytogeography, Willdenow maintained a continuous scientific interest in cryptogamic botany. In 1787, he published his acclaimed regional flora, *Florae Berolinensis Prodromus*, which featured a comprehensive, detailed systematic section treating local lichen species. In 1788, he pioneered the practice of describing exotic lichen species based on minute fragments found adhering to imported medicinal bark inside his apothecary shop. He is widely remembered as the mentor who shaped the early botanical training of Alexander von Humboldt (1769–1859). His herbarium is housed at B. Ref.: Kärnefelt & al. (2012); Schlechtendal (1814); Stafleu (1972, 1972b).



Willey, Henry (1824–1907) – Born in Geneseo, New York, USA, he was initially trained as a teacher and ran a private school before moving into journalism. He later relocated to New Bedford, Massachusetts, where he served for decades as the editor of *The Daily Standard*. Although he had a general interest in nature, it was only in middle age, around 1862, that he turned his attention to cryptogamic botany, specialising in lichens. Entirely self-taught in the discipline, he began identifying his specimens using the pioneering publications of Edward Tuckerman, whom he deeply revered and came to regard as his primary scientific mentor. Willey quickly developed into an keen-eyed field collector and a highly reliable taxonomist. His close relationship with Tuckerman culminated in a profound academic trust; following Tuckerman's death in 1886, Willey was chosen to complete, edit, and posthumously publish the second part of Tuckerman's landmark *Synopsis of the North American Lichens* (1888). Willey also conducted original research on difficult microlichen groups, revisions of which were published in his major monograph, *A Synopsis of the Genus Arthonia* (1890). He actively compared the lichen floras of North and South America and examined collections sent to him from across the continent. His own regional masterpiece, *An Enumeration of the Lichens of New Bedford, Massachusetts* (1892), synthesised three decades of local field collecting and was celebrated as the finest, most meticulous local lichen flora produced in North America at the time. Described by his contemporaries as a diffident and reclusive man who lived a secluded life, he was nevertheless generous and helpful to his scientific correspondents. He described several dozen new species, particularly within the *Graphidaceae* and *Arthoniaceae*. The genus *Willeya* Müll. Arg. is named after him. His herbarium is housed at US. Ref.: Fink (1914); Howe Jr. (1913); Jennings (1914).



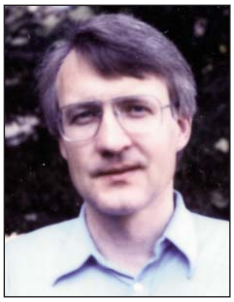
Will-Wolf, Susan (née Will) **(1946–)** – Born in Independence, Missouri, USA, she developed an early fascination with the natural world and was an active member of the Girl Scouts. Following her early education, she read biology and geology at the University of Wisconsin-Madison. Her interest in cryptogamic botany had been sparked earlier in 1963 by an intensive ecology field course delivered by Robert V. Drexler (1910–1987) of Coe

College, which introduced her to lichens through an integrated bryological and ecological framework. She pursued her postgraduate career at the Department of Botany, earning her Master of Science (M.S.) degree in 1970 and her Ph.D. in 1980 under the supervision of the prominent plant ecologist Edward W. Beals (1933–2015). Her doctoral research utilised pioneering multivariate analysis to examine insect foraging patterns in South Dakota prairie ecosystems, during which time she continuously expanded her lichenological training with the assistance of John W. Thomson. Will-Wolf gradually shifted her primary research focus to quantitative lichen ecology, brilliantly adapting established concepts from plant-animal interactions to cryptogamic communities. Her first major lichenological paper, published in 1974, investigated the impact of atmospheric sulfur dioxide emissions on epiphytic lichen vegetation surrounding a coal-fired power plant. This study initiated her lifelong career focus on assessing human and environmental impacts on lichen communities. She spent her entire professional career at the University of Wisconsin-Madison, advancing through several key academic positions before retiring as a Senior Scientist Emerita. Beyond her university duties, she achieved widespread national prominence as the National Lichen Community Indicator Advisor for the USDA Forest Service Forest Inventory and Analysis (FIA) program, developing essential, large-scale biomonitoring models to assess air quality and forest health across the United States. She has not described any taxa. Her main herbarium is housed at WIS, with some project collections at OSU. Ref.: *Pers. comm.*



