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## The Flora of Ikaria (Greece, E. Aegean Islands)

By

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With 2 figures

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### Summary

CHRISTODOULAKIS D. 1996. The Flora of Ikaria (Greece, E. Aegean Islands). – *Phyton* (Horn, Austria) 36 (1): 63–91, with 2 figures. – English with German summary.

The geology, climate, flora and phytogeography of the island of Ikaria are discussed. Its wild vascular flora consists of 829 taxa, 233 of which are first-time records for the island. 13 Greek and 29 Aegean endemic taxa are present on the island of Ikaria, 15 of which are currently known to occur only on Ikaria. Among the Greek endemic taxa, *Onosma kaheirei*, *Crepis hellenica* and *Sedum delicum* are new records for the E. Aegean region. A concise species list with indication of life-form, chorological data and notes on species habitats is provided. In the life-form spectrum therophytes are dominant (49%) as a result of the summer extensive dry period. 17 chorological groups are distinguished, with the Mediterranean element being the dominant one. The high proportion of the Mediterranean element, in conjunction with the high percentage of therophytes, are indicative of the strong Mediterranean character of the island's flora. The largest proportion of plants (63%) are autochthonous and are thought to be remnants of a former Aegean continental flora. A considerable proportion (27%) are anthropophytes, while those plants whose presence is a result of natural, long-distance dispersal are limited (10%). On the basis of this data, Ikaria exhibits a typically Aegean floristic character. The cliffs at the middle part of the island and the summit of Mt. Atheras, with its largely undisturbed, endemic rich flora should be declared as a nature reserve.

### Zusammenfassung

CHRISTODOULAKIS D. 1996. Die Flora von Ikaria (Griechenland, O-Ägäische Inseln). – *Phyton* (Horn, Austria) 36 (1): 63–91, mit 2 Abbildungen. – Englisch mit deutscher Zusammenfassung.

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Geologie, Klima, Flora und Pflanzengeographie der Insel Ikaria werden erörtert. Die Inselflora umfasst 829 taxa an Gefäßpflanzen, von denen 233 erstmals auf der Insel gefunden wurden. 13 griechische und 29 ägäische Endemiten kommen auf Ikaria vor, 15 von ihnen sogar ausschliesslich auf dieser Insel. Unter den griechischen Endemiten sind *Onosma kaheirei*, *Crepis hellenica* und *Sedum delicum* Erstfunde für die ost-ägäische Region. Eine ausführliche Pflanzenliste beinhaltet Lebensform sowie chorologische und Standorts-Angaben. Im Lebensformenspektrum dominieren wegen der ausgedehnten, sommerlichen Trockenheit die Thero-phyten mit 49%. 17 chorologische Einheiten werden unterschieden, wobei die mediterrane Gruppe überwiegt. Der hohe Anteil dieses mediterranen Elements in Verbindung mit dem hohen Prozentsatz an Therophyten unterstreicht den ausgesprochen mediterranen Charakter der Inselflora. Den Grossteil der Arten bilden Autochthone mit 63%, die wahrscheinlich die Relikte einer ehemaligen ägäischen Kontinentalflora sind. Einen beträchtlichen Anteil von 27% besitzen noch die anthropogenen Pflanzen, während jene Arten, deren Anwesenheit das Ergebnis natürlicher Ausbreitung über große Entfernungen ist, sich auf 10% beschränken. Auf der Grundlage dieser Daten läßt sich Ikarias Flora als typisch ägäisch bezeichnen. Die Felspartien im mittleren Teil der Insel und der Gipfelbereich des Mt. Atheras mit ihrer weitgehend ungestörten, endemitenreichen Flora sollten unter Naturschutz gestellt werden.

## 1. Introduction

The flora and phytogeography of the Aegean area have long been the subject of scientific research. Commendable botanical studies have been carried out for many of the islands, but for others our knowledge of their flora and vegetation is still incomplete.

The island of Ikaria belongs to the latter category: from a floristic point of view it remains practically unexplored, despite its phytogeographical position having often been the subject of scientific discussion and contention. Various phytogeographical conclusions expressed hitherto have not been based on the analysis of its flora as a whole.

This study aims primarily to contribute towards a more complete account of the flora of Ikaria, as well as towards the larger-scale survey of "Flora Hellenica", a collaborative project by the Botanical Institutes of Patras and Copenhagen and the Botanical Museums of Berlin and Lund. It will also form the basis for a phytogeographical analysis of the flora of Ikaria which will appear as the second part of this study.

The most important references relevant to the flora of Ikaria are: FORSYTH-MAJOR & BARBEY 1897, "Flora Aegaea" (RECHINGER 1943) and Flora of Turkey (DAVIS 1965–1988); also the "Contribution to the Orchid Flora" by HIRTH & SPAETH 1990 and BAUMANN 1990 which include 24 and 14 taxa, respectively. References to the vegetation and phytogeography of Ikaria have been made by RECHINGER 1936, 1951 and RUNEMARK 1971a, b.

