## KAZIMIERZ BROWICZ, JERZY ZIELIŃSKI

# Trees and shrubs of Ikaria Island (Greece)\*

Abstract

Browicz K., Zieliński J. 1996. Trees and shrubs of Ikaria island (Greece). Arbor. Kórnickie 41: 15-45.

The results are presented of dendrological field studies conducted by the authors on Ikaria in Spring 1994. The woody flora of the island contains 103 spontaneously occurring species, including 82 native and 21 naturalized taxa. Fifteen indigenous and 18 naturalized species are reported for the first time. Point maps of distribution of more interesting or rare species were prepared.

Key words: Chorology, trees, shrubs, Greece, Ikaria.

Address: K. Browicz, J. Zieliński, Polish Academy of Sciences, Institute of Dendrology, 62-035, Kórnik, Poland.

Accepted for publication, April 1996.

#### INTRODUCTION

Ikaria, located in the eastern part of the Aegean Sea, belongs to the Asiatic Greek islands. It constitutes one of the important elements of the disrupted landbridge joining Anatolia and the Balkan Peninsula, stretching from Samos in the east through the Cyklades (Mikonis, Tinos, Andros) to Evvoia in the west. The island is strongly elongated, its maximum length in a straight line being about 30 km while the greatest width in the eastern part is only 9 km. Its area covers 255 km² and coastal line has 102 km.

Ikaria is of montane appearance. Its main mountain range – Oros Atheras, spreads out along the whole length of the island, having the highest peaks 1042 and 1027 m in the east, 981 m in the central part, and 1033 m in the west. Coasts are generally precipitous, rocky and stony. Sandy beaches are few and shallow.

In the north, between Armenistis, Evdilos and Christos Rachon pine forests remained, while in the south, between Agios Kirykos and Chrisostomos they were en-

<sup>\*</sup> The study has been partially sponsored by The Goulandris Natural History Museum, Kifissia, Greece.

tirely destroyed in 1993 during an enormous fire, which ravaged the vegetation from the seashore to the summit of Atheras. In 1994 we observed there only specimens of *Arbutus unedo* regenerating by sprouts. Beside the pine forests there are oak forests (*Quercus ilex* and *Q. coccifera*) on the island, especially between Mavrato, Mavrikato and Oxea. These two oak species appear singly or in small groups in various parts of the island, which may indicate that in the past oak forests were more abundantly represented on Ikaria. The other forest communities are formed by *Platanus orientalis*, but these are narrow strips along some permanent rivers mainly in the east, e.g. near Nas. The major part of the island is covered with more or less degraded maquis and phrygana (Fig. 1).

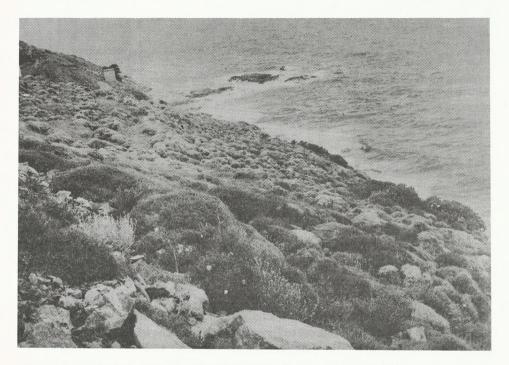


Fig. 1. Stony slope near Armenistis, covered with phrygana dominated by *Centaurea spinosa*. Photo K. Browicz.

The flora of Ikaria has not been described so far. Published data are very scanty and fragmentary, most from the 20th century, therefore the flora is not represented in the Boissier's fundamental work "Flora Orientalis" (Boissier 1867-1888). At the end of the 19th century, between 24th July and 4th August 1887. C. I. Forsyth-Major stayed on the island, but his herbarium collection was published only 10 years later (Forsyth-Major, Barbey 1897). The list of species mentioned in that publication was rather short and contained merely 67 items including only 8 species of trees and

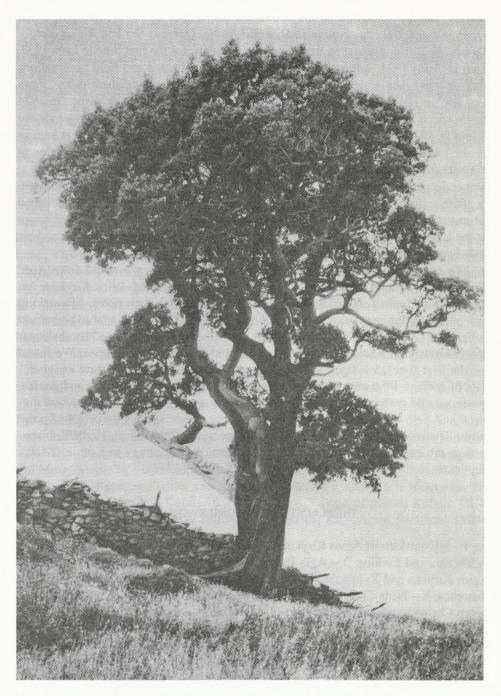


Fig. 2. The largest specimen of *Juniperus macrocarpa* on Ikaria, 12 m tall and stem circumference 218 cm. Photo K. Browicz.

shrubs, namely Alnus glutinosa, Crataegus monogyna, Ephedra foeminea, Erica manipuliflora, Genista acanthoclada, Pinus brutia, Quercus ilex and Rubus ulmifolius. K. H. Rechinger visited the island several times, for the first time in June 1932, then in April 1934. Information about material he collected and field observations and all other data which he was able to gather, Rechinger published in his "Flora Aegaea" in 1943. During his first stay Rechinger found and then published in 1934 a new species for science – Polygonum icaricum. For the third time Rechinger visited Ikaria in 1976 together with E. Stomatiadou. His material collected then is kept in the herbarium of Naturhistorisches Museum in Vienna, while that of Stomatiadou in the herbarium of the Natural History Museum in Kifissia. Rich herbarium material was collected on Ikaria also by Runemark and Snogerup in 1958 and by Nordenstam in 1960, unfortunately however only the most interesting data have been published (Runemark, Snogerup & Nordenstam 1960). Their collection is kept in the herbarium of the University in Lund. Both Rechinger's collection and that of Runemark and his collaborators were included by Davis in his "Flora of Turkey" (1965-1988).

We conducted our investigations on Ikaria in 1994 during 3 weeks from April 27th to May 17th. We penetrated the island from the towns of Agios Kirykos, Armenistis and Evdilos collecting herbarium specimens and floristic notes. After taking into consideration our data, the other published information and available herbarium collections (ATH, E, KOR, LD) it appears that 103 species of trees and shrubs occur spontaneously on Ikaria, including 82 native and 21 naturalized species. We found for the first time 15 indigenous species and 18 naturalized taxa. Below we give 2 lists of species. First one, arranged alphabetically according to families and genera, concerns wild growing trees and shrubs. For each species we cite our herbarium material and field observations. For more interesting or rare species we prepared point maps. The second list, containing cultivated species is alphabetical. Herbarium specimens are kept in the herbarium of the Institute of Dendrology in Kórnik (KOR), duplicates in the Natural History Museum in Kifissia (ATH).