Wilson, Francis **Robert** Muter **(1832–1903)** – Born in Low Waters near Hamilton, Scotland, UK, he was the son of a Presbyterian minister. He spent much of his youth in Manchester, developing an early fascination with natural history. In 1848, he entered the University of Edinburgh, later proceeding to read theology at New College, Edinburgh, from which he graduated in 1856. Ordained to minister in the British colonies, he emigrated to Australia, arriving in 1858. He initially settled as a parish minister in Camperdown, Victoria, before being appointed Minister in Charge of the Presbyterian Church at Kew, Melbourne, where he served from 1877 until his retirement in 1897. Wilson joined the Field Naturalists Club of Victoria in 1880, a move that sparked his emergence as arguably Australia's first major resident lichenologist. He undertook prolific field excursions across eastern Australia, from Tasmania to Brisbane, and traveled extensively throughout the Pacific, collecting specimens in Fiji, New Caledonia, Lord Howe Island, and Diego Garcia. He regularly sent difficult cryptogamic material to leading European experts for validation and published over twenty pioneering papers on Australian lichen taxonomy between 1887 and 1900. In 1898, Wilson sold a massive reference collection of approximately 20,000 specimens to the New South Wales Government, a repository that now forms a historical component of the National Herbarium of New South Wales (NSW). Following his death, his remaining private herbarium was purchased from his widow by the Victorian Government for the National Herbarium of Victoria (MEL). Tragically, the bulk of this latter collection was lost to science; while on loan to the Italian botanist Giacomo Albo (1872–1969) at the University of Messina in 1907, a massive second consignment was completely

lost in transit at sea. A small, earlier parcel containing invaluable type specimens did reach Albo, subsequently surviving the devastating 1908 Messina earthquake that leveled the university, and was eventually returned to Melbourne. Wilson described several dozen new species and erected the Australian macro-lichen genus *Neophyllis.* The genus *Franswilsia* S.Y. Kondr. *et al.* is named after him. Ref.: Ralston (2001).



Wirth, Volkmar (1943–) – Born in Herrnhut, Sachsen, Germany, he relocated with his family after the Second World War to Zell im Wiesental in the Black Forest, where he developed an early fascination with the natural world. He published his first botanical paper in 1963, focusing on plant biodiversity within the Höllertal valley. He read natural sciences at the University of Freiburg from 1962, becoming a dedicated student of the phytosociologist Otti Wilmanns (1928–2023). Wirth completed his doctoral studies at Freiburg in 1971, defending a breakthrough thesis on the ecology and sociology of lichen communities growing on siliceous rocks. Wirth worked as a research assistant at the University of Freiburg from 1969 to 1972, before moving to the University of Würzburg to collaborate with Otto Ludwig Lange on pioneering ecophysiological experiments on the destructive effects of sulfur dioxide pollution on lichen thalli. In 1975, he joined the staff of the *Staatliches Museum für Naturkunde Stuttgart* as a senior botanist. During his decades in Stuttgart, he produced profusely illustrated, landmark regional floras, most notably *Die Flechten Baden-Württembergs* (1987). He traveled widely across multiple continents, with a particular focus on the arid and mountainous regions of southern Africa. For many years, he also shaped international cryptogamic literature as the chief editor of the prestigious monograph series *Bibliotheca Lichenologica*. From 2001 until his retirement in 2008, Wirth served with distinction as the Director of the *Staatliches Museum für Naturkunde Karlsruhe*. His ultimate contribution to European botany was co-authoring the definitive, monumental three-volume reference work *Die Flechten Deutschlands* (2013). He described several taxa, including the genus *Fuscidea* (with A. Vězda). The genus *Wirthiotrema* Rivas Plata *et al.* is named after him. His herbarium is housed at STU, with later collections in KR. Ref.: *Pers. comm.*; Kärnefelt & al. (2012); Türk & al. (2008).



Withering, William (1741–1799) – Born in Wellington, Shropshire, England, UK, he was the son of a successful apothecary, whilst his mother came from a prominent and highly distinguished family of medical practitioners. He attended the Edinburgh Medical School from 1762 to 1766, reading medicine and natural history under leading figures of the Scottish Enlightenment, including the botanist John Hope (1725–1786) and the eminent anatomist Alexander Monro *secundus* (1733–1817). In 1767, he was appointed as a physician to the Stafford Infirmary, where he met his future wife, Helena Cookes (1750–1801), an accomplished amateur botanical illustrator who actively encouraged his latent interest in plants. Through the political initiative of Erasmus Darwin (1731–1801),

