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Trees and Shrubs on Classical Greek Vases

Abstract

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The identification of plants mentioned in classical Greek and Roman literature was performed mainly during the 19th century. Plants depicted on sculptures, vases or coins received attention much later. This paper is exclusively devoted to plants depicted on Greek vases of the classical period, mainly trees and shrubs. Some of the depicted plants can be recognised without difficulty, but for others, archaeological and mythological knowledge must support identification. The grape vine is easily recognised by its typical leaf shape and the grapes, the palm tree by its characteristic growth, whereas myrtle, olive and laurel, the leaves of which as depicted are often more or less identical, can usually be identified by their known association with a particular deity or hero. Such traditional connections, in Greek mythology, between a god or hero and a particular plant dedicated to him, especially trees and shrubs, are well known. They are illustrated here by the representations of about 18 vases.

Introduction

The identification of plants mentioned in classical Greek and Roman literature was performed mainly in the 19th century (see e.g. Sprengel 1822; Billerbeck 1834; Murr 1890, 1892; Hehn 1902, 1911). More recently, attention was paid to plant illustrations on sculptures, vases or coins (Baumann 1993, 1999, 2000; Rühfel 2003; Eichberger 2003, a.o.). Only plants depicted on classical Greek vases, mainly trees and shrubs, will be considered in this paper (the abridged version of a lecture held during the OPTIMA Meeting in Belgrade, to be published in full elsewhere). The earliest representations of trees and shrubs on Greek vases appeared between 580 and 550 BC, probably influenced by the East Ionian view of nature. Most early examples are found on black-figured vases of the late 6th and the early 5th century.

On some vases the depicted plants are easily identified; on others, however, archaeology and mythology must support botanical identification. In this paper we give examples of both kinds. The vine, for instance, with its typical leaves and grapes, or the date palm with its characteristic growth, are easy to recognize. The identification of myrtle, olive and laurel, however, is made difficult by the similar shape of their leaves and requires support from their known association with a deity or hero who is shown in the same picture. A par-

ticular plant may also be associated with certain everyday scenes, or with life to come (Elysion). From ancient times, Greek mythology connects gods and heroes with certain plants, especially trees and shrubs, but there is no strict one-to-one correlation: A given plant may be linked to several gods, and conversely, different plants may be related to one god. The most popular associations are those linking Athene with the olive tree sacred to her, and Apollo (also god of the arts and sciences) with the laurel dedicated to him.

Materials and methods

The nomenclature of the mentioned trees and shrubs follows Strid & Tan (1997, 2002), Tutin & al. (1964-1993), Davis (1965-1985) and Greuter & al. (1984-1989). All illustrations of vase pictures are reproduced by courtesy of the respective museums or institutions.

Results and discussion

Date palm *Phoenix dactylifera* L. (Gr. φοίνιξ).

On relief pictures from Babylonia and ancient Egypt, the date palm is represented more often than any other plant. There is evidence to show that cultivation of *Phoenix dactylifera* dates back around 6000 years (Zohary & Hopf 2000).

Because they yield edible fruits, mainly female plants are cultivated. The need for artificial pollen transfer to ensure fertilization was well known in antiquity (Theophrastos HP 2, 8, 4; see Amigues 1988-2003).

Fig. 1. *Phoenix dactylifera* on a late archaic black-figured lekythos of the Amasis Painter (London, British Museum, B 548) - left: Apollo holding his lyre, opposite to him a date palm, right: Artemis with her bow and quiver.

Fig. 2. *Phoenix dactylifera* – left: Calyx krater of the Kadmos Painter, around 400 BC (Saint Petersburg, Heremitage 1807), Apollo meeting his brother Dionysos in Delos, a date palm between them, right: Black-figured amphora of Exekias, ca. 530-525 BC (Boulogne-sur-Mer, Musée Communal, Inv. No. 558), Aias preparing his suicide, on the left a date palm.

In Greece the date palm was cultivated only rarely. According to Theophrastos (HP 3, 3, 5; see Amigues 1988-2003), its fruits never completely ripen there.