#### THE PLACES OF FIELD OBSERVATIONS

1 – NE outskirts of Agios Kirykos; 2 – Between Agios Kirykos and the crossroads to Therma and Evdilos; 3 – Agia Panagia; 4 – Agios Pandeleleimon; 5 – Between Agios Kirykos and Xylosirtis; 6 – Near Xylosirtis; 7 – Between Xylosirtis and Chrisostomos; 8 – Near Chrisostomos; 9 – Between Chrisostomos and Livadi; 10 – Between Chrisostomos and Valanidies; 11 – Between Valanidies and Vardavades; 12 – Between Vardavades and Plagia; 13 – Plagia; 14 – Therma and slopes above the town; 15 – Between Koudoumas and the crossroads to Therma and Agios Kirykos, SE of Koudoumas; 16 – Between Koudoumas and Mavrato; 17 – Between Mavrato and Oxea; 18 – Near Oxea; 19 – Between Oxea and the crossroads to Katafigi, NE of Oxea; 20 – Near Katafigi; 21 – Between Therma and the crossroads to Katafigi by the road Therma – Faros; 22 – Near Faros; 23 – Between Agios Kyriaki and

the pass on a slope of Mount Kefala by the way to Perdiki: 24 – Between the pass on a slope of Mount Kefala and Perdiki; 25 - Between Perdiki and the crossroads to Agios Kirykos and Evdilos, SW of Perdiki; 26 - Between the crossroads (SSW of Perdiki) and the pass (550 m) N of Katafigi; 27 – Between Armenistis and Agios Dimitrios; 28 – Agios Dimitrios; 29 – Between Agios Dimitrios and Christos Rachon; 30 - Christos Rachon; 31 - Agios Polycarpos; 32 - Between Agios Polycarpos and the road Christos Rachon - Evangelistrias; 33 - Between Agios Polycarpos and Christos Rachon; 34 – Between Stavlos and Avlaki; 35 – Between Maratho and Stavlos; 36 - Maratho; 37 - Between Mandria and Lapsachades; 38 - Between Mandria and Galiskari; 39 – Between Armenistis and the crossroads to Agios Polycarpos and Mandria; 40 - Between Lapsachades and Evangelistrias; 41 - Between Agios Polycarpos and the crossroads to Armenistis and Mandria; 42 - Between Kastanies and Evangelistrias; 43 – Between Evangelistrias and Maratho; 44 – Between Christos Rachon and Kastanies; 45 - Kastanies (510m); 46 - Between Aylaki and Akron Kantirma; 47 - Between Akron Kantirma and Gialiskari; 48 - Between Armenistis and Gialiskari; 49 – Between Armenistis and Nas; 50 – Near Nas; 51 – Between Nas and the crossroads to Koyniadoi; 52 – Between the crossroads W of Nas and Koyniadoi; 53 – Between Nas and Tsakades, SW of Nas; 54 – Between Tsakades and Nanoura; 55 – Between Nanoura and Amalon; 56 – Between Koyniadoi and the valley of Chalaris river (W of Christos Rachon); 57 - Valley of Chalaris river (W of Christos Rachon); 58 – Between the river of Chalaris and Christos Rachon; 59 – Evdilos: 60 - Between Evdilos and Kampos; 61 - The road from Kampos to Maratho; 62 - Between Maratho and Frantato (550 m); 63 – Frantato; 64 – Between Frantato and Pigi; 65 - Between Evdilos and Keramio; 66 - Between Keramio and Droutsoulas; 67 -Between Keramio and the crossroads to Finikas and Arethousa: 68 - Between Kyparisi and Karavastamon; 69 - Karavastamon; 70 - Between Karavastamon and Mileopo; 71 – Between Mileopo and Ploumari; 72 – Ploumari; 73 – Between Ploumari and Monokampi; 74 - Between Monokampi and the crossroads to Perdiki and Agios Kirykos; 75 - Between Evdilos and Xanthi; 76 - Between Xanthi and Akamatra; 77 - Between Akamatra and Dafni; 78 - Dafni; 79 - S slope of Mount Kefala; 80 -Kosikia; 81 - Between Kosikia and Agios Dimitrios; 82 - Agios Dimitrios (520-560 m).

## NATIVE AND NATURALIZED TREES AND SHRUBS

#### Anacardiacae

Pistacia lentiscus L.

Very common throughout the whole island.

Collected specimens: Near Therma. Stream valley. 13. 05. 94. BZ (Ik. 50).

Field obs.: 1-9, 11, 14-17, 21-23, 26-27, 37, 39, 41, 43, 48-50, 52-53, 55, 60-61, 65-70, 76, 81-82.

Pistacia terebinthus L.

Rather common especially in the east.

Collected specimens: Between Koudoumas and Tsouredes, N of Agios Kirykos. Stony slope. 29. 04. 94. BZ (Ik. 51).

Field obs.: 2, 7-8, 10-11, 14-19, 21, 23, 25, 30, 40-41, 44, 48, 55, 59-60, 69-73, 75-76, 78, 80-81.

## Apocynaceae

Nerium oleander L.

Locally common.

Collected specimens: Near Therma. Stream valley. 13. 05. 94. BZ (Ik. 43). Field obs.: 1-3, 5-7, 10, 12, 14, 21, 27, 31, 47-48, 50-51, 55, 60, 65, 70, 81.

### Araliaceae

Hedera helix L. (Fig. 3)

The localities of this species are scattered on Ikaria, especially in the north. It is probably absent or rare in southwest part of the island.

Field obs.: 8, 11-12, 18, 24-25, 30, 36, 41, 44, 55-56, 58, 64, 70, 73, 77-78, 80-81.

# Asclepiadaceae

Cionura erecta (L.) Griseb. (Fig. 4)

Rare species, observed in the northern part of the island.

Collected specimens: At the foot of Mount Kefala, NE of Perdiki. 2. 05. 1994. BZ (Ik. 71).

## Betulaceae

Alnus glutinosa (L.) P. Gaertn. (Fig. 5)

The species occurs exclusively in the northwest part of the island. It grows usually along permanent rivers, sometimes numerously, most often with *Platanus orientalis*.

Collected specimens: Armenistis. The bed of Chalaris river. 4. 05. 1994. BZ (Ik. 86); Near Nas. Stream valley. 5. 05. 1994. BZ (Ik. 95).

Field obs.: 31-32, 42, 44, 48, 50, 57-58, 60, 70.

# Capparaceae

Capparis orientalis Veill. (Fig. 6)

It is a new species for the flora of Ikaria. The only locality on the island is represented by few old individuals.

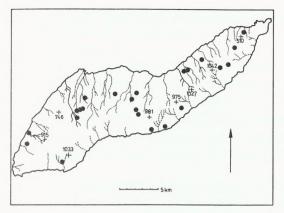


Fig. 3. Hedera helix.

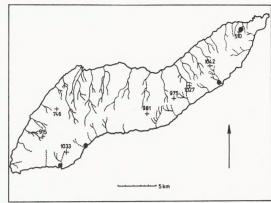


Fig. 4. Cionura erecta.

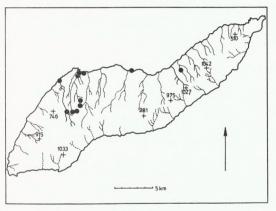


Fig. 5. Alnus glutinosa.

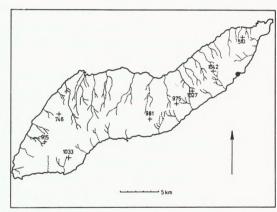


Fig. 6. Capparis orientalis.

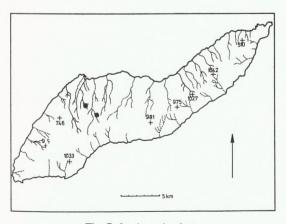


Fig. 7. Lonicera implexa.

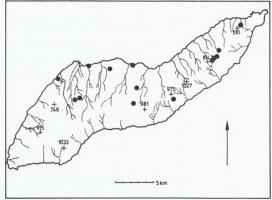


Fig. 8. Sambucus nigra.

Collected specimens: NE of Therma by the road to Agios Kyriaki. Stony slope. 2. 05. 94. BZ (Ik. 13).

# Caprifoliaceae

Lonicera etrusca Santi

The species is locally common, mainly in the east.

Collected specimens: Between Koudoumas and Tsouredes, N of Agios Kirykos. Edge of forest. 29. 04. 94. BZ (Ik. 37); 2 km N of Therma. Roadside thickets. 15. 05. 94. BZ (Ik. 38).

Field obs.: 5, 8, 10-11, 14, 16-17, 19, 21, 24-25, 27, 43, 52, 55-56, 65-66, 68, 70, 74, 77, 80, 82.

Lonicera implexa Aiton (Fig. 7)

It is a species new to Ikaria. We have found it in the north on two localities; in both cases only few specimens have been observed.

Collected specimens: Agios Polycarpos SW of Christos Rachon. Roadside escarpment. In degraded maquis. 6. 05. 94. BZ (Ik. 39).

Field obs.: 42.

Lonicera japonica Thunb.

Planted as ornamental and locally naturalized as in Evdilos and Agios Kirykos.

Sambucus nigra L. (Fig. 8)

The species has been noted almost exclusively in settlements, most often in ruderal places.

Collected specimens: Kosikia. Roadside thickets in the village. 12. 05. 94. BZ (Ik. 70).

Field obs.: 8, 17, 19, 23-25, 30, 32, 35-36, 51, 67, 77, 80.

#### Cistaceae

Cistus incanus L.

Very common on the island.