Withering was appointed Physician to the Birmingham General Hospital in 1775, settling in the city and becoming an influential member of the celebrated Lunar Society. In 1776, Withering published his foundational botanical work, *An Arrangement of All the Vegetables Growing in Great Britain*. This text was monumental in introducing Carl Linnaeus's sexual classification system and binomial nomenclature to the broader British public, and featured a comprehensive, highly accessible section dedicated to regional lichens. He published extensively revised and expanded editions under the title *An Arrangement of British Plants* in 1787 and 1792, which integrated many of his wife's detailed illustrations. Beyond his botanical contributions, Withering achieved immortality in the history of medicine for his clinical work on therapeutics. In 1785, he published his medical masterpiece, *An Account of the Foxglove and Some of its Medical Uses*, which analysed the cardiac properties of *Digitalis purpurea* and laid the scientific foundations for modern clinical pharmacology. Shattered by chronic tuberculosis, he passed away at his home, Birmingham Heath. His herbarium is housed at BM, LINN. Ref.: Laundon (1984); Peck & Wilkinson (1950).



Wolseley, Patricia ('Pat') Anne **(1938–)** – Born in England, UK, she matriculated at Somerville College, Oxford, to read botany, subsequently gaining employment at the Natural History Museum, London, from 1960. A talented botanical illustrator, she frequently paired her artistic training with rigorous research. Following a decade studying aquatic plants, which included a period working at the University of Malta between 1966 and 1977, she pivoted decisively to lichenology after attending an inspiring specialist field course. Returning to the Natural History Museum, she served first as a Leverhulme Research Fellow and later as a long-term Scientific Associate. Wolseley established herself as a pioneering expert on lichens as bioindicators of environmental change and atmospheric nitrogen pollution. She has long-term collaborations on lichens in tropical forests in South-East Asia including Thailand, Malaysia, Sri Lanka, Vietnam and Indonesia, using lichens as indicators of environmental change considering air quality and logging. This has involved training local lichenologists and developing keys and checklists as well as identifying new species. Nationally, her collaborative research with the Centre for Ecology and Hydrology was transformed into the Open Air Laboratories (OPAL) air quality survey, a landmark citizen science initiative that engaged thousands of members of the public in mapping environmental health. A central and deeply respected figure within the British Lichen Society, she served as its President and lent her formidable curatorial and text-editing expertise to co-authoring and proofreading the definitive 1,056-page volume, *The Lichens of Great Britain and Ireland* (2009). Highly regarded for her public outreach, educational workshops, and championing of atlantic oakwood conservation in regions like Exmoor and Pembrokeshire, her extensive scientific collections reside at BM. The genus *Wolseleyidea* S.Y. Kondr. *et al.*, alongside four species, is named in her honour. Her herbarium is housed at BM. Ref.: *Pers. comm.*; English Wikipedia.

Woolls, William (1814–1893) – Born in Winchester, Hampshire, England, UK, he was the son of a clergyman. Lacking local prospects following his father's early death, he emi-



grated to Australia, arriving in Sydney in 1832 carrying a letter of recommendation to colonial society. His classical and literary talents quickly impressed the local Anglican hierarchy, leading to his immediate appointment as an assistant master at the newly established King's School in Parramatta near Sydney. He spent his career in education, later establishing his own successful private academy, where he educated the sons of prominent colonists for over two decades. Woolls developed a deep, self-taught passion for Australian field botany, extensively exploring the bushland of the Parramatta and Hawkesbury districts. He became a close friend, field scout, and trusted correspondent of the government botanist Ferdinand von Mueller (1825–1896), sending him thousands of specimens. The University of Göttingen awarded him a Ph.D. *in absentia* in 1871 for his research on the flora of the Parramatta region. In 1873, following his retirement from teaching, Woolls was formally ordained as a Church of England minister, subsequently serving as the Rural Dean of Richmond. Within lichenology, his primary legacy rests on his landmark book, *A Contribution to the Flora of Australia* (1867). This volume included a dedicated chapter treating twenty-five lichen species he had collected locally, making it the first comprehensive, systematic baseline registry of lichens by a resident naturalist in Australia. He described several new plant species, and the endemic Australian heath genus *Woollsia* F.Muell. is named after him. His herbarium is housed at NSW. Ref.: Haswell (1893); Orchard (1999); Serle (1949).