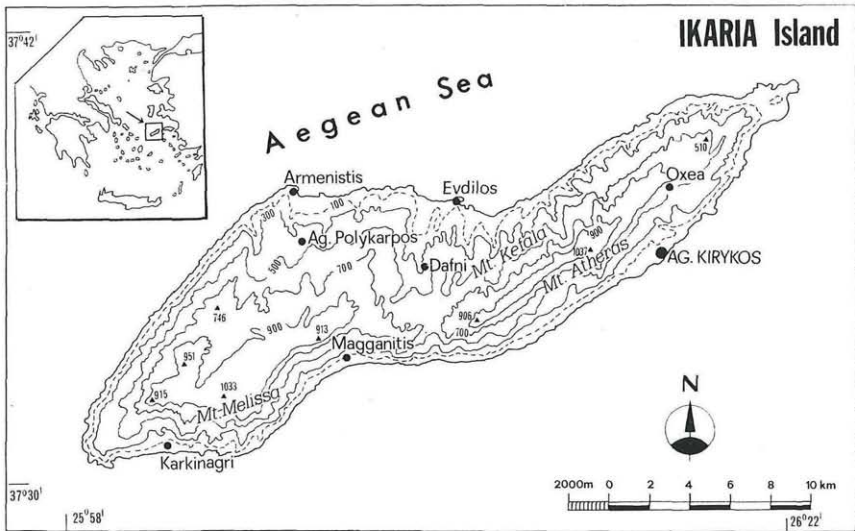


Fig. 1. Map of the island of Ikaria.

### 1.1. Features of the Island of Ikaria

Ikaria is the westernmost Greek island of the Central Eastern Aegean Sea, situated between the islands of Mikonos and Samos. It lies c. 19 km away from the latter island at co-ordinates  $37^{\circ} 30' - 37^{\circ} 41' \text{ N}$ ,  $25^{\circ} 58' - 26^{\circ} 22' \text{ E}$ . It has an area of  $255 \text{ km}^2$  and is rectangular in shape. Its longest axis is 40 km and stretches from an ENE to a WSW direction, while at its widest point, the island measures 9 km. The entire island is occupied by the Atheras mountain range (1037 m), with a steep southern side, but a smoother northern one (Fig. 1).

From a geological point of view, the island of Ikaria belongs to the Cycladic arc geotectonic zone (MOUNTRAKIS 1985). The western half of the island is formed entirely out of Tertiary granite and granodiorite, while most of the eastern part is gneiss. The central part, up to the eastern extremity, is Upper Palaeozoic green schist and phyllite and these are the two oldest rock types on the island. In places, there are outcrops of marble, sedimentary rock and alluvial silt (I.G.M.E. 1983). According to WALTER 1970, and based on the ombrothermic diagram (Fig. 2), the climate of Ikaria belongs to class IV2, i.e. a predominantly typical mediterranean climate with occasional rainfall in the winter and an almost 5.5-month long dry period (from late April to early October). Strong northerly winds prevail on the island.

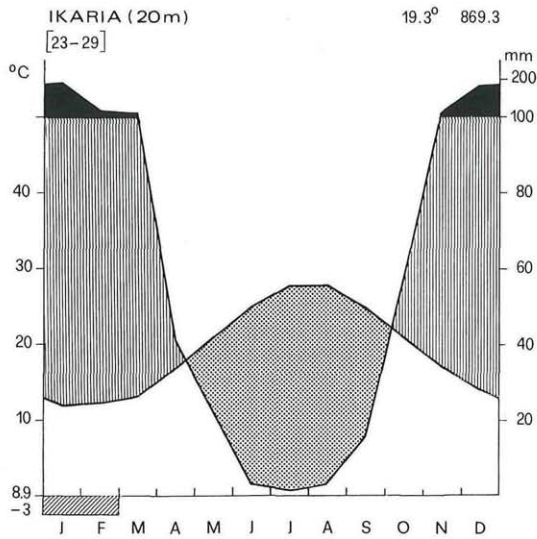


Fig. 2. Ombrothermic diagram of Ikaria.

## 2. Materials and Methods

This study is based mainly on collections and field observations carried out by the author at intervals between April 1980 and June 1993. The collections of RUNEMARK & SNOGERUP (20–25/4/1958, 15–18/6/1958, 12–16/7/1958), RUNEMARK & NORDENSTAM (20–21/6/1960) and TZANOUDAKIS (23–27/4/1975) were also studied. Plant specimens collected by the author and TZANOUDAKIS have been deposited at the Botanical Museum of the University of Patras (UPA), while those of RUNEMARK are in the Botanical Museum of Lund (LD).

The nomenclature followed here is after DAVIS 1965–1985, and where appropriate GREUTER & al. 1984–1989. Author names are given in the plant list only for the taxa not included in the above mentioned two publications. The life-form categories follow the system by RAUNKIAER 1934. For the chorological types, the classification by PIGNATTI 1982, in combination with that of DAVIS 1965, have been used. Taxon classification into autochthonous, anthropophyte and telechorous plants, was based on their ecological behaviour. The reports of GREUTER 1971, 1975, 1976, 1979 were also taken into consideration.

The plant list also includes bibliographical references. Families, genera and species have been placed in alphabetical order.