Collected specimens: Near Therma. Roadside phrygana. 13. 05. 94. BZ (Ik. 89). Field obs.: 2-3, 5-12, 14-15, 17, 19, 21-35, 37-47, 49-56, 58, 61, 64, 66-73, 76, 80-81.

Cistus salvifolius L.

Very common on the island.

Collected specimens: SW of Agios Kirykos. In phrygana. 24. 04. 94. BZ. (Ik. 90). Field obs.: 5-6, 8, 11, 19, 23, 25-26, 28, 30-32, 34-35, 37-38, 40-49, 54-56, 58, 61, 66, 68, 71-74.

Fumana arabica (L.) Spach

Collected specimens: E of Chrisostomos. In phrygana. 30. 04. 94. BZ (Ik. 91, 92); SW of Faros. Stony places in phrygana. 3. 05. 94. BZ (Ik. 93); Agios Kyriaki. Stony

places. 2. 05. 94. BZ (Ik. 94); By the road to Droutsoulas, 2 km from the road Evdilos – Karavastamon. In phrygana. 12. 05. 94. BZ (Ik. 95).

Field obs.: 48.

Fumana thymifolia (L.) Spach ex Webb

Collected specimens: E of Chrisostomos. In phrygana. 30. 04. 94. BZ. ( Ik. 96); Faros. In phrygana near the seashore. 3. 05. 94. BZ (Ik. 97); SW of Faros. Stony places in phrygana. 3. 05. 94. BZ (Ik. 98).

## Compositae

Artemisia arborescens L.

It is a new species for the flora of Ikaria but probably only naturalized.

Collected specimens: Near Xylosirtis, by the road to Agios Kirykos. Stony escarpment. 30. 04. 94. BZ (Ik. 100, 101).

Field obs.: 4, 14, 36, 44, 61.

Centaurea spinosa L. (Fig. 9)

The species occurs mainly in the north, most commonly around Armenistis and Evdilos.

Collected specimens: NE promontory of the island. Agios Kyriaki. Among stones. Sea level. 2. 05. 94. BZ (Ik. 30).

Field obs.: 22-23, 39, 48-49, 59-61, 65, 67-68, 76.

Ptilostemon chamaepeuce (L.) Less. (Fig. 10)

Rare species noted on few localities, mainly in the centre and in southeastern part of the island.

Collected specimens: E of Chrisostomos. Edge of maquis. 30. 04. 94. BZ (Ik. 31). Field obs.: 80-82.

Ptilostemon gnaphaloides (Cyr.) Soják subsp. pseudofruticosus (Pamp.) Greuter The species is recorded from Ikaria by Greuter (1973) on the base of material collected by Runemark and Snogerup. We have not seen this plant on the island.

Santolina chamaecyparissus L.

It is the first record from Ikaria. A garden escape on the island, native to West and Central Mediterranean.

Collected specimens: Between Oxea and Katafigi. In thickets beyond the road. Naturalized. 29. 04. 94 BZ (Ik. 71); Chrisostomos. Planted and naturalized. 14. 05. 94. BZ (Ik. 72).

Field obs.: 8.

### Convolvulaceae

Convolvulus oleifolius Desv. (Fig. 11)

Rare species collected by the authors on the eastern promontory of the island but earlier noted in Praya by Runemark and Snogerup (11353, LD).

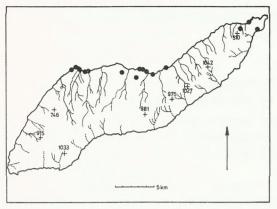


Fig. 9. Centaurea spinosa.

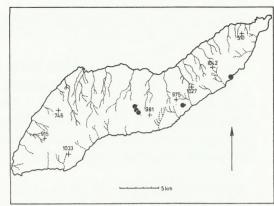


Fig. 10. Ptilostemon chamaepeuce.

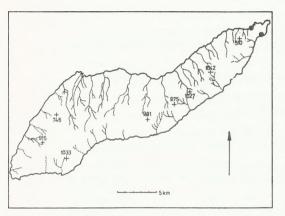


Fig. 11. Convolvulus oleifolius.

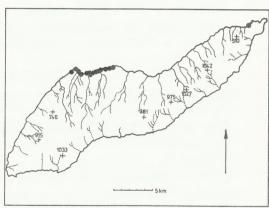


Fig. 12. Juniperus macrocarpa.

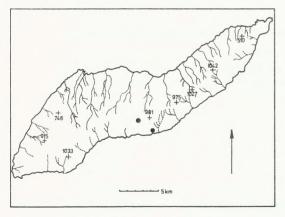


Fig. 13. Juniperus phoenicea.

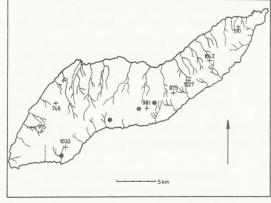


Fig. 14. Cephalaria squamiflora.

Collected specimens: Agios Kyriaki. Stony places among coastal phrygana. 2. 05. 94. BZ (Ik. 44, 45).

Field obs.: 22-23, 66.

## Cupressaceae

Cupressus sempervirens L.

Commonly cultivated on the island and naturalized in many places; both its forms, forma sempervirens and forma horizontalis (Miller) Voss can be seen far from settlements.

Juniperus macrocarpa Sibth. & Sm. (Fig. 2, 12)

The species grows on Ikaria along the northern coast of the island. It is rather numerous between Armenistis and Avlaki where it occurs singly or in small groups almost exclusively within a narrow belt between the seashore and the road from Armenistis to Evdilos. Tree-like specimens grow both on rocky, mild slopes and around beaches, alone or mixed with low windy forms of Pinus brutia. Only very few specimens have been observed somewhat further from the sea in nearby maguis. Armenistis having the largest sandy beaches on the island is a main local vacation resort visited by many vacationists, therefore J. macrocarpa growing around beaches has rather limited possibilities to reproduce by seeds. The population consists almost exclusively of adult specimens, young individuals being almost absent. J. macrocarpa near Armenistis is not endangered at present, but undoubtedly the number of its specimens will quickly diminish. New vacation-houses are still being built, not seldom in the places of occurrence of the species. Old specimens, sometimes kept near buildings, are witnesses of changes. The protection of this beautiful juniper would be advisable not only on Ikaria. At the present moment we propose to recognize the old specimen of *J. macrocarpa* growing solitarily at the western outskirts of Armenistis as "monument of nature". It is the largest specimen on the island about 12 m tall and its stem circumference is 218 cm.

Collected specimens: Around the beach of Armenistis. 7. 05. 94. BZ (Ik. 34, 35). Field obs.: 39, 47-49.

Juniperus phoenicea L. (Fig. 13)

Rare species on Ikaria, we found it only once. It has been recorded earlier by Runemark, Snogerup and Nordenstam (1960).

Collected specimens: Agios Dimitrios SE of Kosikia. In degraded maquis. 12. 05. 94. BZ (Ik. 36).

# Dipsacaceae

Cephalaria squamiflora (Sieber) Greuter (Fig. 14)

Rare chasmophyte growing on the south facing precipitous slopes of Atheras. Collected specimens: Agios Dimitrios, SE of Kosikia. Rocky S facing wall. 12. 05. 94. BZ (Ik. 47).

## **Ephedraceae**

Ephedra foeminea Forssk.

Recorded from Ikaria by Forsyth-Major (1897), but we have not observed it on the island.

### Ericaceae

Arbutus andrachne L. (Fig. 15)

The species occurs mainly in the north, most often on the slopes above Armenistis, in the vicinity of Agios Dimitrios and Christos Rachon. It hybridizes freely with *A. unedo.* Field obs.: 28, 30, 32-33, 40-41, 55, 58, 66, 70-71, 73, 82.

*Arbutus* × *andrachnoides* Link

It is a hybrid between *Arbutus andrachne* and *A. unedo* rather common in areas where its parental species occur side by side. Introgression also takes place, some introgressive forms being difficult to distinguish from *A. andrachne*.

Collected specimens: Between Agios Dimitrios and Christos Rachon. *Pinus brutia* forest. 6. 05. 94. BZ (Ik. 14); 2 km SWW of Christos Rachon. *Pinus brutia* forest. 5. 05. 94. BZ (Ik. 15).

Arbutus unedo L.

This species is very common almost throughout the island. It is one of the few woody plants regenerating freely after fires, so its almost pure communities cover hundreds of hectars.