Worm, Ole (1588–1654) – Born in Aarhus, Jutland, Denmark, he was the son of the city's mayor, Willum Worm (1563-1629), whilst his mother belonged to a prominent, wealthy patrician and political family. He received an exceptional, polymathic education across Europe, reading theology at the University of Marburg in 1605, before continuing his studies in Strasbourg. Turning his attention to medicine, he studied at the University of Padova in 1609 and ultimately earned his medical doctorate from the University of Basel in 1611, where he was a dedicated student of the celebrated taxonomist and anatomist Caspar Bauhin. After practical periods practising as a physician in Paris and London, Worm returned to Denmark to initiate a long academic career at the University of København. From 1613, he successively held chairs in Latin, Greek, physics, and medicine, while also serving as the personal court physician to King Christian IV (1577-1648). Worm is widely celebrated in the history of science for assembling an immense, encyclopaedic collection of natural curiosities, antiquities, and ethnographical artifacts. This collection was meticulously documented in his monumental posthumous catalogue, *Museum Wormianum* (1655), which includes the first detailed scientific description and woodcut illustration of the alpine reindeer lichen, *Cladonia stellaris* (then treated as a coralloid moss), based on specimens sent to him from Norway. Ref.: Christensen (1924–26).

Wu, Ji-Nong (1922–2008) – Born in Shanxi Province, China, he completed his early education locally before reading horticulture at National Central University (later reorgan-



ised as Nanjing University), graduating in 1944. He subsequently entered academia and turned his focus to cryptogamic botany, commencing his pioneering lichenological research under the supervision of Chen Pan-Chieh (Bang-Jie Chen, 1907–1970), a founding figure of Chinese bryology who had been trained at the University of Berlin. Wu spent his long career at Nanjing Normal University, advancing to Full Professor within the Department of Biology. As one of the few senior resident scholars specializing in lichens during the mid-to-late 20th century, he championed the discipline in eastern China and mentored a generation of influential students. Collaborating with his postgraduate student Abdulla Abbas (who later built the infrastructure for Central Asian lichenology), Wu co-authored the landmark volume *Lichens of Xinjiang* **(**1998**)**, which provided the first baseline registry of the highly diverse cryptogamic flora across the Tian Shan and Altai mountain ranges. Wu also focused extensively on the maritime and coastal ecosystems of eastern China, publishing a detailed ecological treatment of the lichens of the Yangtze River Delta in collaboration with his student Qian Sanguang. His systematic research culminated posthumously, when his structural manuscripts were consolidated to produce Volume 11 of the flora series, *Flora Lichenum Sinicorum* **(**2012), which provided the first modern taxonomic revision of the order *Peltigerales* across China. His herbarium is housed at NU. Ref.: Guo, p*ers. comm.*



Wulfen, Franz **Xaver von (1728–1805)** – Born in Beograd in the Habsburg Monarchy (now Serbia), he was the son of a high-ranking Austrian army officer and a Hungarian countess. In 1745, he entered the Society of Jesus in Wien (Vienna) and received a rigorous education in theology, mathematics, and the natural sciences. He subsequently taught mathematics, physics, and philosophy at various Jesuit colleges across the Austrian Empire, including postings in Graz, Wien, Neusohl, and Gorizia, before settling permanently in Klagenfurt in 1764. Following the formal suppression of the Jesuit Order by the Pope in 1773, Wulfen remained in Klagenfurt as a secular priest, dedicating the rest of his life entirely to scientific research and mountain exploration. From 1750 onwards, Wulfen devoted his leisure time to botany and mineralogy, establishing himself as a fearless pioneer of alpine exploration. He repeatedly scaled the most difficult and unexplored peaks of the Eastern Alps, Karawanken, and the Hohe Tauern, discovering hundreds of high-alpine vascular plants and cryptogams new to science. His breakthrough botanical and lichenological discoveries were meticulously documented in his celebrated multi-part treatise, *Plantae rariores Carinthiacae*, published between 1778 and 1790. Wulfen maintained an active correspondence with the leading naturalists of the Enlightenment, including C. Linnaeus, J. C. D. von Schreber, and E. Acharius. He described numerous new species, and his legacy in alpine botany is commemorated by genus *Wulfenia* Jacq., as well as the mineral *wulfenite*. His herbarium was largely taken by Napoleon's troops though an incomplete collection survives in W; Arnold later worked on remnants and typified his taxa. Ref.: Arnold (1882); Klemun (1989); Kunitsch (1810).