Phoenix theophrasti Greuter, the only *Phoenix* species native to Europe, was described in the 1960s from the river valleys and estuaries of eastern and southern Crete (Greuter 1967); it also occurs in a few places in western Turkey (Boydak 1985). This species forms several stems. The fibrous and inedible fruits turns from yellowish brown to blackish.

The representations of the date palm appear in the 2nd millennium BC in Cretan-Minoan and Mycenaean art (Marinatos 1973). The palm occupies a special place in Greek plant ornamentation and has inspired Greek art with the much used fan-shaped palmette motif. Although it is not native to mainland Greece, its rarity and unusual appearance gave the date palm a special place in art and legends (Baumann 1999). In mythology it is closely associated with Apollo and his twin sister Artemis.

In Figure 1 we see Artemis, the virgin goddess of animals and hunting, and her twin brother Apollo on a lekythos of the Amasis Painter. Apollo is holding his instrument, a seven-stringed lyre. Artemis can be recognised by her bow, her quiver and the fawn accompanying her. The artist certainly wanted to show the palm tree, sacred to Apollo, though he chose a stylised representation and did not show the petiole bases remaining on the trunk.

A vase-painting of the early 4th century BC (Fig. 2, left) shows Dionysos, the god of wine, with his retinue of satyrs (silens) and maenads (bacchantes) coming to Apollo's sanctuary. The godly brothers are shaking hands behind the Omphalos in the shade of a stately palm tree. Dionysos is holding his thyrsos wand entwined with ivy, Apollo a stick of laurel (the laurel was traditionally dedicated to Apollo). Here the representation is not of a Delphic palm, since palm trees do not grow in Delphi at the foot of Mount Parnassos, but merely of an attribute of the god Apollo.

The famous vase painter Exekias shows the Greek hero Aias near Troy preparing his suicide (Fig. 2, right). The palm tree, being rare in Greece, symbolises the fame of the hero. Exekias paints the palm with a scabrous caudex, which stands for the characteristic remainders of petiole bases covering the trunk.

Ivy *Hedera helix* subsp. *helix* L. and *Hedera helix* subsp. *poetarum* Nyman (Gr. κισσός; also κιττός).

The representations of ivy already appear in Minoan art. In Mycenaean art, ivy leaves were often used as elements of decoration, though evidence for a connection between Dionysos and the ivy in that period (1600-1100 BC) is still lacking.

Subsequently, the powerful ivy was to play an important part in the Dionysian cult. The main festivals of this god were in winter and springtime, when vines stand leafless in the vineyards and only the evergreen ivy was available to decorate the god's statue (Simon 1998: fig. 264, 265) and the wine jugs (Rühfel 1984: fig. 70, 88, 92). The wreaths crowning successful poets and actors during the main Dionysia were also made of ivy (Pauly 1905: 2838). Bacchantian revellers crowned themselves with ivy around the seasons. Drinkers appreciated the coolness of its firm leaves that stay fresh and bright for a long time. Besides, ivy was believed to be a protection against drunkenness.

Together with the widespread *Hedera helix* subsp. *helix*, a second subspecies of ivy occurs in Greece, Turkey, Cyprus and the Near East: *H. helix* subsp. *poetarum*, characterised by yellow berries and lighter green leaves, those of vegetative shoots being less lobed than in *Hedera helix* subsp. *helix*. The vase painters gave preference to *H. helix* subsp. *poetarum* with its heart-shaped leaves. *H. helix* subsp. *poetarum* probably has its origin in Transcaucasia (Rutherford & al. 1993). This subspecies was used for making poets' wreaths.