Collected specimens: Between Mandria and Gialiskari. *Pinus brutia* forest. 9. 05. 94. BZ (Ik. 16).

Field obs.: 5-8, 15-17, 19, 24-27, 29-35, 37-41, 43-47, 55, 58, 66-71, 73-74, 81-82. *Erica arborea* L. (Fig. 16)

It occurs mainly in the north in *Pinus brutia* forests e.g. above Armenistis or in maquis as above Perdiki.

Collected specimens: Above Chrisostomos. Oak forest. 30. 05. 94. BZ (Ik. 17). Field obs.: 8-9, 16, 25-26, 30, 32-34, 38, 40-43, 45, 57-58, 61, 64, 66, 70-71, 73-74. *Erica manipuliflora* Salisb.

A very common species throughout the island, from sea level to 1000 m.

Collected specimens: Between Xylosirtis and Evangelistrias, by the road to Agios Kirykos. Stony escarpment with phrygana. 14. 05. 94. BZ (Ik. 18).

Field obs.: 3, 5-8, 11-12, 14-17, 19, 23-29, 32, 34, 37-43, 45-52, 54-56, 61, 66, 68, 70-74, 76, 79, 82.

# Euphorbiaceae

Euphorbia acanthothamnos Heldr. & Sart. (Fig. 17)

The species occurs in the eastern part of the island. Localities are not numerous but rather abundant.

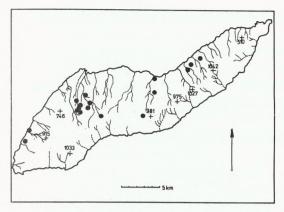


Fig. 15. Arbutus andrachne.

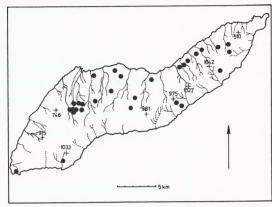


Fig. 16. Erica arborea.

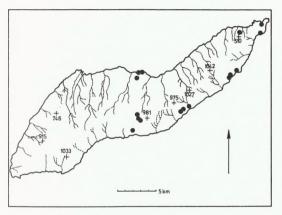


Fig. 17. Euphorbia acanthothamnos.

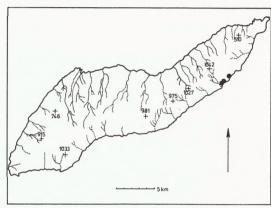


Fig. 18. Euphorbia dendroides.

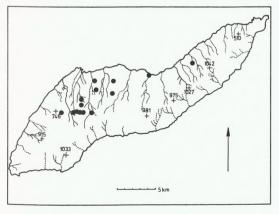


Fig. 19. Castanea sativa.

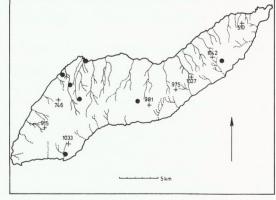


Fig. 20. Quercus ithaburensis subsp. macrolepis.

Collected specimens: Therma, NE of Agios Kirykos. Stony slope. 30. 04. 94. BZ (Ik. 40).

Field obs.: 1-2, 7, 9, 13-14, 21-24, 59-60, 75, 81-82.

Euphorbia dendroides L. (Fig. 18)

The species grows only in southeastern part of Ikaria, in Therma and its vicinity. An especially beautiful site with numerous and large specimens we have found on a rocky slope north-east of Therma, by the road to Faros.

Collected specimens: Therma, NE of Agios Kirykos. In ruderal places. 30. 04. 94. BZ (Ik. 41).

Field obs.: 1, 14, 21.

Ricinus communis L.

The species has not been hitherto recorded from Ikaria. It grows commonly in ruderal places in Agios Kirykos and its vicinity.

Collected specimens: Agios Kirykos. Ruderal places. 16. 05. 94. BZ (Ik. 62).

# Fagaceae

Castanea sativa Mill. (Fig. 19)

Castanea sativa is commonly cultivated for fruits and easily naturalizes. It occurs mainly in villages or their vicinity being especially common between Christos Rachon and Evangelistrias. It is possible that in the past the species occurred naturally on the island. The name of the village Kastanias west of Christos Rachon seems to testify to this supposition.

Collected specimens: Outskirts of Christos Rachon towards Agios Dimitrios. Naturalized in roadside thickets. 5. 05. 94 BZ (Ik. 88).

Field obs.: 30-33, 37-38, 40, 44-45, 56, 58, 62, 66, 71.

Quercus coccifera L.

Scattered throughout the whole island, locally common.

Collected specimens: Between Chrisostomos and Valanides. Roadside thickets. 14. 05. 94. BZ (Ik. 54).

Field obs.: 1-7, 9-19, 22-24, 26, 28-31, 35, 44, 52-57, 60-61, 63-64, 66, 69, 74, 76, 80-81.

Quercus ilex L.

Scattered throughout the whole island, locally forming small forests.

Collected specimens: Near Oxea, N of Agios Kirykos. *Quercus ilex – Q. coccifera* forest. 29. 04. 94. BZ (Ik. 55).

Field obs.: 7-8, 16-19, 24, 28-31, 33-35, 37-38, 40-41, 44, 46, 53-56, 69-71, 73, 81-82. *Quercus ithaburensis* Decne subsp. *macrolepis* (Kotschy) Hedge & Yalt. (Fig. 20) It is a rare species on the island usually represented by single individuals.

Collected specimens: Between Koudoumas and Tsouredes. Roadside thickets. 29.

04. 94. BZ (Ik. 56); Near Armenistis, by the road to Evdilos. 4. 05. 94. BZ (Ik. 57). Field obs.: 14-15, 19-20, 24, 27, 30, 44, 52, 81.

Quercus pubescens Willd. (Fig. 21)

The localities of *Quercus pubescens* are rather numerous on Ikaria but they are usually represented by single specimens or small groups of trees.

Collected specimens: Between Nas and Prospera. Stream valley. 5. 05. 94. BZ (Ik. 58); Between Christos Rachon and Agios Dimitrios. In thickets by the road. 5. 05. 94. BZ (Ik. 59); Above Chrisostomos. Single trees in the forest on a stony slope.

30. 04. 94. BZ (Ik. 60).

Field obs.: 3, 8, 27, 29-30, 35-38, 41, 45, 52, 60-61, 63-65, 68-69, 71, 73, 76-77, 80. *Quercus robur* L. (Fig. 22)

This is the first record from the island.

Collected specimens: Above Chrisostomos. Few specimens in a broad-leaf forest on a stony slope. 30. 04. 1994. BZ (Ik. 54).

### Labiatae

Coridothymus capitatus (L.) Reichb. f.

Locally common.

Collected specimens: Near Therma. Sunny slope with phrygana. 13. 05. 94. BZ (Ik. 9).

Field obs.: 1-2, 7, 9, 12, 14-15, 21-22, 24, 39, 60, 65, 67, 71, 75, 81.

Lavandula stoechas L.

Very common throughout the whole island.

Collected specimens: SW of Agios Kirykos. In phrygana. 24. 04. 94. BZ (Ik.6); Agios Dimitrios SE of Kosikia. Grassy slope. Dwarf form. 12. 05. 94. BZ (Ik. 7); Just S of Gialiskari, by the road to Mandria. Terminal bracts pink. 7. 05. 94. BZ (Ik. 8).

Field obs.: 2-7, 9, 11-16, 19, 21, 27, 29-31, 37-39, 41-42, 46-55, 60, 66, 69-72, 76, 78-79, 82.

Micromeria graeca (L.) Benth. ex Reichb. (Fig. 23)

This is the first record from Ikaria. The species occurs on scattered localities in southeastern part of the island; on one isolated site it has been noted in the north, between Kampos and Maratho.

Collected specimens: SW outskirts of Agios Kirykos. In phrygana. 24. 04. 94. BZ (Ik. 5).

Field obs.: 3, 7, 14, 16, 61.

Micromeria juliana (L.) Bentham ex Reichb.

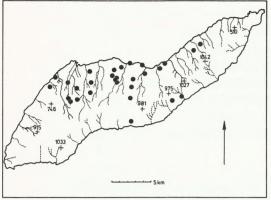
Rather common especially by the roads.

Collected specimens: SW of Agios Kirykos. In phrygana. 24. 04. 94. BZ (Ik. 4).