Yasuda, Atsushi (1868–1924) – Born in Tokyo, Japan, he completed his early education locally before entering the Science College of the Imperial University of Tokyo, graduating in 1895. He pursued advanced research in plant and fungal physiology under the supervision of Manabu Miyoshi, formally earning his higher doctorate (*Rigakuhakushi*) in 1910. In 1911, Yasuda published a landmark textbook on cryptogamic botany, *Shokubutsugaku Kakuron Inka-bu*, which introduced the first systematic, standardised Japanese nomenclature for the morphological and anatomical characters of lower plants, including lichens. Yasuda spent his main professional career as a Professor of Biology at the prestigious Second Higher School (*Daini Kōtō Gakkō*) in Sendai, while also collaborating with researchers at Tohoku Imperial University. He became a pioneering field collector, exploring widely across the Japanese archipelago. His extensive systematic surveys were supported in his final years by grants from the newly established Saito Gratitude Foundation (*Saitō Hō-on Kai*). To validate his extensive cryptogamic materials, he maintained an active exchange with leading European lichenologists, most notably A. Zahlbruckner and E. A. Vainio, who assisted him with critical identifications. Following his sudden death in May 1924, his final comprehensive manuscript was posthumously published by the Saito Foundation as *Flechten Japans* (1925), effectively serving as the first checklist and manual for the Japanese lichen flora. His pioneering achievements paved the way for Yasuhiko Asahina to establish Japan's modern school of systematic lichenology. Many species are named after him. His material is found in TNS, TUR and W. Ref.: Ohmura *pers. comm.*; Sato (1976); Yasuda (1925).



Yoshimura, Isao (1933–) – Born in Sumoto, Hyōgo, Japan, he was the son of a military officer who was killed in action during the Second Sino-Japanese War in 1937. Following this loss, his widowed mother relocated with her three children to Kōchi on the island of Shikoku, where Yoshimura spent his youth and received his early education. The family was forced to move again to the village of Niida in 1944 due to the intensifying air raids of the Second World War. He completed his secondary education at Kōchi Marunouchi Senior High School, where he eagerly joined the school's Science Club. In 1950, he published his very first lichenological paper, a survey of the local lichen flora, in the club's student journal. Following his graduation in 1953, Yoshimura read natural sciences at Kochi University under the mentorship of Jun Nakamura, graduating in 1957. He subsequently held several teaching positions within the Japanese school system while continuing his private lichenological research, receiving encouragement from the grand master of Japanese lichenology, Yasuhiko Asahina. In 1965, he was appointed as a researcher at the Hattori Botanical Laboratory. He secured a prestigious international research scholarship that enabled him to move to the United States to work within the Department of Botany at the University of Tennessee, Knoxville, under the renowned bryologist Aaron 'Jack' Sharp (1914–1994). His American research focused on analyzing the floristic and biogeographical links

between the macro-lichens of Mexico and those of the Appalachian Mountains. His doctoral dissertation, which he successfully defended in 1968, provided a breakthrough comparative analysis of the evolutionary relationships between Japanese and Appalachian *Cladonia* species. Upon returning to Japan, Yoshimura resumed his research tracking at the Hattori Botanical Institute and later joined the faculty of Kōchi Gakugei College, eventually rising to become a Full Professor. He produced monumental taxonomic revisions of East Asian lichens, most notably his masterly global and regional treatments of the genus *Lobaria*, alongside key systematic rearrangements of the genus *Anzia*. Yoshimura was a critical theoretical vanguard in East Asia; he was among the first Japanese taxonomists to explicitly discard the historical "dual-organism" classification, championing the view that lichens should be integrated into the fungal classification system. This advanced perspective initially divided traditionalist scholars in Japan, but it influenced and modernised both Japanese and Korean lichenology. Throughout his multi-decade career, Yoshimura described numerous new taxa, pioneered sophisticated laboratory techniques for the in-vitro resynthesis of lichen thalli from isolated bionts, and distributed a celebrated exsiccatae series of Japanese specimens. He also popularised the discipline by authoring the highly popular, beautifully illustrated manual *Lichen Flora of Japan in Color* (1974)**.** The genera *Yoshimuriella* B. Moncada & Lücking and *Yoshimuria* S. Y. Kondr. *et al.* are named after him. His herbarium is housed at NICH. Ref.: *Pers. comm.*



