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Checklist of Tunisian lichens

Abstract

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The currently known Tunisian lichen flora as determined by a detailed literature survey, supplemented by herbarium studies including those on collections made by the author in 1973, is composed of 415 taxa (395 species, 3 subspecies, 13 varieties and 4 forms); more detailed studies of neighbouring north African countries would suppose that this Tunisian list should be expanded by c. 40 %.

Introduction

According to Werner (1951), sporadic collection of lichens from Tunisia has occurred since 1640, but the first recorded species are attributable to Desfontaines in 1783, followed by Kralik in 1854. The first published lists are those of Hue (1897) and Pitard & Bouly de Lesdain (1909). The most comprehensive published list is to be found in the phytogeographical interpretation of the Tunisian lichen flora by Werner (1951) and the most extensive unpublished list resulted from the expedition led by Poelt in 1968. As well as the above sources, records are widely scattered throughout the literature and specimens are to be found in numerous herbaria, only a few of which have been studied by the author (see below). A list of those people known to have recorded and/or collected lichens from Tunisia is provided below. Further information on the history of lichenological recording in Tunisia, albeit scant, is to be found in Patouillard (1897), Werner (1951) and Faurel & al. (1951).

When Werner (1951, 1951a, 1956) made his phytogeographical interpretations of the Tunisian lichen flora, there were only 186 species recorded. The following checklist includes 415 taxa (395 species, 3 subspecies, 13 varieties and 4 forms); accepting that other north African countries such as Morocco and Algeria are larger in area, their lichen diversities of more than 1000 and 575 taxa respectively would suggest that Tunisia probably possesses c. 40 % more than those listed below. Therefore, much remains to be done in terms of (a) a more comprehensive examination of existing Tunisian lichens in numerous herbaria, (b) more detailed fieldwork, including extensive ecological investigations of the lichen flora, and (c) phytogeographical interpretation.

Tunisia is 164,148 km² in size, bordered on its western side by Algeria, and more particularly by the Atlas Mountains in the northern part; the country is c. 240 km from

east to west, and stretches c. 800 km from north to south, its southern prong finishing in the Sahara Desert, with Libya on its south-eastern border. It is the northernmost country of Africa, with a 1300 km Mediterranean coastline dominated by the three gulfs of Tunis, Hammamet and Gabes. There are numerous offshore islands, of which the largest is Jerba. Much of the country can be described as undulating, but significant uplands exist, reaching a maximum height of 1544 m at Chambi in the west. To the north of the country (where most of the country's c. 6.5 million inhabitants live) the landscape is agriculturally productive, a large proportion of it devoted to wheat fields and olive groves. However, towards the south the land is much more arid and is largely uninhabited for this reason; the only prominent feature before the dunes take over are the dramatic bare summits of the Ksour Mountains. The varied topography of the country affects the climate, which obviously ranges from Mediterranean in the north to Saharan in the south, but it can be unpredictable.

Although the topography is not so highly dramatic and varied as that of neighbouring Mediterranean countries, it nevertheless contains many habitats of interest to the lichenologist, such as rugged upland areas, forests of cork oak, steppe and a wealth of Roman remains. Many areas of Tunisia remain to be explored in terms of their lichen floras, the records of specimens collected to date giving a very incomplete picture of the ecology, status and distribution of these organisms.

Although the following list is by no means definitive, it is hoped that it will provide a useful contribution to the better understanding of the Mediterranean lichen flora, and a further step towards a major aim of the Lichen Commission of OPTIMA (Organization for the Phyto-Taxonomical Investigation of the Mediterranean Area), namely, the compilation of a Checklist of Mediterranean Lichens.

Collectors

Andreanszky, G. de (c. 1930); Arvidsson, L. (1976); Barratte, J. F. G. (1883); Bonnet, A. (c. 1888); Burollet, P. A. (1922, 1932); Cosson, E. S. C. (c. 1883-1890); Culberson, C. F. (1974, 1976); Culberson, W. L. (1974, 1976); Davis, P. H. (1975) in herb. E; Debazac, (1953) in herb. BC and in Werner (1954); Degelius, G. (1948); Desfontaines, R. L. (1783); Durieu de Maisonneuve, M. C. (c. 1842) in herb. PC (ex herb. Motelay); Egea, J. M. (1986); Faurel, L. (1948); Gaillard, ?A. (1892-1893); Hafellner, J. (1982); Hammann, A. (1952) in herb. M; Hammer, L. (1954) in herb. M; Hertel, H. (1968) in herb. M; Kolb, in Poelt (1958, 1982) in herb. GZU; Kralik, J. L. (1854); Labbé, A. (1953); Lamond, J. M. (1975) in herb. E; Lara, I. de (1986) in Torrente & Egea (1989a); Letourneux, A. H. (1884-1887); Leuckert, C. (1968) in Hanks (1983); Maslin, T. P. (1969) in herb. COLO; Mayrhofer, H. (1982); Pannier, F. (1954) in herb. M; Patouillard, N. T. (1891-1893) in herb. PC; Pitard, C. J. M. (1907-1913) in herb. DUKE & herb. G; Poelt, J. (1968, 1982) in herb. GZU; Robinson, P. (1967, 1969-1972) in herb. COLO; Runemark, H. (1948) in herb. M; Seaward, M. R. D. (1973); Torrente, P. (1986); Triebel, D. (1984); Walter, E. (1963) in herb. M; Wunder, H. (1968)

Sources

Herbaria:

The following herbaria are known to contain Tunisian lichens, but, for the most part, only occasional specimens have been seen by the author and only a few herbaria have been examined in detail.

B: Botanischer Garten und Botanisches Museum, Berlin.
 BC: Instituto Botanico de Barcelona.
 BCC: Departamento de Botanica, Universidad de Barcelona.
 BM: The Natural History Museum, London.
 COLO: University of Colorado Museum, Boulder, Colorado.
 DUKE: Duke University, Durham, North Carolina.
 E: Royal Botanic Garden, Edinburgh.
 G: Conservatoire et Jardin Botanique, Geneva.
 GZU: Institut für Systematische Botanik, Graz.
 H: Botanical Museum, University of Helsinki.
 HERTEL: Hertel, H., München (private collection).
 LD: Universitets Botaniska Museum, Lund.
 M: Botanische Staatssammlung, München.
 MRDS: Seaward, M. R. D., Bradford (private collection).
 MUB: Departamento de Botanica, Universidad de Murcia.
 PC: Muséum National d'Histoire Naturelle, Paris.
 S: Swedish Museum of Natural History, Stockholm.
 TRIEBEL: Triebel, D., München (private collection).
 TUR: Department of Botany, University of Turku.
 U: Institute of Systematic Botany, Utrecht.
 UPS: Institute of Systematic Botany, University of Uppsala.

Exsiccata:

Hertel, H.: *Lecideaceae exsiccatae*, no. 4 (fasc. I, 1979).
 Vezda, A. *Lichenes selecti exsiccati*, nos. 755, 756, 763 (fasc. XXXI, 1969) and 1852 (fasc. LXXV, 1983).

Unpublished lists:

[Hertel, H. 1968] — Pflanzenliste der Exkursion des Institutes für Systematische Botanik und Pflanzengeographie der Freien Universität Berlin unter Leitung von Prof. Dr. J. Poelt nach Tunesien (7-21 April 1968), pp. 29-33.
 [Seaward 1973] — Lists and collections made by the author during a visit to Tunisia in 1973.

List of taxa

Acarospora cervina A. Massal. f. *cervina*

Pitard & Bouly de Lesdain (1909: 256 as *A. percaenoides* Jatta), Magnusson (1929: 247, 398), Werner (1951: 202), Werner (1956: 38), Seaward (1973). Herb. COLO, MRDS, Triebel.

Acarospora cervina f. *determinata* (Harm.) H. Magn.

Herb. Triebel.

Acarospora coeruleoalba J. Steiner

Hertel (1968: 31).

Acarospora laqueata Flagey

Pitard & Bouly de Lesdain (1909: 256), Magnusson (1929: 396), Werner (1951: 201), Werner (1956: 37), Hertel (1968: 31), Roux (1991: 173).

Acarospora peltastica Zahlbr.

Hertel (1968: 31).

Acarospora pitardii de Lesd.

Pitard & Bouly de Lesdain (1909: 256), Magnusson (1929: 250), Werner (1951: 201), Werner (1956: 37).

Acarospora pitardii* f. *albomarginata (de Lesd.) H. Magn.

Pitard & Bouly de Lesdain (1909: 256), Magnusson (1929: 250).

Acarospora placenta (Ehrenb.) Hue

Hue (1897: 146 as *Lecanora placenta* forma *nigra*).

Acarospora reagens Zahlbr.

Pitard & Bouly de Lesdain (1909: 256 as *Lecanora schleicheri* var. *dealbata*), Magnusson (1929: 272), Werner (1951: 201), Werner (1956: 37).

Acarospora schleicheri (Ach.) A. Massal.

Gillot & Patouillard (1904: 142 as *Lecanora schleicheri*), Magnusson (1929: 80), Werner (1951: 201), Werner (1956: 37).

Acarospora sulphurata (Arnold) Arnold

Magnusson (1929: 95, 397), Werner (1951: 201), Werner (1956: 37), Egea & Llimona (1991: 186).

Acarospora tunetana H. Magn.

Magnusson (1929: 166).

Acrocordia gemmata (Ach.) A. Massal.

Hertel (1968: 29 as *A. alba*).

Acrocordia macrospora A. Massal.

Hertel (1968: 29).

Amandinea punctata (Hoffm.) Coppins & Scheid. = *Buellia punctata* (Hoffm.) A. Massal.

Pitard & Bouly de Lesdain (1909: 260 as *Buellia punctiformis*).

Anaptychia ciliaris (L.) A. Massal.

Hue (1897: 140), Pitard & Bouly de Lesdain (1909: 247), Werner (1951: 203), Werner (1954: 212 as forma *pallens*), Werner (1956: 39), Hertel (1968: 32).

Anaptychia crinalis (Schleich.) Vezda = *A. ciliaris* var. *crinalis* Schleich.

Pitard & Bouly de Lesdain (1909: 247).

Anaptychia runcinata (With.) J. R. Laundon = *A. fusca* (Huds.) Vainio

Pitard & Bouly de Lesdain (1909: 247 as *Pseudophyscia aquila*), Werner (1951: 203), Werner (1956: 40), Egea & Llimona (1991: 186).