Field obs.: 3-4, 6-7, 9, 12, 14, 27, 29-31, 38-39, 46, 48, 55-56, 61, 67-68, 75-76.

Micromeria myrtifolia Boiss. & Hohen.

The species has been collected by Rechinger near Therma (Davis 1982), unfortunately we have not observed it on the island.



975 MZ 7

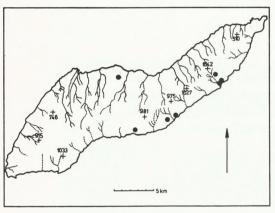
981 JULY 7

995 MZ 7

5 km

Fig. 21. Qurecus pubescens.

Fig. 22. Quercus robur.



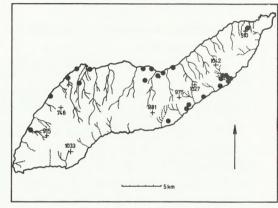
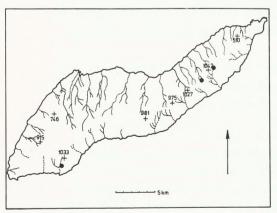


Fig. 23. Micromeria graeca.

Fig. 24. Prasium majus.



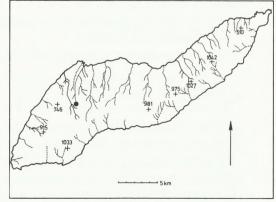


Fig. 25. Satureja icarica.

Fig. 26. Laurus nobilis.

Prasium majus L. (Fig. 24)

Locally common at margins of maquis.

Collected specimens: Agios Kirykos, by the road to Therma. Degraded maquis. 16. 05. 94. BZ (Ik. 26).

Field obs.: 1-5, 9, 11, 14-15, 23, 27, 48-50, 53, 55, 60, 65-68, 76.

Salvia fruticosa Mill.

Very common throughout the whole island.

Collected specimens: W of Chrisostomos. Stony roadside. 30. 04. 94. BZ (Ik. 68).

Field obs.: 1-2, 6-9, 11-12, 14, 21-23, 29, 34, 36-37, 41, 65-67, 75-76, 80-81.

Salvia pomifera L.

The species has been collected on Ikaria near Kerame bay by Runemark and Snogerup (Runemark & Snogerup 12536, LD). We have not seen it on the island.

Satureja icarica P. H. Davis (Fig. 25)

The species was described in 1980 by Davis from Ikaria. In its "locus classicus" on Oros Atheras it grows just below the summit at 900-1000 m on a small surface but is rather common in open places among stones, on ledges and along paths usually accompanied by *Erica manipuliflora*. The species has been also collected near Agios Nikolaos and north-west of Agios Kirykos (Runemark & Snogerup 11253, 12429, LD). It is a small cushion-forming shrub not much grazed by sheep and goats because of aromatic leaves. Besides Ikaria it grows on Chios (S. Snogerup, pers. comm.)

Collected specimens: Massif of Atheras above Mavrato. Summit area. Rocky places, c. 900 m. 15. 05. 94. BZ (Ik. 74).

Satureja thymbra L.

Scattered at lower altitudes, locally common. A white-flowered form of the species we have found near Agios Kirykos.

Collected specimens: SW outskirts of Agios Kirykos. In phrygana. 24. 04. 94. BZ (Ik. 75); NE outskirts of Agios Kirykos. Stony escarpment. 29. 04. 94. BZ (Ik. 76). Flowers white!

Field obs.: 2-3, 8, 11-12, 14-16, 21, 23, 59-61, 65-71, 75-76, 81.

### Lauraceae

Laurus nobilis L. (Fig. 26)

We have found this species only once but on a rich locality near Christos Rachon. The species is also planted.

Collected specimens: Near Christos Rachon. By the river of Karidies. Wet places with *Platanus orientalis* and *Alnus glutinosa*. 5. 05. 94. BZ (Ik. 46).

# Leguminosae

Adenocarpus complicatus (L.) Gay (Fig. 27)

It is a very rare species; we have seen it only once. In 1970 the species was collected on Ikaria by Stamatiadou (9241, ATH), unfortunately the precise locality has not been indicated on the herbarium label.

Collected specimens: Near Stavlos. Few shrubs in phrygana. 6. 05. 94. BZ (Ik. 19).

Anagyris foetida L. (Fig. 28)

Scattered especially in the east.

Field obs.: 1-2, 11, 14, 21-22, 24, 60, 65, 76, 80.

Anthyllis hermanniae L.

Rather common at lower altitudes.

Collected specimens: SW of Agios Kirykos. 24. 04. 94. BZ (Ik. 20). Between Xylosirtis and Evangelistrias. 14. 05. 94. BZ (Ik. 21).

Field obs.: 2, 4-9, 11-12, 14-15, 17, 19-24, 26-27, 34-35, 38-39, 46-53, 55, 61, 65-68, 70-71, 74, 76, 81.

Calicotome villosa (Poir.) Link

Common throughout the whole island, at lower altitudes.

Collected specimens: Between Koudoumas and Mavrato, N of Agios Kirykos. In maquis. 29. 04. 94. BZ (Ik. 22).

Field obs.: 1-2, 5-7, 9-12, 14, 16-17, 21-22, 25, 34, 39, 42-43, 48-49, 53, 61, 64, 66-67, 73-76, 80.

Ceratonia siliqua L.

Scattered throughout almost the whole island.

Collected specimens: Near Chrisostomos. Stony roadside. 14. 05. 94. BZ (Ik. 23). Field obs.: 1-2, 4-7, 9, 14-15, 21, 23-24, 27, 37-38, 40, 46, 49, 52-53, 61, 64-65, 67, 69, 74, 76.

Colutea melanocalyx Boiss. & Heldr. subsp. davisiana (Browicz) D.F. Chamb. (Fig. 29)

It is a species new for the flora of Ikaria, growing in the central part of the island; very rare, only few specimens have been observed.

Collected specimens: Kosikia. Roadside thickets in the village. 12. 05. 94. BZ (Ik. 128).

Field obs.: 78, 81.

Genista acanthoclada DC.

Scattered, but locally common.

Collected specimens: near Xylosirtis by the road to Agios Kirykos. 14. 05. 94. BZ (Ik. 160).

Field obs.: 5-7, 16-19, 21-24, 26, 60, 68-69, 81.

Hippocrepis emerus (L.) Lassen subsp. emeroides (Boiss. & Sprun.) Lassen (Fig. 30) We have seen this species only once but it has been also recorded from Praya and Peranora Vouno (Runemark, Snogerup, Nordenstam 1960).

Collected specimens: Agios Dimitrios, SE of Kosikia. Rocky wall facing S. Rare. 12. 05. 94. BZ (Ik. 24).

Medicago arborea L. (Fig. 31)

The species is probably not native to Ikaria. It is often planted as an ornamental or a honey-yielding plant in gardens and on roadside escarpments. Locally it seems to be fully naturalized.

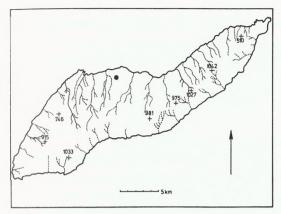


Fig. 27. Adenocarpus complicatus.

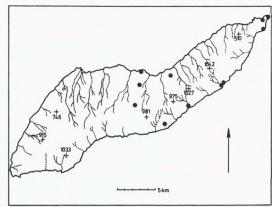


Fig. 28. Anagyris foetida.

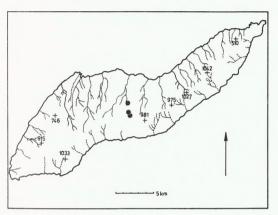


Fig. 29. Colutea melanocalyx subsp. davisiana.

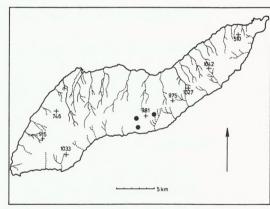


Fig. 30. Hippocrepis emerus subsp. emeroides.

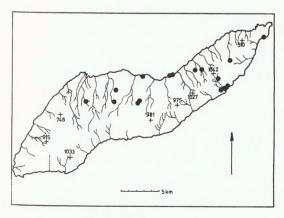


Fig. 31. Medicago arborea.

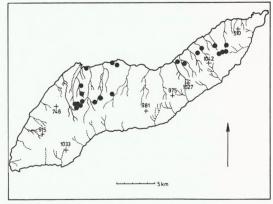


Fig. 32. Teline monspessulana.