Zahlbruckner, Alexander (1860–1938) – Born in St Georgen (present-day Svätý Jur) near Pressburg (now Bratislava, Slovakia), then in the Austrian Empire, he was the grandson of the Austrian botanist Johann Baptist Zahlbruckner (1782–1851). He read natural history and botany at the University of Wien (Vienna) from 1878 under the supervision of Anton Kerner von Marilaun (1831-1898). In 1883, he obtained his Ph.D. with a doctoral dissertation examining the anatomy and physiological function of lenticels under Julius von Wiesner (1838–1916). In 1885, Zahlbruckner joined the staff of the *Naturhistorisches Museum Wien* as a volunteer researcher, gradually narrowing his scientific focus exclusively to systematic lichenology. Despite conducting limited intensive field exploration himself, he regularly spent his summer months surveying and collecting within the Schladming region of the Austrian Alps. He advanced through the museum's curatorial hierarchy, becoming *Kustos* (Curator) in 1900, and was later awarded the prestigious civil title of *Hofrat* (Court Councillor). His administrative career culminated when he served as the First Director of the Museum from 1918 to 1922. Zahlbruckner achieved undisputed global dominance in early 20th-century lichen taxonomy. In 1907, he published his monumental systematic revision of global lichen genera within Adolf Engler and Karl Prantl's seminal reference series, *Die natürlichen Pflanzenfamilien* (Teil I, Abt. 1), introducing an influential, highly structured system of keys that shaped macro-classification for generations. He subsequently compiled the most ambitious bibliographical monument in the history of the discipline: the multi-volume *Catalogus lichenum universalis* (1922–1934), a masterly global nomenclatural registry spanning nine foundational volumes, with a tenth postscript supplement completed posthumously by Karl Redinger in 1940. Alongside his major monographs,

Zahlbruckner actively participated in distributing the *Cryptogamae Vindobonenses* and issued the specialised exsiccatae series titled *Lichenes rariores exsiccati* in collaboration with Redinger. He described thousands of new species and erected numerous genera, including the pyrenocarpous lichen genus *Agonimia*. The genus *Zahlbrucknerella* Herre was named in his honour. His herbarium is housed at W. Ref.: Herre (1939); Keissler (1941); Pišut (2002); Redinger (1933).



Zhelezova (Jelezova)**, Bozhdana** Atanassowa **(1906–2002)** – Born in Shumen, Bulgaria, she completed her early education locally before reading natural history at Sofia University, majoring in botany. Following her graduation in 1931, she spent nearly two decades working as a secondary school biology teacher. In 1950, her career shifted permanently into academic research when she was appointed as a research scientist at the Institute of Botany of the Bulgarian Academy of Sciences in Sofia. Commencing her targeted lichenological publications in 1956, Zhelezova published a series of papers on the Bulgarian cryptogamic flora. Her most significant national contribution was her collaboration with Atanas Popnikolov; she extensively revised, expanded, and completed Popnikolov's historical manuscripts to co-author the definitive, landmark volume *Lichen Flora of Bulgaria* (1964), which served as the country's first comprehensive national manual. Specialised in the challenging family *Parmeliaceae*, she also collaborated closely with her Polish mentor Józef Motyka, culminating in their joint 1963 monograph on the genus *Usnea* in Bulgaria. For many years, Zhelezova stood as the sole professional lichenologist active in Bulgaria. She amassed extensive national field collections, systematically mapping understudied mountain ranges across the country. Because her appointment was strictly a research post within the Academy of Sciences rather than a university chair, she lacked formal teaching duties and was unable to train postgraduate students to succeed her. Her material is housed at SOM. Ref.: *Pers. comm.*; Mayrhofer & al. (2005).

Zhu (=Tchou)**, Yanchen (1912–1980)** – Born in Qingyuan, Zhejiang Province, China, he completed his early education locally before reading biology at the Sino-French University (*Université Franco-Chinoise*) in Beijing, graduating in 1935. Through the encouragement of his professor, Liu Ju-Chuan, he became involved in early exploratory surveys of Chinese cryptogams. This research culminated in 1935 when he published what is recognised by historians as the first scientific paper on lichenology written by a native Chinese scholar. During the Second World War, Zhu travelled to France to pursue postgraduate studies at the University of Montpellier. He became a doctoral student of the Swiss-French botanist Josias Braun-Blanquet (1884–1980) at the International Station for Alpine and Mediterranean Geobotanical Research (SIGMA). Working within the classic Zürich-Montpellier school of phytosociology, Zhu conducted extensive fieldwork on European riverine and alluvial forests, successfully defending his breakthrough doctoral dissertation in 1947. Upon his return to China in late 1947, Zhu was appointed Professor of Biology and Ecology at Yunnan University in Kunming. Facing a total lack of domestic cryptogamic infrastructure, he chose to dedicate his remaining career to macro-vegetation

science, forestry, and geobotany rather than lichenology. He became an architect of modern Chinese ecology, pioneering large-scale field surveys across the mountains of Yunnan and co-authoring several important national textbooks, most notably the monumental reference work *Vegetation of China* (1980)**.** He did not describe new lichen species and his lichen herbarium is partly housed in HMAS. Ref.: AA.VV (1981).