On Figure 3 (left) we see Oinopion, the founder of the famous vineyards of Chios, facing his divine father Dionysos on a neck-amphora of Exekias. He brings wine from Chios in a jug. Oinopion lifts his hand in a gesture of greeting as if to say: "With my very best wine I will fill your kantharos, my father!". The god's left hand is holding the ends of four

Fig. 3. *Hedera helix* – left: Neck amphora of Exekias, around 525 BC (London, British Museum B 210), Oinopion meeting his father Dionysos; the god is holding ivy shoots, right: Neck amphora of the Berlin Painter, around 490 BC (München, Staatliche Antikensammlungen No. 8766), Dionysos crowned and decorated with ivy, holding the thyrsos wand.

Fig. 4. *Hedera helix* – left: Attic amphora, ca. 500 BC (Baumann 1993a: 61 fig. 100, photograph: M. Hirmer), a maenad with a thyrsos wand; Maenads became frenzied by using psychedelic fungi like the fly agaric, they chew laurel leaves as well (Ranke-Graves 1960: 1, 16), right: cup of Makron, ca. 480 BC (Berlin-Charlottenburg), Dionysos, crowned with ivy and holding the thyrsos wand, accompanied by a flute-playing satyr.

ivy branches bearing heart-shaped leaves that are painted with great accuracy.

In the right-hand figure the god Dionysos appears on a neck-amphora of the so called Berlin Painter. He bears the thyrsos wand, a dried stalk of *Ferula communis*, topped by a pine cone and entwined with fresh ivy (Fig. 3, right). The thyrsos wand (Fig. 4) is another characteristic attribute of Dionysos and his attendants. The sticks were strong enough to rest upon, but too light to hurt or wound.

Myrtle *Myrtus communis* L. (Gr. μύρτος, μυρρίνη).

In classical antiquity myrtle, one of the best known shrubs of the evergreen macchia, was often planted near temples and sanctuaries. Theophrastos cites it several times. The fragrant twigs were used, and the wood as well. Pelops, a Greek hero, dedicated a cultic statue cut in myrtle wood to Aphrodite (Pausanias 5, 13, 7; Eckstein 1986-1989). The oil extracted from the leaves has astringent, deodorant and antiseptic properties and has been used to cure illnesses of the respiratory organs, as a spice and to flavour wine, especially from Chios.

The evergreen myrtle, a symbol of youth, beauty and immortality, always stands under the protection of Aphrodite, the goddess of love. In former times it was sacred to the Semitic Ištar (Blech 1982: 322). Ovidius (Fasti 4, 143; Gerlach 1960) and Plutarch (Num. 19; Feldmeier 2003) tell the tale thatAphrodite, when she rose from the sea ("born of the white sea foam"),hid her naked beauty from greedy satyrs behind a thicket of myrtle. The evergreen myrtle, frequent in Greece, was the favourite plant for making wreaths (Blech 1982: 80, 284, 318f.). *Myrtus communis* was the special attribute of the goddess of beauty (Fig 5, left). The characteristics of this plant correspond with the nature of the goddess: the delicate leaves dotted with tiny oil glands, the large white aromatic blossoms and the

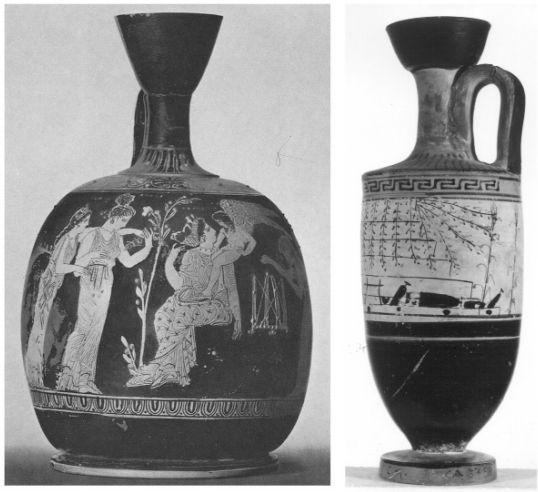

Fig. 5 *Myrtus communis* – left: ‚Lekythos of the Meidias Painter, ca. 420-410 BC (London, British Museum), Aphrodite with little Eros sitting in her garden, a branch of myrtle next to her, right: Lekythos of the Tymbos Painter, around 460 BC (Paris, Musée du Louvre CA 3758), with myrtle branches decorating a tomb.