Collected specimens: Just beyond Mavrato, N of Agios Dimitrios. Naturalized. 29. 04. 94. BZ (Ik. 25).

Field obs.: 2-4, 7, 14, 16, 22, 25, 35-36, 41, 60, 65, 68-69, 71-72, 77-78.

Robinia pseudoacacia L.

Naturalized on Ikaria.

Field obs.: 3, 8, 14, 22.

Spartium junceum L.

One of the most common species on Ikaria especially in the west.

Field obs.: 1, 7-8, 10, 12, 14-19, 21-24, 27-29, 32-34, 37, 39-42, 44-46, 48-50, 52-53, 55-56, 60-62, 65-68, 70-74, 76-77, 80-81.

Teline monspessulana (L.) K. Koch (Fig. 32)

The species grows in the north only, in places, however it is rather common.

Collected specimens: Above Oxea, N of Agios Kirykos. By the road in the Pinus brutia forest. 29. 04. 94. BZ (Ik. 83).

Field obs.: 19-20, 25, 30-32, 34, 39, 41-44, 46, 48, 58, 63, 70, 73-74.

#### Liliaceae

Asparagus acutifolius L.

Collected specimens: Agios Pandeleimon. Roadside thickets. 16. 05. 94. BZ (Ik. 99). Field obs.: 2, 5-7, 12, 14-16, 18, 23, 36, 49, 60-61, 65, 67-68, 75, 80.

#### Moraceae

Ficus carica L.

Planted and locally naturalized.

Field obs.: 14, 19, 28, 59.

# Myrtaceae

Myrtus communis L.

Scattered throughout the whole island, locally common.

Collected specimens: Near Chrisostomos by the road to Vardavades. Wet place by the road. Fruits white. 14. 05. 94. BZ (Ik. 52); Just S of Nanoura. Stream valley. 7. 05. 94. BZ (Ik. 53).

Field obs.: 3-8, 10-11, 22, 27, 29, 33-34, 36-38, 41-42, 46, 48, 52-54, 56, 60, 63, 65-68, 70.

#### Oleaceae

Olea europaea L.

Locally rather common.

Field obs.: 1-3, 6-7, 14-15, 24, 27, 48-49, 50, 55, 66.

Phillyrea latifolia L.

Unevenly distributed, most often in the north-west, locally common.

Collected specimens: E of Chrisostomos. Remnants of maquis. 30. 04. 94. BZ (Ik. 49).

Field obs.: 7-9, 27, 33-34, 39-41, 45-51, 56-58, 66, 81-82.

#### Pinaceae

Pinus brutia Ten.

Very common, locally forming pure forests. In northwestern part of the island we have also observed a pyramidal form of the species, *P. brutia* var. *pyramidalis* Selik. This is the first record from Ikaria. Several years ago we noted this variety on Chios (Boratyński, Browicz, Zieliński 1987).

- var. brutia

Collected specimens: Between Xylosirtis and Evangelistrias. Stony slope. 14. 05. 94. BZ (Ik. 33).

Field obs.: 2-3, 5-7, 12, 14, 16, 19-20, 24, 27-32, 34-35, 37-43, 45-52, 55, 57-58, 61, 66, 68, 70.

– var. pyramidalis Selik

Field obs.: 40-41, 43, 61.

Pinus pinea L.

Probably only planted on the island but naturalized in places.

Field obs.: 3, 16, 24-25, 52, 55, 73.

## Platanaceae

Platanus orientalis L.

Very common throughout the whole island.

Collected specimens: Near Therma. Stream valley. 13. 05. 94. BZ (Ik. 48).

Field obs.: 1-3, 5-8, 10, 12, 14-19, 21, 27-28, 31, 33, 36-38, 45, 48, 50-52, 55-58, 60, 66-68, 70-73, 78, 80.

# Polygonaceae

Polygonum icaricum Rech. f. (Fig. 33)

Polygonum icaricum was found for the first time by K. H. Rechinger in 1933 on Mountain Atheras (Rechinger 1934). At the end of our stay on Ikaria when penetrating the summit area of Atheras we found the species near the highest peak of the massif above Mavrato village. It is possible that this is the locus classicus of this interesting species. The population is not very rich but it is represented by all generations from seedlings to old individuals. Polygonum grows in crevices of south facing vertical serpentine walls, on rocky ledges, usually in inaccessible places, so at

present it is not endangered there. *P. icaricum* is an endemic Greek species, out of Ikaria it is known from the islands of Chios and Samothraki.

Collected specimens: Massif of Atheras above Mavrato. Summit area. Ca. 900 m. Rocky walls. In crevices. 15. 05. 94. BZ (Ik. 27).

#### Ranunculaceae

Clematis cirrhosa L.

Scattered at lower altitudes but locally up to 550 m e.g. between Maratho and Frantato.

Collected specimens: Near Therma. In maquis. 13. 05. 94 BZ (Ik. 2); SW of Faros, NE part of the island. In maquis. 3. 05. 94 BZ (Ik. 1); Agios Kirykos. Remnants of maquis around the cathedral. 24. 04. 94. BZ (Ik. 3).

Field obs.: 1, 4, 7, 9, 12, 14, 23, 27, 49, 50, 61-62, 65-67, 80-81.

#### Rhamnaceae

Rhamnus oleoides L. (Fig. 34)

This is a species new to Ikaria, noted there only once.

Collected specimens: Between Kosikia and Agios Dimitrios. Rocky slope above the road. 12. 05. 94. BZ (Ik. 61).

#### Rosaceae

Amygdalus communis L.

The species is commonly planted and locally naturalized.

Collected specimens: Between Evdilos and Kampos. Grassy escarpment. 10. 05. 94. BZ (Ik. 12).

Field obs.: Kampos, near Perdiki, above Therma.

Armeniaca vulgaris Lam.

Cultivated and locally naturalized.

Field obs.: 82.

Cerasus vulgaris mill.

Planted and locally naturalized.

Field obs.: Near Mavrato, Perdiki, 33, 37.

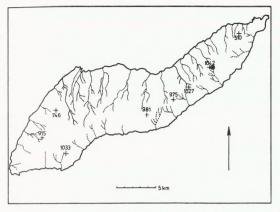
Crataegus monogyna L.

Rather common on the island, especially in the north-west.

Collected specimens: Between Koudoumas and Tsouredes, N of Agios Kirykos. Edge of forest. 29. 04. 94. BZ (Ik. 10); Kefala hill NE of Perdiki. Grassy roadside. 2. 05. 94. BZ (Ik. 11).

Field obs.: 8, 12, 14, 16-19, 23-25, 34, 43, 45, 57, 60, 62, 64, 66, 68, 70, 73-78, 80. *Crataegus* × *sinaica* Boiss. (Fig. 35)

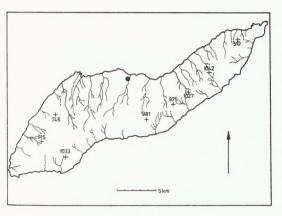
It is a taxon new to Greece, known from scattered localities in the Near East and Anatolia. According to Christensen (1992) it is a hybrid between *Crataegus mono-*



381 1915 1033 5 km

Fig. 33. Polygonum icaricum.

Fig. 34. Rhamnus oleoides.



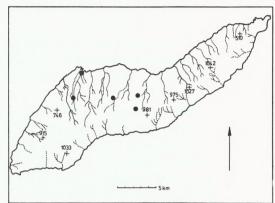
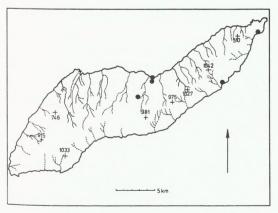


Fig. 35.  $Crataegus \times sinaica$ .

Fig. 36. Rosa canina.



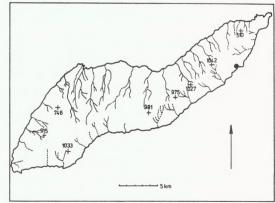


Fig. 37. Rubia tenuifolia.

Fig. 38. Ruta chalepensis.

gyna and C. azarolus var. aronia. The latter supposed parental species does not occur on Ikaria. We have found only 2 specimens in roadside thickets just above Kampos by the road to Frantato. C. × sinaica grows also on Chios, where we collected it in 1985 near Agios Georgios N of Kampia. We treated it then as an abnormal form of C. monogyna with 1-2 stones (Boratyński, Browicz, Zieliński 1987).