Anisomeridium biforme (Borrer) R. C. Harris

Seaward (1973). Herb. MRDS.

***Arthonia caesiella* Nyl.**

Hertel (1968: 29).

***Arthonia dispersa* (Schrad.) Nyl.**

Alonso & Egea (1996).

***Arthonia galactiformis* Flagey**

Hertel (1968: 29).

***Arthonia galactites* (DC.) Dufour**

Pitard & Bouly de Lesdain (1909: 261), Burollet (1927: 75), Werner (1951: 202), Faurel & al. (1954: 290), Werner (1956: 38), Seaward (1973). Herb. MRDS.

***Arthonia lapidicola* (Taylor) Branth & O. Rostr. = *Allarthonia lapidicola* (Taylor) Zahlbr.**

Burollet (1927: 75), Faurel & al. (1954: 292), Hertel (1968: 29).

***Arthonia melanophthalma* Dufour**

Faurel & al. (1954: 290), Hertel (1968: 29), Alonso & Egea (1996).

***Arthonia palmicola* Ach.**

Hue (1897: 150), Werner (1951: 204), Faurel & al. (1954: 291).

***Arthonia radiata* (Pers.) Ach. = *A. astroidea* Ach.**

Hue (1897: 150), Pitard & Bouly de Lesdain (1909: 261), Werner (1951: 203), Faurel & al. (1954: 291), Werner (1956: 40), Seaward (1973). Herb. MRDS.

***Arthopyrenia punctiformis* (Pers.) A. Massal.**

Alonso & Egea (1996).

***Arthothelium burolletii* de Lesd.**

Bouly de Lesdain (1925: 790), Burollet (1927: 75), Faurel & al. (1954: 293), Seaward (1973). Herb. MRDS.

***Arthothelium crozalsianum* (de Lesd.) de Lesd.**

Hertel (1968: 29), Seaward (1973), Alonso & Egea (1996). Herb. MRDS.

***Arthrosporum populorum* A. Massal. = *Bacidia acclinis* (Flotow) Zahlbr.**

Hertel (1968: 30), Alonso & Egea (1996).

***Aspicilia affinis* (Eversm.) Mereschk. = *Lecanora affinis* (A. Massal.) Jatta**

Hertel (1968: 31).

***Aspicilia calcarea* (L.) Mudd incl. var. *concreta* Schaer.**

Hue (1897: 146), Pitard & Bouly de Lesdain (1909: 255), Burollet (1927: 74), Werner (1951: 203), Werner (1956: 40), Seaward (1973). Herb. MRDS, Triebel.

***Aspicilia calcarea* var. *subochracea* Müll. Arg.**

Pitard & Bouly de Lesdain (1909: 255).

***Aspicilia circummunita* (Nyl.) Flagey = *Lecanora circummunita* Nyl.**

Hue (1897: 146), Werner (1951: 201), Werner (1956: 37), Hertel (1968: 31). Herb. COLO.

Aspicilia contorta (Hoffm.) Kremp. incl. *A. hoffmannii* (Ach.) Flagey

Pitard & Bouly de Lesdain (1909: 255), Seaward (1973). Herb. Triebel.

Aspicilia intermutans (Nyl.) Arnold

Pitard & Bouly de Lesdain (1909: 255), Werner (1951: 202), Werner (1956: 38), Egea & al. (1990: 414), Egea & Llimona (1991: 186).

Aspicilia radiosa (Hoffm.) Poelt & Leuckert = *Lecanora radiosa* (Hoffm.) Schaer., incl. *Aspicilia subcircinata* (Nyl.) Coppins

Pitard & Bouly de Lesdain (1909: 249), Werner (1951: 202 as *Squamaria radiosa*), Werner (1956: 38), Hertel (1968: 31), Seaward (1973). Herb. Triebel.

Aspicilia rimulosa (H. Magn.) Ochsner = *Lecanora rimulosa* H. Magn.

Pitard & Bouly de Lesdain (1909: 255).

Bacidia incompta (Hooker) Anzi

Burollet (1927: 74).

Bacidia naegelii (Hepp) Zahlbr.

Herb. COLO.

Bacidia rosella (Pers.) De Not.

Hertel (1968: 30).

Bacidia rubella (Hoffm.) A. Massal.

Faurel & al. (1953a: 377 as *B. luteola*), Hertel (1968: 30).

Bactrospora patellarioides (Nyl.) Almq. = *Lecanactis patellarioides* (Nyl.) Vain.

Burollet (1927: 75), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 29), Seaward (1973), Torrente & Egea (1989a: 184), Egea & al. (1990: 414), Torrente & Egea (1993a: 249). Vezda, *Lichenes selecti exsiccati* no. 756. Herb. MRDS, MUB.

Blastenia ferruginella (Nyl.) Müll. Arg. = *Lecanora ferruginella* Nyl.

Hue (1897: 143), Werner (1951: 202). Almost certainly a *Caloplaca*, but the combination not made, or lost in synonymy.

Buellia boitardi Werner

Werner (1940: 120), Lamb (1963: 98), Llimona (1979: 503).

Buellia patouillardii (Hue) Zahlbr. = *Lecidea patouillardii* Hue

Hue (1897: 149), Burollet (1927: 75).

Buellia tunetana (Hue) Zahlbr. = *Lecidea tunetana* Hue

Hue (1897: 149).

Caloplaca aegatica Giralt, Nimis & Poelt

Alonso & Egea (1996).

Caloplaca agardhiana (A. Massal.) Clauzade & Cl. Roux

Szatala (1930: 165 as forma *alpina*), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 33), Seaward (1973). Herb. MRDS, Triebel.

Caloplaca albidoaurantiaca (Hue) Zahlbr.

Hue (1897: 143 as *Lecanora albido-aurantiaca* Hue).

Caloplaca alnetorum Giralt, Nimis & Poelt

Alonso & Egea (1996).

Caloplaca alociza (A. Massal.) Mig.

Pitard & Bouly de Lesdain (1909: 253 as *Caloplaca variabilis* var. *acrustacea*), Wunder (1974: 50), Seaward (1973). Herb. MRDS.

Caloplaca aurantia (Pers.) J. Steiner = *Placodium callopismum* (Ach.) Mérat

Pitard & Bouly de Lesdain (1909: 251), Burollet (1927: 74), Werner (1951: 202), Werner (1956: 38), Seaward (1973). Herb. MRDS, Triebel.

Caloplaca aurantiaca auct. *s. lat.*

Pitard & Bouly de Lesdain (1909: 252), Werner (1951: 202), Werner (1956: 39), Hertel (1968: 33), Seaward (1973). Herb. COLO, MRDS.

Caloplaca biatorina (A. Massal.) J. Steiner

Pitard & Bouly de Lesdain (1909: 251 as *Placodium callopizum*).

Caloplaca cerina (Hedw.) Th. Fr.

Hue (1897: 143), Pitard & Bouly de Lesdain (1909: 252), Werner (1951: 202), Werner (1956: 39). Herb. COLO.

Caloplaca chalybaea (Fr.) Müll. Arg.

Hertel (1968: 33), Seaward (1973), Wunder (1974: 82). Herb. MRDS.

Caloplaca circumalbata (Delile) Wunder, incl. *Caloplaca aegyptiaca* (Müll. Arg.) J. Steiner

Hertel (1968: 33), Wunder (1974: 60). Herb. COLO.

Caloplaca circumalbata var. *candida* (Stizenb.) Wunder = *C. variabilis* var. *candida* Stizenb.

Hue (1897: 144), Pitard & Bouly de Lesdain (1909: 253), Wunder (1974: 73).

Caloplaca crenularia (With.) J. R. Laundon

Seaward (1973), Egea & al. (1990: 414), Egea & Llimona (1991: 187).

Caloplaca decipiens (Arnold) Blomb. & Forsell

Burollet (1927: 74), Werner (1951: 203), Werner (1956: 39), Seaward (1973).

Caloplaca erythrocarpa (Pers.) Zwackh = *C. lallavei* (Clemente) Flagey

Hertel (1968: 33), Seaward (1973). Herb. MRDS, Triebel.

Caloplaca ferruginea (Huds.) Th. Fr. *s. lat.*

Pitard & Bouly de Lesdain (1909: 253 as *Blastenia ferruginea*), Werner (1951: 203), Werner (1956: 40), Hertel (1968: 33), Seaward (1973). Probably includes *C. crenularia* records.

Caloplaca flavescens (Huds.) J. R. Laundon

Seaward (1973). Herb. MRDS.

Caloplaca granulosa (Müll. Arg.) Jatta

Pitard & Bouly de Lesdain (1909: 252 as *Placodium granulosum*).

Caloplaca haematites (Chaub. ex St-Amans) Zwackh

Pitard & Bouly de Lesdain (1909: 252), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 33).

Caloplaca herbidella (Hue) H. Magn.

Hertel (1968: 33).

Caloplaca holocarpa (Ach.) Wade s. lat. = *C. pyracea* (Ach.) Th. Fr. and var. *pyrithroma* (Ach.) Flagey

Hue (1897: 144), Pitard & Bouly de Lesdain (1909: 253), Burrollet (1927: 74), Lee (1927: 86), Werner (1951: 202, 203), Werner (1956: 38, 40), Seaward (1973), Alonso & Egea (1996). Herb. COLO, MRDS, Triebel.

Caloplaca inconnexa (Nyl.) Zahlbr.

Hertel (1968: 33), Seaward (1973). Herb. COLO, Triebel.

Caloplaca interfulgens (Nyl.) J. Steiner

Pitard & Bouly de Lesdain (1909: 251), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 33). Herb. COLO.

Caloplaca lactea (A. Massal.) Zahlbr.

Pitard & Bouly de Lesdain (1909: 253 as *Gyalolechia lactea*), Burrollet (1927: 74 as *G. lactea*), Werner (1951: 203), Werner (1956: 39).

Caloplaca marmorata (Bagl.) Jatta = *C. lactea* forma *fulva* (Harm.) Zahlbr.

Hertel (1968: 33).

Caloplaca navasiana Nav.-Ros. & Cl. Roux

Herb. Triebel.

Caloplaca ochracea (Schaer.) Flagey

Hafellner & Poelt (1979: 34).