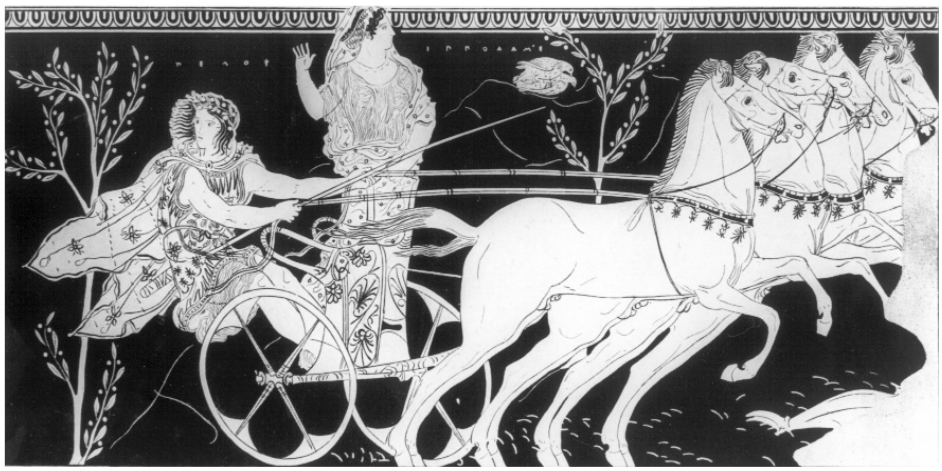

Fig. 6. *Myrtus communis* on an amphora, around 410 BC (Arezzo, Museo Civico No. 1460), Pelops and Hippodameia driving along the sea shore, myrtles on both sides.

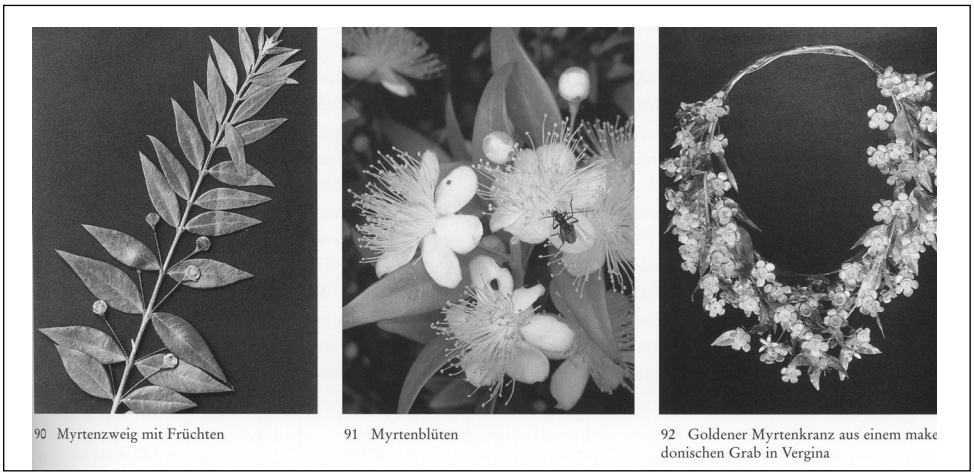

Fig. 7. *Myrtus communis* – left: A pressed twig, with flower buds on long pedicels, centre: Fresh blossoms, right: A golden myrtle wreath from a royal tomb at Vergina (Makedonia), ca. 340 BC (Baumann 2000: fig. 90-92, photographs: H. Baumann).

little black fruits on long pedicels, sweet smelling as well. In the love-goddess's honour, brides decorated themselves with wreaths of roses and myrtles (Baumann 1999).