Zhurbenko, Mikhail ('Mischa') Petrovich **(1958–)** – Born in Leningrad, Soviet Union (now St. Petersburg, Russia), he was the son of a naval architect and shipbuilder. He initially read psychology at Leningrad State University before switching his academic focus to geobotany and plant ecology. In 1980, while still a student, he joined a major scientific expedition to the remote Chukotka Peninsula led by Adrian Katenin, who introduced him to Arctic cryptogamic botany. Following his university graduation in 1982, Zhurbenko joined the research staff at the V.L. Komarov Botanical Institute of the Russian Academy of Sciences in St Petersburg. Working within its Laboratory of Lichenology and Bryology, he completed his postgraduate research under the supervision of Nina S. Golubkova, successfully defending his Candidate of Sciences dissertation (Ph.D. equivalent) on the subarctic lichen flora of the Putorana Plateau in 1990. During the mid-1990s, Zhurbenko's research track shifted definitively from general lichen floristics to the specialised study of lichenicolous fungi. Supported by international fellowships, he spent 1994–1995 at Uppsala University in Sweden collaborating closely with Rolf Santesson. This partnership initiated decades of highly detailed mycological fieldwork across polar ecosystems, culminating in his publication of *The Lichenicolous Fungi of Russia: Geographical Overview and a First Checklist* (2007), which provided the first baseline registry for 276 regional species. In 2010, he defended a higher doctoral dissertation (*Doctor of Biological Sciences*) establishing a definitive systematic framework for the lichenicolous fungi of the Russian Arctic. Zhurbenko has spent his entire professional career at the Komarov Botanical Institute, advancing through various senior posts to become a Chief Research Scientist within its Laboratory of Systematics and Geography of Fungi. Widely recognised as one of the world's foremost authorities on polar and cold-climate micro-fungi, he has conducted extensive expeditions across Eurasia, Greenland, Svalbard, and Mongolia. He has described hundreds of new fungal taxa, including dozens of new genera, and has authored critical global revisions of fungi infesting major macro-lichen hosts such as *Cladonia* and *Rhizoplaca*. The genus *Zhurbenkoa* Flakus *et al.* is named after him. His herbarium is housed at LE. Ref.: *Pers. comm*; Hertel & al. (2017).

Zopf, Friedrich **Wilhelm (1846–1909)** – Born in Roßleben, Kingdom of Prussia (now Thuringen, Germany), he was the son of a miller. Zopf initially trained and worked as a primary school teacher from 1864 to 1867, before accumulating enough private funds to read natural sciences and philosophy at the University of Berlin from 1874. There, he studied under the botanist Alexander Heinrich Braun and the pioneering mycologist Oscar Brefeld. In 1878, Zopf obtained his doctorate from the University of Halle with a dissertation on the conidial development of the sooty mould genus *Fumago*. He subsequently



served as a professor at the Agricultural College of Berlin (*Landwirtschaftliche Hochschule*) from 1880 to 1883. He then returned to Halle, where he was appointed Associate Professor (*Extraordinarius*) and established a world-class cryptogamic laboratory. In 1899, his academic career culminated in his appointment as Full Professor of Botany and Director of the Botanic Garden at the University of Münster. Influenced by F. Arnold and H. Sandstede, Zopf conducted brilliant, early investigations into the biological relationships between lichens and specialised micro-fungi. He coined the term *parasymbiont* to describe organisms that live on a lichen thallus without causing immediate lethality to the symbiosis. Zopf's greatest scientific legacy, however, lies in his pioneering foundation of lichen chemotaxonomy. He was the first to systematically isolate, crystallise, and chemically characterise secondary metabolites. This research culminated in his masterly reference work, *Die Flechtenstoffe in chemischer, biologischer, pharmakologischer und technischer Beziehung* (1907). He utilised these chemical profiles as definitive taxonomic markers, using distinct "lichen substances" to delimit and untangle notoriously difficult macro-lichen complexes, particularly within the genus *Cladonia*. An exceptionally industrious scholar, Zopf described new species of lichens and lichenicolous fungi, and formally erected several genera, including *Pseudevernia* and *Rhizoplaca*. The fungal genera *Zopfia* Rabenh., *Zopfiella* G. Winter, *Zopfiofoveola* D. Hawksw., and *Zopfochytrium* M.J. Powell *et al.* are named after him. Tragically, the bulk of his invaluable primary herbarium, chemical reference sets, and authentic types, which had been deposited at the University of Münster (MSTR), were entirely destroyed during catastrophic air raids in 1944. Ref.: Huneck & al. (1973); Kärnefelt & al. (2012); Tobler (1909).