Caloplaca polycarpoides (J. Steiner) M. Steiner & Poelt

Steiner & Poelt (1982: 176).

Caloplaca saxicola (Hoffm.) Nordin = *C. murorum* (Ach.) Th. Fr.

Pitard & Bouly de Lesdain (1909: 252), Lee (1927: 86), Werner (1951: 203), Werner (1956: 40), Seaward (1973).

Caloplaca subochracea (Wedd.) Werner

Egea & al. (1990: 414).

Caloplaca tavaresiana Nav.-Ros. & Cl. Roux

Herb. Triebel.

Caloplaca teicholyta (Ach.) J. Steiner = *C. arenaria* auct. p. p. non (Pers.) Müll. Arg.

Pitard & Bouly de Lesdain (1909: 252), Burrollet (1927: 74), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 33), Seaward (1973). Herb. COLO, MRDS, Triebel.

Caloplaca variabilis (Pers.) Müll. Arg.

Pitard & Bouly de Lesdain (1909: 253 as *Pyrenodesmia variabilis*), Burrollet (1927: 74 as *P. variabilis* var. *albescens*), Werner (1951: 203), Werner (1956: 39), Seaward (1973). Herb. Triebel.

***Caloplaca variabilis* var. *bullosa* Flagey**

Pitard & Bouly de Lesdain (1909: 253).

***Caloplaca velana* (A. Massal.) Du Rietz s. lat., incl. var. *schaereri* (Arnold) Clauzade & Cl. Roux**

Seaward (1973). Herb. Triebel.

***Candelariella aurella* (Hoffm.) Zahlbr.**

Hertel (1968: 31), Seaward (1973).

***Candelariella medians* (Nyl.) A. L. Sm., incl. *C. granulata* (Schaer.) Zahlbr.**

Pitard & Bouly de Lesdain (1909: 252 as *Placodium medians*), Werner (1951: 201), Werner (1956: 37), Hertel (1968: 31), Seaward (1973). Herb. MRDS.

***Candelariella senior* Poelt**

Hertel (1968: 31), Poelt (1970: 194).

***Candelariella vitellina* (Hoffm.) Müll. Arg.**

Pitard & Bouly de Lesdain (1909: 253), Werner (1951: 202), Werner (1956: 39), Seaward (1973), Egea & al. (1990: 414), Egea & Llimona (1991: 187).

***Candelariella xanthostigma* (Ach.) Lettau**

Hertel (1968: 31), Seaward (1973).

***Catapyrenium contumescens* (Nyl.) Breuss**

Breuss (1990a: 71), Breuss (1994: 231), Alonso & Egea (1994: 227). Herb. GZU.

***Catapyrenium lachneum* (Ach.) R. Sant. s. lat., incl. *Dermatocarpon hepaticum* auct.**

Hue (1897: 151 as *Endocarpon hepaticum*), Pitard & Bouly de Lesdain (1909: 261 as *E. hepaticum*), Burollet (1927: 75), Werner (1951: 203), Werner (1956: 40), Seaward (1973). Herb. COLO.

***Catapyrenium lachneum* var. *rufopallens* (Nyl.) Servit = *Dermatocarpon rufopallens* (Nyl.) Zahlbr.**

Hue (1897: 151 as *Endocarpon rufopallens*), Werner (1951: 202), Werner (1956: 38).

***Catapyrenium phaeocarpoides* (Nyl.) Breuss**

Breuss (1994: 232).

***Catapyrenium rufescens* (Ach.) Breuss = *Endocarpon rufescens* Ach., *Dermatocarpon rufescens* (Ach.) Th. Fr.**

Hue (1897: 150), Pitard & Bouly de Lesdain (1909: 261), Burollet (1927: 76 as var. *trapeziforme*), Werner (1951: 203), Werner (1956: 40), Breuss (1994: 233).

***Catapyrenium semaforonense* Breuss**

Breuss (1990: 77), Breuss (1994: 234). Herb. Triebel.

***Catapyrenium squamulosum* (Ach.) Breuss = *Dermatocarpella squamulosa* (Ach.) Harada**

Breuss (1990a: 125), Harada (1993: 141), Breuss (1994: 235). Herb. GZU.

***Catapyrenium tenellum* Breuss**

Breuss (1990a: 127), Breuss (1994: 235). Herb. M.

***Catapyrenium virescens* (Zahlbr.) Breuss**

Breuss (1994: 235).

***Catillaria chalybeia* (Borrer) A. Massal.**

Burollet (1927: 75).

***Catillaria lenticularis* (Ach.) Th. Fr.**

Szatala (1930: 163 as forma *erubescens*).

***Catillaria nigroclavata* (Nyl.) Schuler**

Alonso & Egea (1996)

***Catillaria tricolor* (With.) Th. Fr.**

Hertel (1968: 30).

***Chiodecton myrticola* Fée**

Egea (1989: 85), Torrente & Egea (1989a: 205), Egea & al. (1990: 411).

***Chromatochlamys muscorum* (Fr.) H. Mayrhofer & Poelt**

Hertel (1968: 29 as *Microglæna muscorum*), Mayrhofer & Poelt (1985: 36), Mayrhofer (1987: 71).

***Cladonia convoluta* (Lam.) Anders = *C. foliacea* var. *convoluta* (Lam.) Vain.**

Szatala (1930: 164), Seaward (1973). Herb. COLO, MRDS.

***Cladonia fimbriata* (L.) Fr.**

Hue (1897: 139), Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 244 as var. *tubaeformis*), Werner (1951: 202), Werner (1956: 39).

***Cladonia firma* (Nyl.) Nyl.**

Werner (1954: 200 as *C. foliacea* var. *firma*).

***Cladonia foliacea* (Huds.) Willd. = *C. alpicornis* (Lightf.) Fr., *C. endiviifolia* Fr.**

Hue (1897: 138), Pitard & Bouly de Lesdain (1909: 244), Burollet (1927: 73), Werner (1951: 203), Werner (1954: 200), Werner (1956: 40), Seaward (1973). Herb. COLO, MRDS.

***Cladonia furcata* (Huds.) Schrad.**

Gillot & Patouillard (1904: 142 as var. *corymbosa*), Pitard & Bouly de Lesdain (1909: 245 as vars. *racemosa* and *corymbosa*), Werner (1951: 202), Werner (1956: 39).

***Cladonia mediterranea* P.A. Duvign. & Abbayes**

des Abbayes & Duvigneaud 1947: 100), Ahti (1961: 129).

***Cladonia pocillum* (Ach.) O. J. Rich. = *C. pyxidata* var. *pocillum* (Ach.) Flot.**

Pitard & Bouly de Lesdain (1909: 244), Burollet (1927: 73), Seaward (1973). Herb. COLO.

***Cladonia portentosa* (Dufour) Coem.**

Hue (1897: 139 as *C. sylvatica* var. *pumila*), Faurel & al. (1951a: 118).

***Cladonia pyxidata* (L.) Hoffm.**

Hue (1897: 138 as var. *neglecta*), Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 244 as var. *neglecta*), Szatala (1930: 164 as var. *neglecta*), Werner (1951: 202), Werner (1956: 39).

Cladonia ramulosa (With.) J. R. Laundon

Werner (1954: 200 as *C. pityrea* var. *zwackhii* forma *crassiuscula*).

Cladonia rangiformis Hoffm.

Pitard & Bouly de Lesdain (1909: 245 incl. forma *foliosa*), Szatala (1930: 164 as *C. pungens* var. *foliosa*), Werner (1951: 203), Werner (1956: 39), Seaward (1973). Herb. MRDS, Triebel.

Cladonia strepsilis (Ach.) Vain.

Werner (1954: 200 as forma *subalbicornis*).

Cladonia symphycarpa (Flörke) Fr.

Werner (1954: 200).

Clauzadea chondrodes (A. Massal.) Clauzade & Cl. Roux = *Lecidea chondrodes* A. Massal., *Protoblastenia chondrodes* (A. Massal.) Zahlbr.

Burollet (1927: 75), Werner (1951: 202), Werner (1956: 38).

Clauzadea immersa (Hoffm.) Hafellner & Bellem. = *Lecidea immersa* (Hoffm.) Ach.

Burollet (1927: 75).

Clauzadea metzleri (Körb.) D. Hawksw. = *Lecidea metzleri* (Körb.) Th. Fr.

Seaward (1973), Hertel (1973: 492). Herb. MRDS.

Clauzadea monticola (Ach.) Hafellner & Bellem.

Burollet (1927: 75 as *Lecidea fuscorubens*), Seaward (1973). Herb. MRDS.

Collema auriforme (With.) Coppins & J. R. Laundon = *C. auriculatum* Hoffm.

Degelius (1954: 358), Hertel (1968: 30), Seaward (1973).

Collema crispum (Huds.) F. H. Wigg. = *C. cheileum* (Ach.) Ach.

Pitard & Bouly de Lesdain (1909: 263), Werner (1951: 203), Degelius (1954: 297), Werner (1956: 40), Hertel (1968: 30), Seaward (1973).

Collema cristatum (L.) F. H. Wigg.

Pitard & Bouly de Lesdain (1909: 263 as *C. multifidum*).

Collema fasciculare (L.) F. H. Wigg.

Hue (1897: 138 as *C. aggregatum*), Werner (1951: 203 as *C. aggregatum*), Degelius (1954: 458).

Collema flaccidum (Ach.) Ach.

Pitard & Bouly de Lesdain (1909: 263), Degelius (1954: 400), Poelt & al. (1968: 30).

Collema furfuraceum (Arnold) Du Rietz

Degelius (1954: 451), Hertel (1968: 30).

Collema fuscovirens (With.) J. R. Laundon = *C. tuniforme* (Ach.) Ach, *C. furvum* Ach.

Pitard & Bouly de Lesdain (1909: 263).

Collema latzelii Zahlbr.

Hertel (1968: 30), Degelius (1974: 95).

***Collema nigrescens* (Huds.) DC.**

Pitard & Bouly de Lesdain (1909: 264 as *Collemodiopsis nigrescens*), Werner (1951: 203), Werner (1954: 199), Degelius (1954: 436), Werner (1956: 39), Hertel (1968: 30).

***Collema rysssoleum* (Tuck.) A. Schneid.**

Hue (1906: 97 as *C. meridionale*), Degelius (1954: 442).

***Collema subflaccidum* Degel.**

Degelius (1954: 405 as *C. subfurvum*).