A vase picture of the late 5th century (Fig. 6) shows Pelops, prince of Lydia, accompanied by Hippodameia, the daughter of Oinomaos, king of Elis. Pelops had obtained Hippodameia in marriage by winning a race against her father, who had vanquished then killed previous suitors. Pelops is rushing along the seashore with Poseidon's horses and carriage, as is indicated by little waves and a dolphin. Pelops' robe and hair, decorated with a myrtle wreath, are fluttering in the air stream. Next to him, Hippodameia stands in proud bearing. The two young trees on either side of the lovers to show the presence of Aphrodite (just like the two pigeons, also sacred to her) are myrtle trees, closely connected to the goddess. The painter characterises them well with their long stalked fruits**.** He mostly ignores the opposite leaf arrangement.

The evergreen myrtle was also sacred to Persephone, carried off by Hades to be the queen of the underworld, and therefore it can also be attributed to the sphere of death (Lohmann 1979: 123ff., Blech 1982: 94f.). The dead and their tombs were crowned with myrtle, the tumuli (burial mounds) were planted with it (Euripides Elektra 512; Stoessl 1958-1968). Myrtle wreaths made of gold, as have been found in tombs (Burr Thompson & Griswold 1963: 33, Blech 1982: 426), show the exceptional popularity of that myth. The myrtle wreath from a royal tomb in Vergina (Fig. 7, right; see also Andronikos 1978: t. 154) is of perfect beauty and high fidelity. Those initiated to the Eleusinian mysteries wore myrtle wreaths during the processions because myrtle fragrance of the was considered a symbol of the Elysion to come.

On a lekythos (Fig. 5, right) branches with dainty leaves spread all over a tomb. The delicate leaves, painted in characteristically opposite pairs, indicate a tomb decoration with myrtle. On the right side, two reed canes can be discerned; also plants of death and the underworld.

Olive tree, olive *Olea europaea* L. var. *europaea* (Gr. ἐλάα) and *O. europaea* var. s*ylvestris* (Mill.) Lehr (Gr. κότινος).

Because of the long lasting cultivation of the olive tree its origin was not easy to define. Linguistic and phonetical research showed for instance that the origin could be found around the Caucasus Mountains (Genaust 1996). Until a few years ago it was thought that the oleaster (*Olea europaea* var. s*ylvestris*), a thorny and divaricate shrub with angular twigs, small leaves and very small, bitter fruits was simply a variety of the cultivated olive *Olea europaea* var. *europaea* which escaped from cultivation (Green & Wickens 1989). The oleaster is now an element of macchia and phrygana and open forests as well. It is even seen as an element of the potential natural vegetation of inshore regions ("Oleo-Ceratonion" cf. Eichberger 2001). Today it is clear that the cultivated olive derives with certainty from (non-feral) oleaster and originated within the Mediterranean area (Zohary & Hopf 2000).

The olive is one of the oldest cultivated plants of the Mediterranean region. In Palestine, for example, stone mortars and stone mills dating from that period have been found. Many presses and mills from Minoan times have also been excavated., No wonder, the tree is surrounded by rich symbolism. Minoan mural-paintings at Knossos already show olive trees (see Schäfer-Schuchardt 1993: 31 a.o.). The link between the olive tree and the worship of gods and in religious rituals is often apparent, especially in the case of Athene, who was already worshipped in the 2nd millennium BC in the Minoan-Mycenaean area (Möbius 1933, Pauly 1937: 1998ff., Ventris & Chadwick 1956, Richter 1990).

The legend of Attica's first olive tree describes a dispute between Athene, patron of Athens, and Poseidon, god of the sea. Both advanced the claim to own Attica for themselves. It was agreed that the country would belong to the god who gave the most useful gift. Poseidon caused a salt spring to gush forth out of the rocks of the Akropolis. As to Athene, she made the first olive tree grow. King Kekrops awarded the victory to the god-