Collected specimens: Kampos NWW of Evdilos. Among shrubs. 10. 05. 1995. BZ (Ik. 120).

Prunus cerasifera Ehrh.

Planted as a fruit tree and locally naturalized.

Collected specimens: Near Mavrato, N of Agios Kirykos. By the road, naturalized. 29. 04. 94 BZ (Ik. 28).

Field obs.: 33, 70.

Prunus domestica L.

Locally escaped from cultivation.

Field obs.: near Koudoumas, 33.

Pyrus spinosa Forssk.

Very common species throughout the whole island.

Collected specimens: Near Therma. Roadside thickets. 13. 05. 94. BZ (Ik. 29).

Field obs.: 1-7, 10-11, 14-17, 19, 21-24, 27, 31, 41, 49-55, 59-62, 65-68, 71, 73, 75-76, 79, 81.

Rosa canina L. (Fig. 36)

The species occurs in few localities on the northern slopes of the island but it is common in places as below the village of Frantato.

Collected specimens: Near Armenistis by the Charakas river. In thickets. Single shrub. 4. 05. 94. BZ (Ik. 63); Frantato. Grassy slope below the village. 10. 05. 94. BZ (Ik. 64).

Field obs.: 28, 48, 63, 80.

Rosa sempervirens L.

The species has been collected by Runemark and Snogerup 2 km W of Mesaria (LD). We have not seen it on the island.

Rubus ulmifolius Schott

One of the most common woody species on Ikaria.

Collected specimens: Near Therma. Roadside thickets. 13. 05. 94. BZ (Ik. 65).

Field obs.: 2-3, 5-7, 11-12, 14, 16-20, 24-26, 29-31, 33, 35-36, 38, 40-42, 45, 48, 52-53, 55-56, 58, 60-63, 65-74, 76, 80-81.

Sarcopoterium spinosum (L.) Spach

Very common at lower altitudes.

Collected specimens: N outskirts of Agios Kirykos. Stony places by the road. 29. 04. 94. BZ (Ik. 73).

Field obs.: 2, 5-7, 10-14, 16, 19, 22-25, 27, 31, 39, 47-53, 55-56, 60-61, 64, 66, 70, 73, 75-76, 79, 81-82.

#### Rubiaceae

Rubia tenuifolia d'Urv. (Fig. 37)

It is a species new to Ikaria, observed on scattered localities in the eastern part of the island.

Collected specimens: Above Therma. Rocky slope. 30. 04. 94. BZ (Ik. 66). Field obs.: 14, 22, 65-66, 76.

#### Rutaceae

Ruta chalepensis L. (Fig. 38)

It is a new species for the flora of Ikaria, noted only once.

Collected specimens: NE of Therma by the road to Agios Kyriaki. Stony slope. 2. 05. 94. BZ (Ik. 67).

#### Salicaceae

Populus nigra L.

Planted as a road-tree and locally naturalized.

Field obs.: 18, 20.

Salix pedicellata Desf. (Fig. 39)

Salix pedicellata was reported for the first time from Ikaria by Rechinger (1943), who found it between Agios Kirykos and Agios Nikolaos. This information, however, has been treated as uncertain (Skvortsov 1968). In 1976 the species was collected again by K. H. Rechinger and E. Stomatiadou in the same region near Lefkados Monastery (ATH, W). Unfortunately in spite of special search we have not found any of these localities. It is very possible that they were destroyed during the large fire in 1993. We found this interesting species in the western part of the island south-west of Christos Rachon. It grows there abundantly in roadside ditches as well as in wet places along the Chalaris river. At least at present the above locality is not endangered. It is important because Ikaria is the only place of occurrence of Salix pedicellata in Greece.

Collected specimens: Between Christos Rachon and Pazi, by the road to Kalamos. Wet places by the road. 9. 05. 94. BZ (Ik. 112, 113).

### Santalaceae

Osyris alba L. (Fig. 40)

We have observed this species almost exclusively in the southeastern part of Ikaria. The isolated locality in the north is between Kampos and Maratho.

Collected specimens: W of Chrisostomos. In maquis on a stony escarpment. 30. 04. 94. BZ (Ik. 32).

Field obs.: 4, 10-14, 21-22, 61, 80.

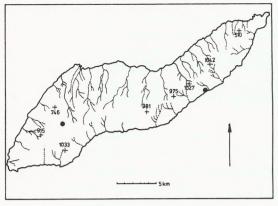
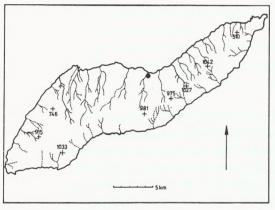


Fig. 39. Salix pedicellata.

Fig. 40. Osyris alba.



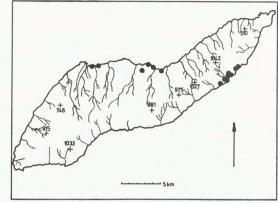
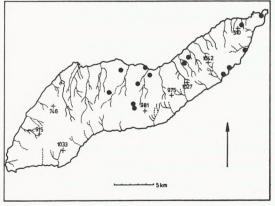


Fig. 41. Smilax aspera.

Fig. 42. Nicotiana glauca.



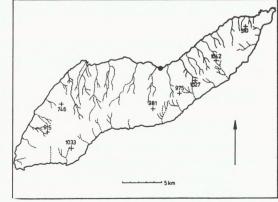


Fig. 43. Styrax officinalis.

Fig. 44. Tamarix hampeana.

#### Simaroubaceae

Ailanthus altissima (Mill.) Swingle

Planted along roads and freely naturalized.

Field obs.: 59, 65, 70.

## Smilacaceae

Smilax aspera L. (Fig. 40)

This is a first record from Ikaria.

Collected specimens: By the road to Droutsoulas ca. 150 m above the road Evdilos – Karavastamon. In maquis. 12. 05. 94. BZ (Ik. 77).

#### Solanaceae

Nicotiana glauca Graham (Fig. 42)

A South American species naturalized in many places in Greece (Browicz 1993). It is probably a recent newcomer on Ikaria spreading from such harbours as Agios Kirykos, Armenistis and Evdilos. It grows mainly in ruderal places in towns and villages, along roads, in quarries etc.

Collected specimens: Agios Kirykos. Open ruderal places in the town. 1. 05. 94. BZ (Ik. 42).

Field obs.: 2-3, 5, 11, 14-15, 48, 60-61, 65, 67.

# Styracaceae

Styrax officinalis L. (Fig. 43)

The localities of this species are scattered throughout the eastern part of the island, but some of them are very abundant, for example in Kosikia.

Collected specimens: Between Oxia and Katafigi. In thickets. 29. 04. 94. BZ (Ik. 78). Field obs.: 21, 23, 61, 64-66, 70-71, 76, 80-81.

### Tamaricaceae

Tamarix hampeana Boiss. & Heldr. (Fig. 44)

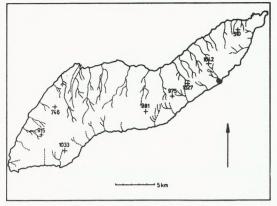
This is the species new to the flora of Ikaria. We observed it only once in a wild state, but the species is planted as an ornamental.

Collected specimens: Between Keramio and Kyparisi, E of Evdilos. Edge of the beach. 11. 05. 94. BZ (Ik. 79).

Tamarix tetrandra Pall. ex M. Bieb. (Fig. 45)

This is a new species for the flora of Ikaria. A rare plant observed in one site only. Also planted near the sea.

Collected specimens: SW outskirts of Agios Kirykos. Temporary stream. 24. 04. 94. BZ (Ik. 80-82).



975 km

Fig. 45. Tamarix tetrandra.

Fig. 46. Thymelaea tartonraira.

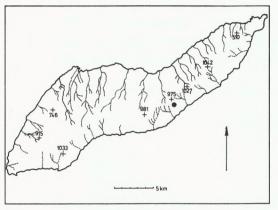


Fig. 47. Celtis tournefortii.

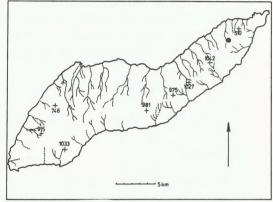


Fig. 48. Ulmus minor subsp. canescens.