***Collema subnigrescens* Degel.**

Degelius (1954: 425), Lamb (1963: 206).

***Collema tenax* (Sw.) Ach. = *C. pulposum* (Schrad.) Ach. and vars. *tenax* Ach. and *granulatum* Stizenb.**

Hue (1897: 137), Pitard & Bouly de Lesdain (1909: 263), Burollet (1927: 76), Werner (1951: 203), Werner (1956: 39), Hertel (1968: 30), Seaward (1973). Herb. Triebel.

***Collemopsidium calcicola* J. Steiner**

Szatala (1930: 163). Probably a lichenicolous fungus, but status and position in need of clarification (D. L. Hawksworth, *in litt.*)

***Dactylospora saxatilis* (Schaer.) Hafellner**

Egea & al. (1990: 414).

***Degelia atlantica* (Degel.) M. Jörg. & P. James = *Parmeliella atlantica* Degel.**

Hertel (1968: 30).

***Degelia plumbea* (Lightf.) M. Jörg. & P. James = *Parmeliella plumbea* (Lightf.) Vain.**

Pitard & Bouly de Lesdain (1909: 249 as *Pannaria plumbea*), Degelius (1935: 140), Werner (1951: 203), Werner (1954: 200), Werner (1956: 40), Hertel (1968: 30).

***Diploicia canescens* (Dicks.) A. Massal. = *Buellia canescens* (Dicks.) De Not.**

Lee (1927: 86), Hertel (1968: 32), Seaward (1973). Herb. MRDS.

***Diploicia subcanescens* (Werner) Hafellner & Poelt**

Egea & al. (1990: 414).

***Diploschistes candidissimus* (Kremp.) Zahlbr. = *D. calcareus* (Müll. Arg.) J. Steiner, *D. farinosus* (Anzi) Vezda**

Pitard & Bouly de Lesdain (1909: 258 as *Urceolaria actinostoma*), Werner (1951: 201), Werner (1956: 37), Seaward (1973), Lumbsch (1989: 167). Herb. MRDS.

***Diploschistes diacapsis* (Ach.) Lumbsch = *D. steppicus* Reichert**

Seaward (1973), Lumbsch (1989: 169). Herb. COLO, MRDS.

***Diploschistes gypsaceus* (Ach.) Zahlbr. = *Urceolaria gypsacea* Ach.**

Hue (1897: 147), Pitard & Bouly de Lesdain (1909: 258), Burollet (1927: 74).

***Diploschistes muscorum* (Scop.) R. Sant. = *D. subscruposus* (Nyl.) Zahlbr.**

Werner (1954: 199), Lumbsch (1989: 181).

***Diploschistes ocellatus* (Vill.) Norman**

Burollet (1927: 74), Werner (1951: 201), Werner (1956: 37), Hertel (1968: 31), Seaward (1973). Herb. COLO, MRDS.

***Diploschistes scruposus* (Schreb.) Norman**

Pitard & Bouly de Lesdain (1909: 258), Werner (1951: 202), Werner (1956: 39), Hertel (1968: 31), Seaward (1973), Egea & al. (1990: 414), Egea & Llimona (1991: 188).

***Diploschistes subscruposus* (Nyl.) Zahlbr.**

Werner (1954: 199).

***Diplotomma alboatrum* (Hoffm.) Flot. = *Buellia alboatra* (Hoffm.) Branth & O. Rostr.**

Pitard & Bouly de Lesdain (1909: 260), Burollet (1927: 75), Werner (1951: 203), Werner (1956: 40), Hertel (1968: 32), Seaward (1973), Alonso & Egea (1996). Herb. MRDS, Triebel.

***Diplotomma chlorophaeum* (Leight.) Szatala = *Buellia porphyrica* (Arnold) Mong.**

Hertel (1968: 32).

***Diplotomma dispersum* (Kremp.) Arnold**

Pitard & Bouly de Lesdain (1909: 260 as *Buellia dispersa*).

***Diplotomma epipolium* (Ach.) Arnold**

Pitard & Bouly de Lesdain (1909: 260), Burollet (1927: 75), Hertel (1968), Seaward (1973). Herb. COLO, MRDS, Triebel.

***Diplotomma hedinii* H. Magn.**

Hertel (1968: 32).

***Diplotomma venustum* (Körb.) Körb. = *Buellia venusta* (Körb.) Lettau**

Seaward (1973). Herb. MRDS.

***Dirina ceratoniae* (Ach.) Fr.**

Burollet (1927: 74), Werner (1951: 201), Faurel & al. (1954: 295), Hertel (1968: 29), Seaward (1973), Tehler (1983: 42). Herb. MRDS.

***Dirina massiliensis* Durieu & Mont.**

Tehler (1983: 33), Roux (1991: 167).

***Dirina massiliensis* forma *sorediata* (Müll. Arg.) Tehler**

Hertel (1968: 29 as *D. stenhammari*), Poelt & Follmann (1968: 64 as *Lecanactis stenhammari*), Seaward (1973), Tehler (1983: 34), Roux (1991: 167).

***Dirina paradoxa* (Fée) Tehler ssp. *africana* (Fée) Tehler**

Egea (1989: 89), Egea & al. (1990: 411).

***Dirina paradoxa* ssp. *africana* forma *sorediata* Egea**

Egea (1989: 89), Egea & al. (1990: 412), Egea & Llimona (1991: 188).

***Endocarpon pusillum* Hedw.**

Pitard & Bouly de Lesdain (1909: 262 as *Dermatocarpon garovaglii*), Seaward (1973). Herb. MRDS.

***Enterographa crassa* (DC.) Fée**

Pitard & Bouly de Lesdain (1909: 260 as *Stigmatidium crassum*), Culberson (1952: 282), Faurel & al. (1953: 49), Werner (1951: 202 as *Chiodecton crassum*), Werner (1956: 38).

***Evernia prunastri* (L.) Ach.**

Hue (1897: 139), Pitard & Bouly de Lesdain (1909: 246), Werner (1951: 203), Werner (1954: 204 as var. *sorediifera*), Werner (1956: 40), Hertel (1968: 32).

***Fulgensia fulgens* (Sw.) Elenkin**

Pitard & Bouly de Lesdain (1909: 251 as *Squamaria fulgens*), Burollet (1927: 74 as *S. fulgens*), Werner (1951: 202 as *Caloplaca fulgens*), Werner (1956: 38 as *C. fulgens*), Seaward (1973).

***Fulgensia fulgida* (Nyl.) Szatala**

Hue (1897: 142 as *Lecanora fulgida* var. *minor* Hue), Szatala (1930: 165), Werner (1951: 201 as *Caloplaca fulgida*), Werner (1956: 37 as *C. fulgida*), Hertel (1968: 33), Seaward (1973). Herb. MRDS.

***Fulgensia schistidii* (Anzi) Poelt**

Hertel (1968: 33).

***Fulgensia subbracteata* (Nyl.) Poelt**

Hertel (1968: 33), Seaward (1973). Herb. MRDS.

***Gloeoheppia erosa* (J. Steiner) K. Marton**

Egea (1989a: 43), Henssen (1995: 273).

***Gloeoheppia turgida* (Ach.) Gyeln. = *Heppia turgida* (Ach.) Nyl.**

Hue (1897: 142 as *Heppia fulva*), Egea (1989a: 60).

***Gonohymenia algerica* J. Steiner**

Hertel (1968: 30).

***Gyalecta truncigena* (Ach.) Hepp**

Hertel (1968: 30).

***Gyalecta ulmi* (Sw.) Zahlbr.**

Hue (1897: 147 as *Lecanora rubra*).

***Hafellia leptoclinoides* (Nyl.) Scheid. & H. Mayrhofer**

Egea & al. (1990: 414).

***Heppia crispatula* Nyl.**

Hertel (1968: 30).

***Heppia despreauxii* (Mont.) Tuck. = *Heppia gigantea* Egea & Llimona**

Egea (1989a: 48), Henssen (1994: 66).

***Heppia solorinoides* (Nyl.) Nyl. = *H. reticulata* (Dufour in Fr.) Nyl.**

Hue (1897: 141 as *H. reticulata* var. *patouillardii* Hue), Werner (1951: 202), Werner (1956: 38 incorrectly cited as *H. articulata*), Hertel (1968: 30), Egea (1989a: 56).

***Heppia subrosulata* J. Steiner**

Hertel (1968: 30).

Heterodermia obscurata (Nyl.) Trevis.

Hue (1897: 140 as *Physcia speciosa*).

Hyperphyscia adglutinata (Flörke) H. Mayrhofer & Poelt = *Physcia adglutinata* (Flörke) Nyl., *P. elaeina* auct.

Burollet (1927: 73), Werner (1951: 203), Werner (1956: 40), Hertel (1968: 32), Seaward (1973).

Julella myrticola (de Lesd.) Barr

Alonso & Egea (1996).

Lasallia pustulata (L.) Mérat

Werner (1951: 203), Werner (1956: 40), Egea & Llimona (1991: 188).

Lecanactis grumulosa (Dufour) Fr. incl. var. *monstrosa* (Bagl.) Egea & Torrente

Hertel (1968: 29), Egea (1989: 90), Torrente & Egea (1989a: 167), Egea & al. (1990: 414), Egea & Llimona (1991: 188). Herb. MUB.

Lecanactis lyncea (Sm.) Fr. = *Opegrapha stictica* Nyl., *Lecanactis stictica* Durieu & Mont.

Pitard & Bouly de Lesdain (1909: 261).

Lecania cyrtella (Ach.) Th. Fr.

Seaward (1973), Alonso & Egea (1996). Herb. MRDS.

Lecania cyrtellina (Nyl.) Sandst.

Alonso & Egea (1996).

Lecania erysibe (Ach.) Mudd

Pitard & Bouly de Lesdain (1909: 255), Burollet (1927: 74), Seaward (1973).

Lecania inundata (Körb.) M. Mayrhofer

Mayrhofer (1988: 71).

Lecania olivacella (Nyl.) Zahlbr.

Mayrhofer (1988: 80).

Lecania spadicea (Flot.) Zahlbr.

Mayrhofer (1988: 97), Roux (1991: 167).

Lecania turicensis (Hepp) Müll. Arg.

Mayrhofer (1988: 116).