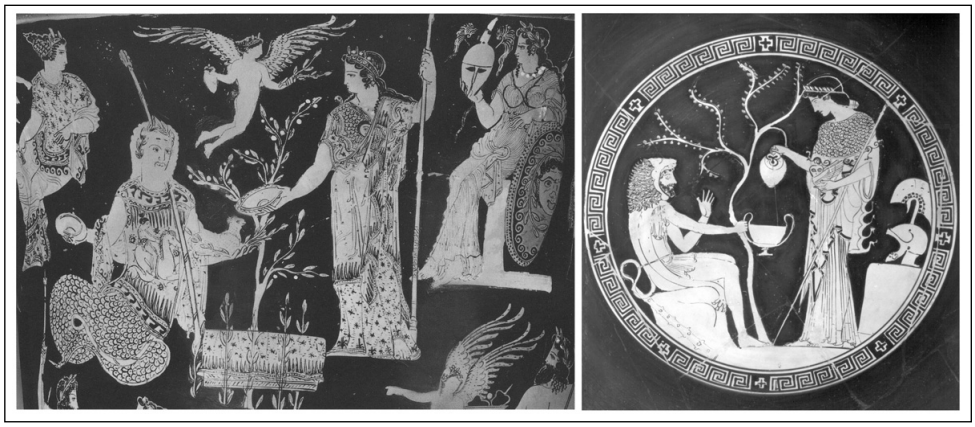

Fig. 8. *Olea europaea* – left: Calyx-krater of the Kekrops Painter, ca. 410 BC (Schloss Fasanerie, Adolphseck), Athene makes the first olive tree grow; on the left, king Kekrops, right: Red-figured cup of the Oidipus Painter, around 470/465 BC (München, Antikensammlung 2648), Athene invigorating Heracles, between them an olive tree.

Fig. 9. *Olea europaea* – left: Coin featuring Athene's owl with a fruiting olive twig (Baumann 2000: 45, fig. 100, photograph: M. Hirmer), right: Skyphos, 3rd century BC, Würzburg, Martin-von-Wagner-Museum), Athene's owl between olive twigs.

dess and made her ruler of Attica (see Fig. 8, left).

Many Attic coins show on one side (face) the head of the goddess and on the other (tale) the little owl sacred to her, framed by a wreath of olive leaves (Fig. 9, left). Olive twigs frame the sacred owl of the goddess on innumerable drinking bowls or skyphoi (Fig. 9, right; Hagenow 1982; Schäfer-Schuchardt 1993).

The amphorae were filled with the precious oil of Athens' olive trees and presented as prizes – in addition to the main prize, the olive wreath – to the victors of the Panathenea, a sports and arts competition. The Attic olive trees, which were always regarded as Athene's gift, were protected by rigorous laws (Pauly 1937: 2006-2008): Any unauthorized destruction by cutting was severely punished. In the time of Pericles, olive oil provided the foundation for the wealth of Athens and was used to pay for imported cereals. The oil was so valuable that Athens kept a monopoly in its export. Olive oil had many uses: the first pressing produced the virgin oil to be used in food; the second was used for the production of ointments and the third gave oil for lamps (Richter 1990; Baumann 1999).

The Figure 8 (right) shows a meeting between Heracles and Athene. Supporting Heracles, who sits exhausted in front of her, Athene has put away her helmet and her breast plate (aigis). She fills his kantharos with magic invigorating nectar and turns her head amiably towards the hero. The little owl (Pauly 1909: 1064ff.; Keller 1909-1913: 2, 39ff.) at Athene's hand is already stretching its wings, a good omen for Heracles. The tree between the two figures can, with some certainty, be identified as Athene's sacred olive tree.

Being an extremely popular plant in ancient Greece, we also find the olive tree as a subject of everyday life, for instance the gathering of olives on a vase of the Antimenes Painter (Fig. 10, left): A boy sits in the crown of an olive tree (with a characteristically crooked trunk) and two bearded men hold long sticks for beating off the olives. According to Pliny (NH 15, 3, 12; König 1981) reed sticks were used for this purpose. Another boy sitting on the ground is gathering the fallen olives in a basket.