# Thymelaeaceae

Thymelaea tartonraira (L.) All. (Fig. 46)

Rare species, but near Agios Dimitrios represented by rather numerous specimens.

Collected specimens: SW of Faros. In phrygana. 3. 05. 94. BZ (Ik. 84).

Field obs.: 81-82.

#### Ulmaceae

Celtis tournefortii Lam. (Fig. 47)

It is the first record of *C. tournefortii* from Ikaria. Only two small plants have been observed in roadside thickets. The species is sometimes cultivated, so it is possible that we have to do with naturalized plants.

Collected specimens: Above Chrisostomos. In thickets by the road. Young plant. 30. 04. 94. BZ (Ik. 87).

Ulmus minor Mill. subsp. canescens (Melville) Browicz & Ziel. (Fig. 48) It is a new species for the flora of Ikaria. We have observed it only once. Collected specimens: Near Perdiki towards Oxea. Roadside thickets. 2. 05. 94. BZ (Ik. 85).

#### Verbenaceae

Vitex agnus-castus L.

Scattered on the island, but abundant in places.

Collected specimens: Between Xanthi and Evdilos. Roadside thickets. 12. 05. 94. BZ (Ik. 86).

Field obs.: 1-2, 5-6, 14, 21-23, 27, 46, 48-50, 53-54, 59-61, 65-66, 75.

## Vitaceae

*Parthenocissus inserta* (A. Kerner) Fritsch Cultivated and locally naturalized.

Field obs.: Agios Kirykos

Vitis vinifera L.

Cultivated and locally naturalized.

Field obs.: 82.

#### CULTIVATED TREES AND SHRUBS

Acacia cyanophylla Lindl., Ailanthus altissima (Mill.) Swingle, Albizzia julibrissin Durazz., Albizzia lophantha (Willd.) Benth., Araucaria heterophylla (Salisb.) Franco, Amygdalus communis L., Armeniaca vulgaris Lam., Artemisia arborescens L., Bougainvillea spectabilis Willd., Brachychiton populneum (Cav.) R.Br., Callistemon sp., Camellia sp., Campsis radicans (L.) Seeman, Castanea sativa Mill., Celtis australis L., Celtis tournefortii Lam., Cerasus avium (L.) Moench., Cerasus vulgaris Mill., Cercis siliquastrum L., Chamaerops humilis L., Citrus limon (L.) Burm.f., Citrus sinensis (L.) Osbeck, Cupressus lusitanica Mill. 'Glauca', Cupressus sempervirens L. forma sempervirens and forma horizontalis (Mill.) Voss, Cydonia oblonga Mill., Datura arborea L., Diospyros kaki L.f., Elaeagnus angustifolia L., Eucalyptus camaldulensis Dehnh., Euonymus japonicus Thunb., Euphorbia dendroides L., Ficus carica L., Ficus elastica Roxb., Gomphocarpus fruticosus (L.) R.Br., Hedera canariensis Willd., Hibiscus rosa-sinensis L., Hibiscus syriacus L., Jacaranda mimosifolia D. Don, Jasminum officinale L., Juglans regia L., Koelreuteria paniculata Laxm., Lantana camara L., Laurus nobilis L., Lonicera japonica Thunb., Malus domestica

Borkh., Medicago arborea L., Mellia azedarach L., Morus alba L., Morus rubra L., Myoporum tenuifolium G. Forster, Nerium oleander L., Nicotiana glauca Graham, Olea europaea L., Parkinsonia aculeata L., Parthenocissus inserta (A. Kerner) Fritsch, Parthenocissus tricuspidata (Sieb. & Zucc.) Planch., Passiflora coerulea L., Philadelphus sp., Phoenix canariensis Chaub., Pinus brutia Ten., Pinus pinea L., Pistacia atlantica Desf., Pistacia vera L., Pittosporum tobira (Thunb.) W. T. Aiton., Platanus orientalis L., Populus alba L., Populus nigra L., Populus uzbekistanica Komarov 'Afghanica', Portulacaria afra Jacq., Prunus domestica L., Punica granatum L., Pyracantha coccinea Roemer, Pyrus communis L., Quercus ithaburensis Decne subsp. macrolepis (Kotschy) Hedge & Yalt., Ricinus communis L., Robinia pseudoacacia L., Rosa sp. - numerous garden forms, Rosmarinus officinalis L., Salix babylonica L., Schinus molle L., Solanum jasminoides Paxton, Sophora japonica L., Syringa × persica L., Tamarix hampeana Boiss. & Heldr., Tamarix nilotica (Ehrenb.) Bunge, Tamarix tetrandra Pall. ex M. Bieb., Tilia tomentosa Moench., Viburnum tinus L., Vitis vinifera L., Washingtonia filifera H. Wendl., Wisteria floribunda (Willd.) DC., Ziziphus jujuba Mill.

#### SUMMARY

In the year 1994 from April 27th to May 17th field studies were being conducted on the dendroflora of Ikaria island. Basing on own herbarium materials, field notes, literature data and collections from several European herbaria the authors conclude that on Ikaria there grow spontaneously 103 species including 82 native nad 21 naturalized taxa. Fifteen indigenous and 18 naturalized species have been found for the first time by the authors. The mode of occurrence of all species on the island has been shortly characterized and for each taxon the herbarium materials collected by the authors have been quoted. Distribution of more interesting and rare species is illustrated on the maps. At the end of the article the list of cultivated trees and shrubs is given.

#### LITERATURE

Boissier P. E., 1867-1888. Flora Orientalis 1-5 + Suppl. Basileae, Genevae & Lugduni.

Browicz K., 1993. *Nicotiana glauca* and *Solanum elaeagnifolium (Solanaceae)* – two xenophytes from South America and the history of their spreading in the eastern Mediterranean. Fragm. Flor. Geobot. Suppl. 2, 1: 299-305.

Boratyński A., Browicz K., Zieliński J., 1987. Woody flora of Chios. Arbor. Kórnickie 32: 37-92.

CHRISTENSEN K. I., 1992. Revision of Crataegus sect. Crataegus and nothosect. Crataeguineae (Rosaceae-Maloideae) in the Old World. Syst. Bot. Monogr. 35: 1-199.

DAVIS P. H. (ed.), 1965-1988. Flora of Turkey the East Aegean Islands 1-10. University Press. Edinburgh.
 DAVIS P. H., 1980. Materials for a fora of Turkey XXXVII: Labiatae, Plumbaginaceae, Plantaginaceae.
 Notes RBG Edinb. 38, 1: 23-64.

Forsyth-Major C. I., Barbey W., 1897. Ikaria. Etude botanique. Bull. de l'Herbier Boissier 5: 279-284.

Greuter W., 1973. Monographie der Gattung Ptilostemon (Compositae). Boissiera 22: 1-215.

Rechinger H. H., 1943. Flora Aegaea. Flora der Inseln und Halbinseln des Ägäischen Meeres. Akad. Wiss. Wien, Math.-Naturwiss. Kl. Denkschr. 105, 1: XX + 924 pp. Wien.

Runemark H., Snogerup S., Nordenstam B., 1960. Studies in the Aegean Flora I. Floristic Notes. Bot. Not. 113: 412-450.

Skvortsov A. K., 1968. Ivy SSSR. Izdatelstvo Nauka. Moskva. 262 pp.

## Drzewa i krzewy wyspy Ikarii (Grecja)

#### Streszczenie

W roku 1994 od 27 kwietnia do 17 maja prowadzono na wyspie Ikarii badania terenowe poświęcone dendroflorze tej wyspy. Opierając się na zebranych przez siebie materiałach zielnikowych, notatkach terenowych, danych z literatury oraz na zbiorach kilku ważniejszych europejskich zielników autorzy wykazali, że na Ikarii występują spontanicznie 103 gatunki drzew i krzewów, w tym 82 gatunki rodzime i 21 zadomowionych na wyspie. 15 gatunków rodzimych na Ikarii oraz 18 zadomowionych zostało znalezionych tutaj przez autorów po raz pierwszy. Autorzy omawiają krótko warunki występowania poszczególnych gatunków na wyspie, przy każdym z nich cytowane są zebrane przez nich materiały zielnikowe (BZ). W przypadku gatunków bardziej interesujących lub rzadkich sporządzono punktowe mapy ich rozmieszczenia na wyspie. Zamieszczono również listę drzew i krzewów uprawianych na Ikarii.