Lecanographa farinosa (Hepp) Egea & Torrente = *Lecanactis farinosa* (Hepp) Egea, Torrente & Manrique

Egea & al. 1993: 105), Egea & Torrente (1994: 132). Herb. MUB.

Lecanographa wernerii (Faurel, Ozenda & Schotter) Egea & Torrente = *Lecanactis wernerii* (Faurel, Ozenda & Schotter) Egea & Torrente

Egea (1989: 93), Torrente & Egea (1989a: 175), Egea & al. (1990: 412), Egea & al. (1993: 112), Egea & Torrente (1994: 164). Herb. MUB.

Lecanora albescens (Hoffm.) Branth & O. Rostr.

Seaward (1973). Herb. MRDS, Triebel.

***Lecanora campestris* (Schaer.) Hue**

Hertel (1968: 31), Seaward (1973).

***Lecanora carpinea* (L.) Vain. = *L. angulosa* (Schaer.) Ach.**

Hue (1897: 145), Pitard & Bouly de Lesdain (1909: 254), Werner (1951: 203), Werner (1956: 39).

***Lecanora chlarotera* Nyl. s. lat. incl. *L. subfusca* auct., *L. chlarona* auct.**

Hue (1897: 145), Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 254 as forma *cretacea* and var. *glabrata*), Burollet (1927: 74 as *L. subfusca* var. *allophanum*), Werner (1951: 202), Werner (1956: 39), Hertel (1968: 31), Seaward (1973). Herb. COLO, MRDS.

***Lecanora crenulata* (Dicks.) Hook.**

Pitard & Bouly de Lesdain (1909: 254), Seaward (1973).

***Lecanora dispersa* (Pers.) Sommerf. s. lat. incl. *L. hagenii* auct.**

Hue (1897: 146), Pitard & Bouly de Lesdain (1909: 255), Burollet (1927: 74), Werner (1951: 203), Werner (1956: 40), Seaward (1973). Herb. MRDS.

***Lecanora fragilis* (Scop.) Zahlbr.**

Werner (1951: 201), Werner (1956: 37).

***Lecanora graeca* Steiner**

Hertel (1968: 31), Leuckert & al. (1981: 469).

***Lecanora horiza* (Ach.) Lindsay = *L. laevis* Poelt**

Pitard & Bouly de Lesdain (1909: 254 as *L. subfusca* forma *horiza*), Hertel (1968: 31), Seaward (1973), Alonso & Egea (1996). Herb. MRDS.

***Lecanora lisbonensis* Samp.**

Burollet (1927: 74 as *Squamaria circinata*), Hertel (1968: 31), Seaward (1973).

***Lecanora muralis* (Schreb.) Rabenh. incl. var. *diffracta* (Ach.) Rabenh. and var. *versicolor* (Pers.) Tuck.**

Pitard & Bouly de Lesdain (1909: 250 as *Squamaria saxicola*), Werner (1951: 203 as *Squamaria muralis*), Werner (1954: 203), Werner (1956: 40), Hertel (1968: 31), Seaward (1973), Egea & Llimona (1991: 188). Herb. COLO.

***Lecanora orosthea* (Ach.) Ach.**

Egea & al. (1990: 414).

***Lecanora piniperda* Körb.**

Pitard & Bouly de Lesdain (1909: 254), Werner (1951: 203), Werner (1956: 40).

***Lecanora pitardi* (de Lesd.) Zahlbr.**

Pitard & Bouly de Lesdain (1909: 250 as *Squamaria pitardi*).

***Lecanora pruinosa* Chaub.**

Pitard & Bouly de Lesdain (1909: 251 as *L. pruinifera*), Burollet (1927: 74 as *Squamaria pruinosa*), Werner (1951: 202 as *S. pruinosa*), Werner (1956: 38), Hertel (1968: 31), Seaward (1973). Herb. MRDS.

***Lecanora rupicola* (L.) Zahlbr.**

Egea & al. (1990: 415).

Lecanora rupicola* ssp. *sulphurata (Ach.) Leuckert & Poelt = *L. sulphurata* (Ach.) Nyl.

Werner (1951: 202), Werner (1956: 38), Egea & Llimona (1991: 189).

Lecanora schistina (Nyl.) Arnold

Egea & al. (1990: 415).

Lecanora sulphurea (Hoffm.) Ach. = *Lecidea sulphurea* (Hoffm.) Wahlenb.

Pitard & Bouly de Lesdain (1909: 254), Werner (1951: 203), Werner (1956: 40), Hertel (1968: 31), Egea & Llimona (1991: 189).

Lecidea fuscoatra (L.) Ach.

Pitard & Bouly de Lesdain (1909: 259 as *L. badiopallens*).

Lecidea sanguineoatra (Wulfen) Ach.

Pitard & Bouly de Lesdain (1909: 259), Werner (1951: 203), Werner (1956: 40).

Lecidella carpathica Körb.

Knoph (1990: 86).

Lecidella elaeochroma (Ach.) M. Choisy = *Lecidea limitata* (Scop.) Gray, *L. parasema* auct.

Hue (1897: 148 as *Lecidea enteroleuca* and *L. parasema* forma *limitata*), Pitard & Bouly de Lesdain (1909: 259), Werner (1951: 202), Werner (1956: 39), Hertel (1968: 30), Seaward (1973), Alonso & Egea (1996).

Lecidella elaeochroma* var. *flavicans (Ach.) Hertel

Hertel (1968: 30).

Lecidella euphorea (Flörke) Hertel

Hue (1897: 148 as *Lecidea euphorea* and var. *leucoplacoides*).

Lecidella stigmatea (Ach.) Hertel & Leuckert = *Lecidea stigmatea* Ach.

Hertel (1968: 31), Seaward (1973).

Lempholemma polyanthes (Bernh.) Malme

Seaward (1973). Herb. MRDS.

Leptogium gelatinosum (With.) J. R. Laundon

Pitard & Bouly de Lesdain (1909: 264 as *L. scotinum*).

Leptogium gelatinosum* var. *pulvinatum (Hoffm.) Zahlbr.

Pitard & Bouly de Lesdain (1909: 264).

Leptorhaphis oleae (A. Massal.) Körb.

Alonso & Egea (1996).

Lichinella stipatula Nyl.

Egea & al. (1990: 415).

Lobaria amplissima (Scop.) Forss. incl. *Dendriscocaulon umhausense* (Auersw.) Degel.

Hertel (1968: 30).

Lobaria pulmonaria (L.) Hoffm.

Hue (1897: 140 as *L. pulmonacea* and var. *papillaris*), Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 249 as *L. pulmonacea* forma *papillaris*),

Werner (1951: 202), Werner (1954: 200), Werner (1956: 39), Hertel (1968: 30). Herb. E.

Lobaria scrobiculata (Scop.) DC. = *L. verrucosa* Hoffm.

Pitard & Bouly de Lesdain (1909: 249), Faurel & al. (1953a: 375), Werner (1954: 200), Werner (1956: 40), Hertel (1968: 30).

Nephroma laevigatum Ach. = *N. lusitanicum* (Schaer.) Nyl.

Hue (1897: 140), Pitard & Bouly de Lesdain (1909: 249), Degelius (1935: 93), Werner (1951: 203), Faurel & al. (1951: 85), Werner (1956: 40), Hertel (1968: 30), James & Walker (1987: 263).

Nephroma tangeriense (Maheu & A. Gillet) Zahlbr.

James & Walker (1987: 263).

Normandina pulchella (Borrer) Nyl.

Hertel (1968: 29).

Ochrolechia balcanica Versegghy

Hertel (1968: 31), Hanks & al. (1985: 177).

Ochrolechia harmandii Versegghy

Seaward (1973). Herb. MRDS.

Ochrolechia parella (L.) A. Massal.

Pitard & Bouly de Lesdain (1909: 257), Werner (1951: 203), Werner (1956: 39), Hertel (1968: 31), Seaward (1973), Hanks & al. (1985: 188), Egea & Llimona (1991: 189). Herb. GZU.

Ochrolechia subviridis (Hoeg) Erichsen

Werner (1954: 201 as *Pertusaria subviridis* var. *albescens*), Hertel (1968: 31), Hanks & al. (1985: 190). Herb. GZU.

Opegrapha atra Pers. s. lat.

Pitard & Bouly de Lesdain (1909: 261), Werner (1951: 203), Werner (1956: 39), Faurel & al. (1953: 42), Torrente & Egea (1989a: 72). Herb. MUB.

Opegrapha calcarea Sm.

Burollet (1927: 75), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 29), Seaward (1973). Vezda, *Lichenes selecti exsiccati* no. 755.

Opegrapha circumducta Nyl.

Egea (1989: 93), Torrente & Egea (1989a: 88), Egea & al. (1990: 415). Herb. MUB.

Opegrapha deusta Jatta

Hertel (1968: 29).

Opegrapha durieui Mont.

Egea (1989: 94).

Opegrapha endoleuca Nyl.

Torrente & Egea (1989a: 94). Vezda, *Lichenes selecti exsiccati* no. 1852. Herb. H, BCC.

***Opegrapha mougeotii* A. Massal.**

Egea & al. (1990: 415).

***Opegrapha ochrocincta* Werner**

Seaward (1973), Torrente & Egea (1989: 387), Torrente & Egea (1989a: 114). Herb. MRDS, MUB.

***Opegrapha rupestris* Pers. = *O. saxicola* Ach.**

Pitard & Bouly de Lesdain (1909: 261), Werner (1951: 204), Faurel & al. (1953: 40), Werner (1956: 41), Torrente & Egea (1989a: 121). Herb. MUB.

***Opegrapha subelevata* (Nyl.) Nyl.**

Burollet (1927: 75), Faurel & al. (1953: 40).

***Opegrapha tunetana* de Lesd.**

Bouly de Lesdain (1932: 688), Faurel & al. (1953: 43), Lamb (1963: 449), Torrente & Egea (1989a: 152).

***Opegrapha varia* Pers. = *O. lichenoides* Pers.**

Pitard & Bouly de Lesdain (1909: 261), Hertel (1968: 29), Seaward (1973), Torrente & Egea (1989a: 132). Herb. MRDS, MUB.

***Pannaria ignobilis* Anzi**

Hertel (1968: 30).

***Pannaria mediterranea* Tavares**

Jørgensen (1978: 46).

***Pannaria olivacea* M. Jörg.**

Jørgensen (1978: 51).