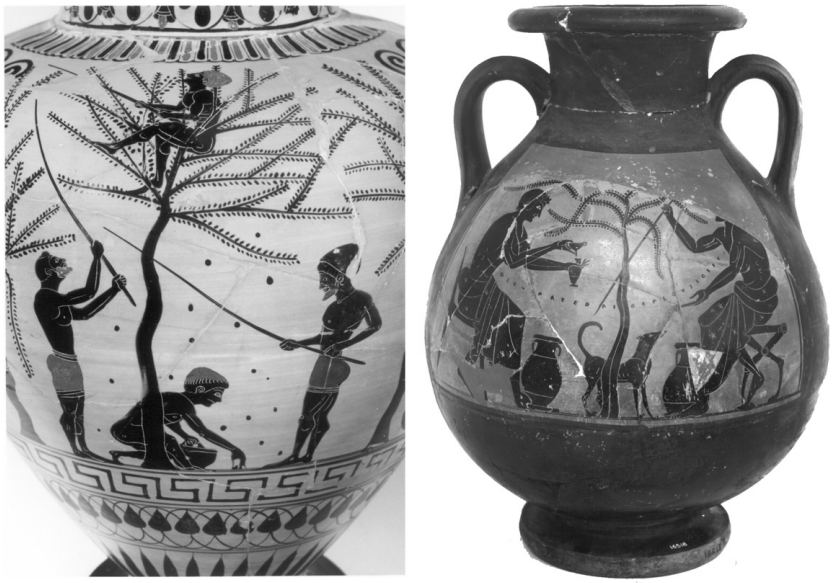

Fig. 10. *Olea europaea* – left: Neck amphora of the Antimenes Painter, around 520-510 BC (London, British Museum B 226), two men and two boys harvesting olives, right: Pelike (Vatican, Museo Gregoriano Etrusco Inv. 413), oil dealer with his customer.

On the front (Fig. 10, right) and reverse of a black-figured pelike we observe a lively scene of olive oil being sold. For the precious oil, a vessel in the shape of a pelike, with a downward projecting belly and stable flat foot, was well suited. On the front of the vase a young oil dealer and his customer are sitting face to face in thze shade of a typically crooked olive tree, which stands for the dealer`s olive grove. Using a funnel, the dealer fills his customer's lekythos with oil. The painter wrote the dealer's thoughts in the middle of the picture: "Oh Father Zeus, let me become rich!". The customer, with his left hand stretched forward while speaking and swinging his stick, seems to doubt whether there is enough oil in the funnel to fill his lekythos.

Grape vine *Vitis vinifera* L. (άμπελος, also οίνας, οίνοφόρος).

We already know the cultivation of vine from Egyptian representations. Along with cereals and the olive tree, it is one of the oldest cultivated plants of mankind.

The grape vine, *Vitis vinifera*, is the single Mediterranean representative of its genus. It has its origin in the broadleaved forests of the Mediterranean and the Near East. Its sweet-smelling, paniculate flowers appear on some long shoots instead of the lowest tendrils.

The wild *Vitis vinifera* (subsp. *sylvestris* (C. C. Gmel.) Berger) does not differ much from the cultivated forms. It is found in S Europe, SW Asia, in Palestine and NW Africa.

Fig. 11. *Vitis vinifera* – left: Ionian cup around 550 BC (Paris, Musée du Louvre F 68, Cp 263), the vegetation god Dionysos amidst old grapevine plants, right: The famous cup of Exekias, around 540/535 BC (München, Staatliche Antikensammlungen No. 2044), Dionysos sailing on the sea.

Cultivated grape vines placed in *Vitis vinifera* subsp. *vinifera* are derived from this subspecies. Today we know more than 5000 different variants of grape vine (Tutin & al. 1964-1993; Hagenow 1982).

The grape vine was believed to have been created by Dionysos and was sacred to him. Numerous myths and artworks demonstrate the close links between the god of wine and this ancient cultivated plant. There are several legends about Dionysos and his gift of the first grape vine plants, to which magic power is invariably ascribed. Archaeological finds show that wine was a customary drink about 2000 BC in the Minoan culture. In Egypt, viniculture was erratic and not known before 3000 BC. Many Egyptian frescoes in tombs show the growing and pressing of wine.