Zschacke, Georg **Hermann (1867–1937)** – Born in Köthen, Duchy of Anhalt (now Sachsen-Anhalt, Germany), he was the son of a baker. He trained for a career in education, qualifying in 1889 at the Teachers' Seminar in Dessau, and subsequently spent his life working as a dedicated schoolmaster. He developed an early fascination with field botany, which was heavily encouraged following a formative 1897 meeting with the prominent phytogeographer Paul Ascherson (1834–1921) and the bryologist Carl Warnstorf (1837–1921), both of whom guided him into bryological and, ultimately, lichenological research. His first major lichenological paper, published in 1908, provided a detailed floristic account of the Saale River valley. To resolve difficult material, he actively collaborated with several amateur researchers and international experts, most notably Julius Steiner and Miroslav Servít, the latter profoundly inspiring his lifelong focus on pyrenocarpic taxa. Zschacke's scientific career was severely disrupted by the outbreak of the First World War. While conducting an intensive botanical collecting trip on the French island of Corsica in 1914, he was arrested as an enemy alien and interned in a prisoner-of-war camp. His extensive, unique Corsican collections were entirely confiscated by French authorities; much of this material was subsequently studied and published by the French botanist R. V.

de Litardière (1888–1957), frequently denying Zschacke due taxonomic credit. Shattered by years of harsh wartime imprisonment, Zschacke suffered from failing health. Upon his release, he underwent medical treatment in Davos, Switzerland, while simultaneously pursuing geobotanical studies at the University of Zürich. Despite chronic illness and severe financial hardships in post-war Germany, he established himself as a foremost global authority on pyrenocarpic lichens. This research culminated in his monumental, exhaustive monograph published within the second edition of Rabenhorst's *Kryptogamen-Flora* (1934), which provided the systematic framework for Central European pyrenocarpic lichens, particularly the family *Verrucariaceae*. He described several taxa and the genus *Zschackia* M. Choisy & Werner commemorates him. His herbarium was sent to Berlin (B) after his death and survived the war in the basement, with duplicates elsewhere. Ref.: Herman (1939); Kärnefelt & al. (2012); Mattick (1939).



Zwackh-Holzhausen Freiherr von**,** Philipp **Wilhelm, (1826–1903)** – Born in Mannheim, Grand Duchy of Baden (now Baden-Württemberg, Germany), he was raised in München as the son of a prominent Bavarian nobleman who held high-ranking governmental and judicial offices. After receiving a rigorous aristocratical military education, he attained the officer rank of Cavalry Captain (*Rittmeister*) in the Bavarian army. In 1847, he retired from active military service to manage his private family estates, residing primarily at Gut Holzhausen near Geisenheim before settling permanently on his estate in Heidelberg, which became the central focus of his prolific lichenological activity. Zwackh-Holzhausen was an exceptionally enthusiastic field collector who developed a deep expertise in lichen taxonomy. He authored numerous floristic papers and maintained a regular, highly productive scientific correspondence with the foremost European authorities of the 19th century, most notably G. W. Körber and W. Nylander. Between 1850 and 1894, he edited and distributed a monumental, highly celebrated exsiccatae series titled simply *Lichenes exsiccati*, which eventually reached a total of 1,211 numbers primarily focused on the rich, understudied micro-lichen biota of the Heidelberg region. Körber characterised him as an incredibly energetic researcher possessing a true connoisseur's eye for rare, easily overlooked species, as well as an exceptionally generous financial patron of cryptogamic botany. Zwackh-Holzhausen described several new taxa himself. The genera *Zwackhia* Körb., *Zwackhiomacromyces* Etayo & van den Boom, and *Zwackhiomyces* Grube & Hafellner are named in his honour. His herbarium is housed at GJO. Ref.: Hertel (1980).

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