***Pannaria rubiginosa* (Ach.) Bory**

Hertel (1968: 30).

***Pannaria sampaiana* Tavares**

Jørgensen (1978: 65).

***Parmelia acetabulum* (Neck.) Duby**

Hertel (1968: 32).

***Parmelia caperata* (L.) Ach.**

Pitard & Bouly de Lesdain (1909: 246), Werner (1951: 203), Werner (1954: 204 as forma *subglauca*), Werner (1956: 39), Hertel (1968: 32).

***Parmelia delisei* (Duby) Nyl.**

Werner (1951: 202), Werner (1956: 38).

***Parmelia glabra* (Schaer.) Nyl.**

Werner (1954: 203 as *P. olivacea*), Ahti (1966: 48).

***Parmelia glabratula* (Lamy) Nyl.**

Pitard & Bouly de Lesdain (1909: 246 as *P. fuliginosa* var. *laetevirens*), Hertel (1968: 32), Seaward (1973).

***Parmelia perlata* (Huds.) Ach. = *P. trichotera* Hue**

Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 246), Werner (1951: 203), Werner (1956: 39), Hale (1965: 302), Hertel (1968: 32).

***Parmelia pulla* Ach. = *P. proluxa* (Ach.) Carroll**

Hue (1897: 139), Pitard & Bouly de Lesdain (1909: 247 as *P. proluxa* var. *perrugata*), Werner (1954: 203), Hertel (1968: 32), Leuckert & al. (1975: 32), Egea & Llimona (1991: 189).

***Parmelia quercina* (Willd.) Vain. = *P. carporrhizans* Taylor**

Werner (1951: 203), Werner (1954: 204), Werner (1956: 39), Hertel (1968: 32), Hale (1976: 43).

***Parmelia saxatilis* (L.) Ach.**

Werner (1954: 204 incl. var. *furfuracea* and forma *laevis*), Werner (1956: 39), Hertel (1968: 32).

***Parmelia subaurifera* Nyl.**

Pitard & Bouly de Lesdain (1909: 246), Werner (1951: 203), Werner (1956: 40).

***Parmelia submontana* Hale = *P. contorta* Duby**

Hertel (1968: 32), Schindler (1975: 362).

***Parmelia subrudecta* Nyl.**

Gillot & Patouillard (1904: 142 as *P. dubia*), Hertel (1968: 32 as *P. helenae*).

***Parmelia sulcata* Taylor**

Hue (1897: 139), Pitard & Bouly de Lesdain (1909: 246), Werner (1951: 203), Werner (1956: 40).

***Parmelia tiliacea* (Hoffm.) Ach. s. lat. = *P. scortea* (Ach.) Ach.**

Hue (1897: 139), Pitard & Bouly de Lesdain (1909: 246), Werner (1951: 203), Werner (1954: 204), Werner (1956: 39), Hertel (1968: 32), Hale (1976: 50), Egea & Llimona (1991: 189).

***Parmelia tinctoria* Maheu & A. Gillet**

Hertel (1968: 32).

***Parmelia wernerii* (M. Choisy) Zahlbr.**

Faurel & al. (1953a: 382 as *P. melanothrix* ssp. *wernerii*).

***Peccania coralloides* (A. Massal.) A. Massal.**

Hue (1897: 136 as var. *arenicola*), Werner (1951: 201), Werner (1956: 37).

***Peccania synaliza* (Ach.) Forssell**

Hertel (1968: 30).

***Peltigera collina* (Ach.) Schrad.**

Vitikainen (1994: 35).

***Peltigera neckeri* Müll. Arg.**

Vitikainen (1987: 242), Vitikainen (1994: 66).

Peltigera praetextata (Sommerf.) Zopf = *P. rufescens* var. *praetextata* Nyl.

Pitard & Bouly de Lesdain (1909: 249), Faurel & al. (1951: 88), Werner (1951: 202 incorrectly cited as *P. rufescens*), Werner (1956: 39 incorrectly cited as *P. rufescens*), Vitikainen (1994: 76).

Peltula euploca (Ach.) Poelt

Hertel (1968: 30), Egea (1989a: 76).

Peltula obscuratula Nyl.

Hertel (1968: 30), Egea (1989a: 87).

Peltula radicata Nyl.

Hertel (1968: 30), Egea (1989a: 105).

Pertusaria albescens (Huds.) M. Choisy & Werner s. lat. incl. *P. globulifera* (Turner) A. Massal.

Pitard & Bouly de Lesdain (1909: 258 as *P. scutellaris*), Faurel & al. (1951: 111), Hertel (1968: 31), Seaward (1973). Vezda, *Lichenes selecti exsiccati* no. 764.

Pertusaria amara (Ach.) Nyl.

Werner (1951: 203), Werner (1956: 40), Hanko (1983: 223).

Pertusaria colliculosa Körb.

Hertel (1968: 31).

Pertusaria debazaci Werner

Werner (1954: 201), Lamb (1963: 530).

Pertusaria excludens Nyl.

Hertel (1968: 31), Hanko (1983: 200).

Pertusaria flavida (DC.) J. R. Laundon

Hertel (1968: 31), Hanko (1983: 82).

Pertusaria ficorum Zahlbr.

Hertel (1968: 31).

Pertusaria gallica de Lesd.

Egea & al. (1990: 413).

Pertusaria hemisphaerica (Flörke) Erichsen

Erichsen (1938: 103 as var. *splendida*), Almborn (1948: 73), Hertel (1968: 31), Hanko (1983: 142).

Pertusaria heterochroa (Müll. Arg.) Erichsen

Alonso & Egea (1996)

Pertusaria hymenea (Ach.) Schaer. = *P. wulfenii* DC.

Pitard & Bouly de Lesdain (1909: 257), Werner (1951: 203), Faurel & al. (1951: 104), Werner (1956: 40), Hertel (1968: 31), Hanko (1983: 91).

Pertusaria ilicicola Harm.

Hertel (1968: 31), Hanko (1983: 93).

***Pertusaria lactea* (L.) Arnold**

Hanko (1983: 147).

***Pertusaria leioplaca* DC. = *P. leucostoma* (Bernh.) A. Massal.**

Pitard & Bouly de Lesdain (1909: 257), Werner (1951: 203), Faurel & al. (1951: 105), Werner (1956: 39).

***Pertusaria melanochlora* (DC.) Nyl.**

Egea & al. (1990: 415).

***Pertusaria monogona* Nyl.**

Egea & al. (1990: 415).

***Pertusaria multipuncta* (Turner) Nyl.**

Pitard & Bouly de Lesdain (1909: 258), Werner (1951: 204), Faurel & al. (1951: 109), Werner (1956: 41).

***Pertusaria pertusa* (Weigel) Tuck. = *P. communis* DC.**

Hue (1897: 147), Pitard & Bouly de Lesdain (1909: 257), Faurel & al. (1951: 103), Werner (1954: 201), Hertel (1968: 31), Hanko (1983: 121).

***Pertusaria pertusa* var. *polycarpa* (Clemente) Zahlbr.**

Hertel (1968: 31).

***Pertusaria pertusa* var. *rupestris* (DC.) Dalla Torre & Sarnth. = *P. rupestris* (DC.) J. Steiner**

Faurel & al. (1951: 103), Egea & al. (1990: 415), Egea & Llimona (1991: 190).

***Pertusaria pseudocorallina* (Lilj.) Arnold = *P. concreta* Nyl., *P. ceuthocarpoides* Zahlbr.**

Szatala (1930: 164), Faurel & al. (1951: 103), Egea & al. (1990: 415).

***Pertusaria teneriffensis* Vain.**

Hanko (1983: 229).

***Pertusaria velata* (Turner) Nyl.**

Pitard & Bouly de Lesdain (1909: 257), Werner (1951: 203), Faurel & al. (1951: 107), Werner (1956: 39).

***Phaeophyscia cernohorskyi* (Nadv.) Essl. = *Physcia strigosa* Poelt & Buschardt**

Hertel (1968: 32), Seaward (1973), Poelt (1974: 199). Herb. MRDS.

***Phaeophyscia hirsuta* (Mereschk.) Essl. = *Physcia hirsuta* Mereschk.**

Hertel (1968: 32).

***Phaeophyscia orbicularis* (Neck.) Moberg**

Burollet (1927: 73 as *Physcia obscura*), Hertel (1968: 32 as var. *echinella*), Seaward (1973).

***Phaeophyscia sciastra* (Ach.) Moberg**

Pitard & Bouly de Lesdain (1909: 248 as *Physcia lithotea*), Werner (1951: 203), Werner (1956: 40).

***Phlyctis agelaea* (Ach.) Flot.**

Pitard & Bouly de Lesdain (1909: 258), Werner (1951: 202), Faurel & al. (1953a: 381), Werner (1956: 38), Seaward (1973).

Physcia adscendens (Fr.) H. Olivier

Hertel (1968: 32), Seaward (1973). Herb. COLO, MRDS.

Physcia aipolia (Humb.) Hampe

Hue (1897: 141), Pitard & Bouly de Lesdain (1909: 248), Werner (1951: 203), Werner (1956: 39).

Physcia biziana (A. Massal.) Zahlbr. var. ***leptophylla*** Vezda

Hertel (1968: 32).

Physcia caesia (Hoffm.) Fűrnr. var. ***caesiella*** (de Lesd.) Clauzade & Cl. Roux = *P. wainioi* Rasanen

Hertel (1968: 32).

Physcia clementei (Sm.) Maas Geest.

Hertel (1968: 32).

Physcia semipinnata (J.F.Gmel.) Moberg = *P. leptalea* (Ach.) DC.

Hue (1897: 141), Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 248 as *P. ascendens* forma *leptalea*), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 32), Seaward (1973).

Physcia stellaris (L.) Nyl.

Pitard & Bouly de Lesdain (1909: 247), Werner (1951: 203), Werner (1956: 40).

Physcia tenella (Scop.) DC.

Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 248 as *P. ascendens* forma *tenella*), Hertel (1968: 32), Seaward (1973).

Physcia tenella ssp. ***marina*** (A. E. Nyl.) D. Hawksw. = *P. obscura* (Nyl.) Nyl.

Hertel (1968: 32).

Physconia distorta (With.) J. R. Laundon = *P. pulverulacea* Moberg, *Physcia pulverulenta* Nyl.

Pitard & Bouly de Lesdain (1909: 248). Herb. COLO.