Around 570 BC, the vase painters began to represent the god Dionysos together with the vine *oínas*, and twenty years later, with the ivy *kissós*, making use of much older traditions. Homer (Iliad 18, 561ff.; Rupé 1961), the first to refer to the grape vine in Greece, recounts how Achilleus received a precious shield decorated with vines. In the same Iliad (14, 325) he also praises the god, the giver of vine as a "delight of mankind". Homer held that people who were ignorant of wine were barbarians.

On Figure 11 (left) one can see Dionysos, also the god of vegetation, amidst two flourishing stocks of grape vine; by touching those branches that still lack blossoms he creates fertility everywhere. Here the painter probably had in mind very old individuals of the wild grape vine (cf. Theophrastos HP 4, 13, 4).

Figure 11 (right) again features Dionysos, lying comfortably in his dolphin-shaped ship in the shade of its white sail. Crowned with ivy, he holds his drinking horn. The

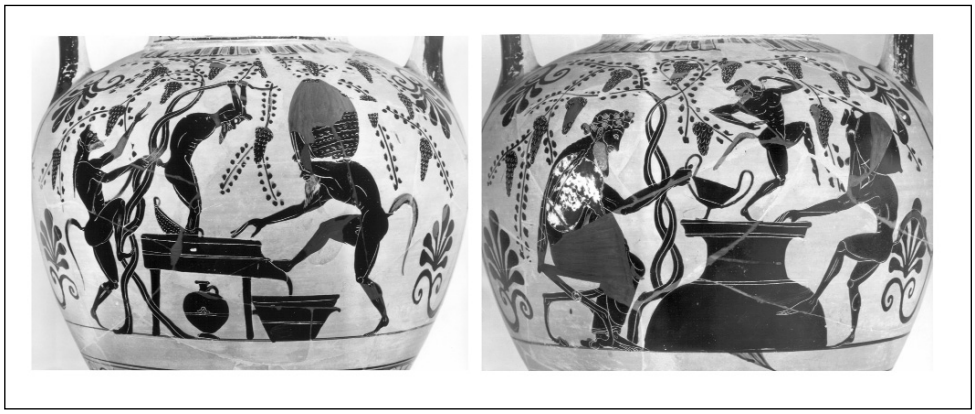

Fig. 12. Winemaking shown on a neck-amphora, around 520/510 BC (Würzburg, Martin-von-Wagner-Museum Inv. L 208). – left: Silens (satyrs) pressing the grapes, right: Silens filling the kantharos of Dionysos with fresh wine.

miracle-working god let a vine full of grapes grow around his ship's mast like a bower. The representation of the three- to five-lobed leaves and the grapes is extremely true to nature.

One can observe the subject of wine-making on both sides of a neck-amphora of the 6th century. The front side (Fig. 12, left) shows the pressing of the grapes. A silen is treading them. He stands in a flat basket, retaining the draff (skins and pips) and letting the clear grape juice flow into a ready vat. Another silen is carrying a basket full of grapes, a third one starts climbing the vine to pick the grapes (for further details see Hagenow 1982; Richter 1990; Weeber 1993; McGovern & al. 1996).

The other side of the amphora (Fig. 12, right) shows Dionysos crowned with ivy. He is sitting on a folding chair under a vine stock. On the right, a silen carrying a large pointed amphora is ready to pour the fresh wine into a pithos that is half dug into the ground, having first filled the god's kantharos. One silen is dancing wildly on the edge of the pithos in anticipation of his beloved wine. The vine bears huge grapes; the leaves are mere dots, devoid of petioles.

The ancient Greeks, in their mythology, expressed an intense interest in natural phenomena. Since they regarded trees as sanctuaries of the gods they gave them a sacred meaning and dedicated them to certain deities. Therefore, fidelity to nature was not as important to the artists as was symbolism, as everybody knew the close links between the gods and their plants.

Acknowledgements

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