Physconia enteroxantha (Nyl.) Poelt

Hertel (1968: 32).

Physconia muscigena (Ach.) Poelt

Pitard & Bouly de Lesdain (1909: 248 as *Physcia pulverulenta* var. *muscigena*), Werner (1951: 204), Werner (1956: 41).

Physconia perisidiosa (Erichsen) Moberg = *P. farrea* (Ach.) Poelt

Pitard & Bouly de Lesdain (1909: 248 as *Physcia farrea* forma *leucoleiptes*), Hertel (1968: 32).

Physconia servitii (Nadv.) Poelt

Hertel (1968: 32).

Physconia venusta (Ach.) Poelt

Pitard & Bouly de Lesdain (1909: 248), Werner (1951: 202), Werner (1954: 212), Werner (1956: 38), Hertel (1968: 32).

***Physma omphalarioides* (Anzi) Arnold**

Degelius (1955: 138). Herb. S, U.

***Placocarpus schaeferi* (Fr.) Breuss = *Dermatocarpon monstrosum* (Schaer.) Vain.**

Pitard & Bouly de Lesdain (1909: 262 as *Endopyrenium monstrosum*), Werner (1951: 201), Werner (1956: 37), Hertel (1968: 29), Zehetleitner (1978: 720), Egea & al. (1990: 415).

***Placolecis opaca* (Fr.) Hafellner = *Lecidea opaca* Dufour, *Astroplaca opaca* (Fr.) Bagl.**

Hertel (1968: 31), Steiner & al. (1974: 273).

***Placynthium nigrum* (Huds.) Gray**

Pitard & Bouly de Lesdain (1909: 262), Werner (1951: 203), Werner (1956: 40), Seaward (1973). Herb. MRDS.

***Placynthium tremniacum* (A. Massal.) Jatta**

Hertel (1968: 30), Seaward (1973).

***Pleopsidium chlorophanum* (Wahlenb.) Zopf = *Acarospora chlorophana* (Wahlenb.) A. Massal.**

Pitard & Bouly de Lesdain (1909: 256), Faurel & al. (1953a: 381).

***Polychidium muscicola* (Sw.) Gray**

Pitard & Bouly de Lesdain (1909: 264), Werner (1951: 203), Werner (1956: 41).

***Polysporina simplex* (Davies) Vezda**

Egea & al. (1990: 415).

***Porina linearis* (Leight.) Zahlbr.**

Hertel (1968: 29).

***Porpidia cinereoatra* (Ach.) Hertel & Knoph = *Lecidea cinereoatra* Ach.**

Werner (1954: 200).

***Porpidia hydrophila* (Fr.) Hertel & A. J. Schwab**

Pitard & Bouly de Lesdain (1909: 259 as *Lecidea platycarpa*).

***Porpidia macrocarpa* (DC.) Hertel & A. J. Schwab = *Lecidea macrocarpa* (DC.) Steud., *Huilia macrocarpa* (DC.) Hertel**

Pitard & Bouly de Lesdain (1909: 254 as *Lecidea contigua*), Werner (1951: 203), Werner (1956: 40), Hertel (1968: 31), Hertel (1980: 495). Hertel, *Lecideaceae exsiccatae* no. 4.

***Problastenia calva* (Dicks.) Zahlbr.**

Seaward (1973), Triebel (1989: 187). Herb. Triebel.

***Protoparmelia psarophana* (Nyl.) Sancho & A. Crespo = *Lecanora psarophana* Nyl.**

Pitard & Bouly de Lesdain (1909: 255), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 31), Egea & Llimona (1991: 190).

***Pseudevernia furfuracea* (L.) Zopf var. *ceratea* (Ach.) D. Hawksw.**

Werner (1954: 203).

Pseudosagedia byssophila (Körb. ex Hepp) Hafellner & Kalb = *Porina byssophila* (Körb.) Zahlbr.

Hertel (1968: 29), Hafellner & Kalb (1995: 178). Herb. GZU.

Psora decipiens (Hedw.) Hoffm. = *Lecidea decipiens* Ach.

Hue (1897: 148), Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 258), Burollet (1927: 75), Werner (1951: 203), Werner (1956: 39), Hertel (1968: 30), Seaward (1973). Herb. COLO, MRDS.

Psora lurida (With.) DC. = *Lecidea lurida* (With.) Ach.

Pitard & Bouly de Lesdain (1909: 258), Werner (1951: 203), Werner (1956: 39), Hertel (1968: 31), Seaward (1973).

Psora saviczii (Tomin) Follmann & A. Crespo

Seaward (1973). Herb. MRDS.

Psora vallesiaca (Schaer.) Timdal = *P. deceptor* Flagey

Pitard & Bouly de Lesdain (1909: 258), Werner (1951: 201 as *Squamaria deceptor*), Werner (1956: 37 as *Lecanora deceptor*).

Psorotichia numidella (Nyl.) Forssell

Hertel (1968: 30).

Psorotichia obtenebrans (Nyl.) Forssell

Hertel (1968: 30).

Pyrenopsis subcooperta Anzi

Hertel (1968: 30).

Pyrenopsis triptococca Nyl.

Egea & al. (1990: 415).

Pyrenula chlorospila Arnold

Alonso & Egea (1996).

Ramalina calicaris (L.) Fr.

Pitard & Bouly de Lesdain (1909: 245), Werner (1951: 203), Werner (1954: 204), Werner (1956: 39).

Ramalina canariensis J. Steiner

Alonso & Egea (1996).

Ramalina farinacea (L.) Ach. incl. *R. reagens* (de Lesd.) W.L. Culb.

Pitard & Bouly de Lesdain (1909: 245), Werner (1951: 202), Werner (1954: 205), Werner (1956: 39), Hertel (1968: 32).

Ramalina lacera (With.) J. R. Laundon = *R. evernioides* auct., *R. duriae* (De Not.) Bagl.

Pitard & Bouly de Lesdain (1909: 245), Burollet (1927: 73), Werner (1951: 202), Werner (1956: 39).

Ramalina polymorpha (Lilj.) Ach.

Pitard & Bouly de Lesdain (1909: 245 as *R. capitata* var. *emplecta*), Werner (1951: 203 as *R. strepsilis*), Werner (1956: 41 as *R. strepsilis*).

Ramalina requienii (De Not.) Jatta

Egea & Llimona (1991: 190).

Ramalina subfarinacea (Crombie) Nyl. = *R. angustissima* (Anzi) Vain.

Pitard & Bouly de Lesdain (1909: 245), Werner (1951: 202), Werner (1956: 39), Egea & Llimona (1991: 191).

Rhizocarpon geographicum (L.) DC. s. lat.

Pitard & Bouly de Lesdain (1909: 260), Werner (1951: 202), Werner (1954: 200), Runemark (1956: 128 as *R. tinei* ssp. *tinei*), Werner (1956: 39), Egea & Llimona (1991: 191).

Rhizocarpon obscuratum (Ach.) A. Massal.

Pitard & Bouly de Lesdain (1909: 260), Werner (1951: 203), Werner (1956: 41), Egea & Llimona (1991: 191).

Rhizocarpon oportense (Vain.) Räsänen

Egea & al. (1990: 415).

Rhizocarpon umbilicatum (Ramond) Flagey

Pitard & Bouly de Lesdain (1909: 260 as *Diplotomma calcareum*).

Rimularia insularis (Nyl.) Hertel & Rambold

Egea & al. (1990: 415).

Rinodina anomala (Zahlbr.) H. Mayrhofer & Giralt

Alonso & Egea (1996).

Rinodina bischoffii (Hepp) A. Massal.

Hue (1897: 144 as *Lecanora bischoffii* var. *melanops*), Pitard & Bouly de Lesdain (1909: 254), Burollet (1927: 74 as var. *convexula*), Werner (1951: 203), Werner (1956: 40), Hertel (1968: 32), Seaward (1973), Mayrhofer (1984: 383). Herb. COLO, MRDS.

Rinodina cretica H. Mayrhofer

Mayrhofer (1984: 403).

Rinodina dubyana (Hepp) J. Steiner

Mayrhofer (1984: 407).

Rinodina exigua (Ach.) Gray

Hue (1897: 144 as *Lecanora exigua*).

Rinodina gennarii Bagl.

Mayrhofer (1984: 416).

Rinodina guzzinii Jatta

Mayrhofer (1984: 419).

Rinodina immersa (Körb.) Zahlbr.

Pitard & Bouly de Lesdain (1909: 254 as *R. bischoffii* var. *immersa*), Hertel (1968: 32), Seaward (1973), Mayrhofer (1984: 425).

Rinodina lecanorina (A. Massal.) A. Massal.

Mayrhofer (1984: 430), Mayrhofer & al. (1990: 346).

***Rinodina luridescens* (Anzi) Arnold**

Egea & al. (1990: 413).

***Rinodina plana* H. Magn.**

Giralt & Mayrhofer (1995: 151). Herb. GZU.

***Rinodina pruinella* Bagl.**

Giralt & Mayrhofer (1994: 136).

***Rinodina roboris* (Nyl.) Arnold**

Hertel (1968: 32).

***Rinodina tunicata* H. Mayrhofer & Poelt**

Mayrhofer (1984: 471).

***Rinodinella controversa* (A. Massal.) H. Mayrhofer & Poelt**

Mayrhofer & Poelt (1978: 98), Mayrhofer (1984: 478).

***Roccella phycopsis* (Ach.) Ach. = *R. fucoides* Vain.**

Pitard & Bouly de Lesdain (1909: 246), Werner (1951: 201), Faurel & al. (1954: 297), Hertel (1968: 29), Egea & al. (1990: 415).

***Roccella vicentina* (Vain.) Vain.**

Egea (1989: 100), Egea & Llimona (1991: 191).

***Sarcogyne algerica* H. Magn.**

Werner (1951: 202 as *Biatorella algerica*), Werner (1956: 38 as *B. algerica*), Hertel (1968: 31 as *S. algeriensis*).

***Sarcogyne calcifraga* (Müll. Arg.) H. Magn.**

Hertel (1968: 31).

***Sarcogyne privigna* (Ach.) A. Massal.**

Hertel (1968: 31).

***Sarcogyne regularis* Körb. s. lat., incl. *S. pruinosa* Körb. = *Biatorella pruinosa* auct.**

Pitard & Bouly de Lesdain (1909: 257 (incl. var. *macrocarpa*), Burollet (1927: 74), Szatala (1930: 164 as *B. pruinosa* forma *minuta*), Werner (1951: 203), Werner (1956: 40), Seaward (1973). Herb. Triebel.

***Schismatomma albocinctum* (Nyl.) Zahlbr.**

Hertel (1968: 29).

***Schismatomma dirinellum* (Nyl.) Zahlbr.**

Tehler (1993: 25), Alonso & Egea (1996).

***Schismatomma picconianum* (Bagl.) J. Steiner**

Torrente & Egea (1989a: 219). Herb. MUB.

***Sclerophyton circumscriptum* (Taylor) Zahlbr.**

Egea (1989: 100), Torrente & Egea (1989a: 202). Herb. NUB.

***Solenopsis candicans* (Dicks.) J. Steiner**

Pitard & Bouly de Lesdain (1909: 249 as *Squamaria candicans*), Werner (1951: 202), Werner (1956: 38), Hertel (1968: 31), Seaward (1973).

***Solenopsora vulturiensis* A. Massal.**

Hertel (1968: 32).

***Squamarina cartilaginea* (With.) P. James = *S. crassa* (Huds.) Poelt, *Lecanora crassa* (Huds.) Ach.**

Hue (1897: 145), Gillot & Patouillard (1904: 142), Pitard & Bouly de Lesdain (1909: 250 as *Squamaria crassa*), Hertel (1968: 32), Seaward (1973). Herb. MRDS, Triebel.

***Squamarina cartilaginea* var. *algeriensis* Hue**

Pitard & Bouly de Lesdain (1909: 250).

***Squamarina cartilaginea* var. *desertii* Müll. Arg.**

Hue (1897: 145 as *Lecanora crassa* var. *deserti*), Buroillet (1927: 74 as *S. crassa* var. *deserti*).

***Squamarina cartilaginea* var. *desertii* f. *iberica* (Mattick) Poelt**

Herb. COLO.

***Squamarina cartilaginea* var. *pseudocrassa* (Mattick) D. Hawksw.**

Seaward (1973). Herb. COLO.

***Squamarina concrescens* (Müll. Arg.) Poelt**

Poelt (1958: 533), Hertel (1968: 32), Seaward (1973). Herb. MRDS.

***Squamarina gypsacea* (Sm.) Poelt**

Hue (1897: 145 as *Lecanora gypsacea*), Pitard & Bouly de Lesdain (1909: 250 as *Squamaria gypsacea*), Hertel (1968: 32), Seaward (1973).

***Squamarina lentigera* (Weber) Poelt**

Pitard & Bouly de Lesdain (1909: 251), Werner (1951: 203 as *Squamaria lentigera*), Werner (1956: 39 as *Lecanora lentigera*), Hertel (1968: 32), Seaward (1973). Herb. COLO, MRDS.

***Squamarina periculosa* (Schaer.) Poelt**

Hue (1897: 145 as *Lecanora crassa* var. *periculosa*).

***Squamarina stella-petraea* Poelt**

Hertel (1968: 32).

***Staurothele andreanszkyi* Szatala**

Szatala (1930: 163).

***Staurothele hymenogonia* (Nyl.) Th. Fr.**

Szatala (1930: 163).

***Teloschistes villosus* (Ach.) Norman**

Pitard & Bouly de Lesdain (1909: 247 as *Anaptychia villosa*), Werner (1951: 202), Werner (1956: 39), Hertel (1968: 33).

***Tephromela atra* (Huds.) Hafellner ex Kalb = *Lecanora atra* (Huds.) Ach., incl. var. *calcareae* Jatta**

Pitard & Bouly de Lesdain (1909: 255), Werner (1951: 202), Werner (1956: 39), Hertel (1968: 31), Seaward (1973), Egea & al. (1990: 415), Egea & Llimona (1991: 191).

Thelopsis isiaca Stizenb.

Hertel (1968: 29), Seaward (1973). Herb. E, MRDS.

Thyrea frustillata (Nyl.) Zahlbr.

Hertel (1968: 30).

Thyrea girardii (Durieu & Mont.) Bagl. & Carestia

Pitard & Bouly de Lesdain (1909: 264 as *Omphalaria girardi*), Werner (1951: 202), Werner (1956: 38).

Thyrea plicatissima (Nyl.) Zahlbr. = *Anema plicatissimum* Nyl.

Hertel (1968: 30).

Thyrea tiruncula (Nyl.) Zahlbr.

Hertel (1968: 30).

Toninia albilabra (Dufour) H. Olivier = *Lecidea albilabra* Dufour

Hertel (1968: 30), Seaward (1973), Timdal (1991: 35). Herb. GZU.

Toninia aromatica (Sm.) A. Massal.

Burollet (1927: 75), Werner (1951: 202), Werner (1956: 39), Timdal (1991: 42). Herb. GZU, M.

Toninia athallina (Hepp) Timdal = *Catillaria athallina* (Hepp) Lynge

Kiliass (1981: 357), Timdal (1991: 44). Herb. GZU.

Toninia cinereovirens (Schaer.) A. Massal.

Timdal (1991: 56). Herb. GZU.

Toninia lutosa (Ach.) Timdal

Timdal (1991: 70). Herb. GZU.

Toninia opuntiioides (Vill.) Timdal

Timdal (1991: 77). Herb. GZU.

Toninia physaroides (Opiz) Zahlbr.

Timdal (1991: 85). Herb. M.

Toninia sedifolia (Scop.) Timdal = *T. caeruleonigricans* (Lightf.) Th. Fr.

Hue (1897: 148 as *Lecidea vesicularis*), Pitard & Bouly de Lesdain (1909: 259 as *Thalloedema caeruleonigricans*), Szatala (1930: 163), Werner (1951: 203), Werner (1956: 39), Seaward (1973), Timdal (1991: 97). Herb. GZU, M, MRDS, UPS.

Toninia tristis (Th. Fr.) Th. Fr. s. lat. incl. ssp. *pseudotabacina* Timdal = *Psora tabacina* auct.

Burollet (1927: 75 as *Thalloedema tabacina*), Werner (1951: 201), Werner (1956: 37 as *Toninia tabacina*), Hertel (1968: 31), Seaward (1973), Alonso & Egea (1994: 236), Timdal (1991: 115). Herb. GZU, MRDS.

Tornabea scutellifera (With.) J. R. Laundon = *Anaptychia intricata* (Desf.) A. Massal.

Pitard & Bouly de Lesdain (1909: 247), Werner (1951: 202), Werner (1956: 38).

Usnea hirta (L.) F. H. Wigg.

Pitard & Bouly de Lesdain (1909: 246), Motyka (1936-1938: 261 as *U. mollis*), Werner (1951: 202 as *U. mollis*).

Usnea wirthii P. Clerc

Clerc 1984: 35). Herb. PC.

Verrucaria beltraminiana (A. Massal.) Trevis.

Burollet (1927: 76).

Verrucaria calciseda auct.

Pitard & Bouly de Lesdain (1909: 262), Seaward (1973). Herb. MRDS.

Verrucaria fuscula Nyl.

Hue (1897: 151), Werner (1951: 202), Werner (1956: 38).

Verrucaria hochstetteri Fr. = *V. integra* (Nyl.) Nyl., *V. dolomitica* (A. Massal.) Kremp.

Hue (1897: 151), Burollet (1927: 76), Werner (1951: 203), Werner (1956: 41), Seaward (1973).

Verrucaria macrostoma Dufour ex DC. *s. lat.*

Burollet (1927: 76), Werner (1951: 202), Werner (1956: 38), Seaward (1973). Herb. Triebel.

Verrucaria minuta (Hepp) Zschacke = *V. lecideoides* (A. Massal.) Trevis. var. *minuta* (A. Massal.) Hepp

Pitard & Bouly de Lesdain (1909: 262), Werner (1951: 202), Werner (1956: 38).

Verrucaria muralis Ach.

Pitard & Bouly de Lesdain (1909: 262), Burollet (1927: 76), Lee (1927: 86), Seaward (1973).

Verrucaria nigrescens Pers.

Pitard & Bouly de Lesdain (1909: 262), Seaward (1973). Herb. MRDS, Triebel.

Verrucaria periphysata Zahlbr.

Hertel (1968: 29).

Verrucaria veronensis A. Massal.

Burollet (1927: 76), Werner (1951: 202), Werner (1956: 38).

Xanthoria calcicola Ochsner = *X. aureola* (Ach.) Erichsen

Burollet (1927: 73), Hertel (1968: 33), Egea & al. (1990: 416), Seaward (1973), Egea & Llimona (1991: 191).

Xanthoria ectanoides (Nyl.) Zahlbr. = *X. parietina* var. *ectanea* auct.

Szatala (1930: 165).

Xanthoria elegans (Link) Th. Fr. = *Caloplaca elegans* (Link) Th. Fr.

Burollet (1927: 74 as *Placodium elegans* var. *granulosum*), Werner (1951: 202), Werner (1956: 39).

Xanthoria papillifera (Vain.) Poelt = *Caloplaca papillifera* (Vain.) Zahlbr.

Pitard & Bouly de Lesdain (1909: 251), Werner (1951: 204).

Xanthoria parietina (L.) Th. Fr.

Hue (1897: 140), Gillot & Patouillard (1904: 142 incl. forma *chlorina*), Pitard & Bouly de Lesdain (1909: 247), Burollet (1927: 73), Lee (1927: 86), Werner (1951: 202),

Werner (1956: 39), Hertel (1968: 33), Seaward (1973), Keller & al. (1995: 87). Herb. COLO, Hertel, MRDS.

***Xanthoria resendei* Poelt & Tavares**

Egea & al. (1990: 413).

***Xanthoria steineri* I. M. Lamb**

Seaward (1973). Herb. MRDS.

***Xanthoria stiligera* Giralt, Nimis & Poelt**

Giralt & al. (1993: 283), Arnold & Poelt (1995: 55).

Previously published as occurring in Tunisia, being based on doubtful records unsupported by herbarium material:

***Lepraria neglecta* (Nyl.) Lettau**

Egea & al. (1990: 415).

***Parmelia hypoleucina* J. Steiner**

Werner (1956: 38).

***Ramalina fraxinea* (L.) Ach.**

Werner (1956: 39).

***Roccella tinctoria* DC.**

Werner (1951: 201).

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