## 3. Results

The vascular flora of the island of Ikaria consists of 829 taxa from 92 families and 401 genera (Table 1). In addition, 15 cultivated or naturalized taxa and one hybrid have been included, but are not numbered and have not been taken into account in the floristic analysis (Tables 1–3).

Table 1  
Numbers of vascular plant taxa in the Ikarian flora.

Systematic unit	Families	Genera	Species	Subspecies	Sp. & Subsp.	%
<i>Pteridophyta</i>	5	14	19	4	23	2.8
<i>Gymnospermae</i>	3	3	3	1	4	0.5
<i>Dicotyledones</i>	71	296	506	115	621	74.9
<i>Monocotyledones</i>	13	88	143	38	181	21.8
Total	92	401	671	158	829	100

Table 2  
Biological spectrum of the Ikarian flora.

Life-forms		number of taxa	%
Therophytes	Th	406	49
Th. caespitose	Thcaesp		7
Th. reptant	Thrept		15
Th. scapose	Thscap		376
Th. rosulate	Thros		1
Th. parasite	Thpar		7
Hydrophytes	Hyd	6	1
Hyd. radicans	Hydrad		5
Hyd. natant	Hydnat		1
Geophytes	G	108	13
G. bulbous	Gbulb		71
G. rhizomatosus	Grhiz		35
G. parasite	Gpar		2
Hemicryptophytes	H	195	23
H. caespitose	Hcaesp		39
H. reptant	Hrept		3
H. scapose	Hscap		103
H. rosulate	Hros		30
H. biennial	Hbienn		18
H. scandent	Hscand		2
Chamaephytes	Ch	58	7
Ch. suffruticose	Chsuffr		40
Ch. succulent	Chsucc		1
Ch. reptant	Chrept		4
Ch. fruticose	Chfrut		13
Nano-phanerophytes	Nph	17	2
Phanerophytes	Ph	39	5
Ph. shrubby	Phcaesp		28
Ph. arborescent	Phscap		7
Ph. lianas	Phlian		4
Total			829 100

Table 3  
Chorological spectrum of the Ikarian flora.

Chorological group	Number of taxa	%
Endemic taxa		
Ikarian endemics (Endem.)	15	1.8
Aegean endemics (Aegean)	14	1.6
Greek endemics (Greek)	13	1.5
Mediterranean taxa		
Eurymediterranean (Eu. Med.)	163	19.7
Stenomediterranean (St. Med.)	182	22.0
E. Mediterranean (E. Med.)	205	24.7
Irano-Anatolian (Ir.-Anat.)	4	0.5
SE. European-Caucasian (SE. Europ.-Caucas.)	2	0.2
E. Africa (E. Afr.)	1	0.1
Widely distributed taxa		
Mediterranean-Atlantic (Med.-Atl.)	31	3.7
Mediterranean-Turanian (Med.-Turan.)	32	3.9
Eurosiberian (Eurosiber.)	5	0.6
Eurasian (Euras.)	16	1.9
Paleotemperate (Paleotemp.)	47	5.7
Circumboreal (Circumbor.)	8	1.0
Pan-, Paleo-, Paleosub-tropical (Pantrop., Paleotrop., Paleosubtrop.)	12	1.5
Sub- and Cosmopolitan (Subcosmop., Cosmop.)	79	9.6
Total	829	100

Approximately one third of the taxa found on Ikaria belong to three families: *Leguminosae*, *Compositae* and *Gramineae*. The families of *Caryophyllaceae*, *Cruciferae*, *Labiatae* and *Umbelliferae* are also well represented, the last one by 32 taxa.

In the biological spectrum found in the Ikarian flora (Table 2), therophytes form the highest proportion (49%). The proportion of hemicryptophytes (23%) seems remarkably high, while other forms occur in much smaller percentages.

Based on the data shown in the plant list, the current distribution of taxa in the studied area can be divided into 17 main groups (Table 3). The Mediterranean group (Eurymediterranean, Stenomediterranean and East-mediterranean) is predominant and comprises 550 taxa (66.4%). The highest number of taxa in the Mediterranean group is included in the East Mediterranean element (205, 24.7%). 230 taxa (27.7%) in the studied area can be regarded as widely distributed. Out of these, the Sub- and Cosmopolitan groups comprise 79 taxa, while the Palaeotemperate and

Eurasian elements are represented by 47 and 16 taxa, respectively. The Atlantic group consists of 31 species (3.7%) and the Mediterranean-Turanian element of 32 taxa (3.9%). The other chorological groups are represented in lower proportions.

The endemic flora comprises 42 taxa (5%): 15 taxa are exclusively endemic to Ikaria, 14 taxa are strictly endemic to the Aegean islands, and 13 taxa are endemic to Greece as a whole. 6% (38 taxa) of all dicotyledonous and c. 2% (4 taxa) of all monocotyledonous taxa are endemic. The proportion of perennials in the endemic flora is high, 80.5% (34 taxa), with annuals contributing only 19.5% (8 taxa).

### 3.1. Plant list

Abbreviations and symbols used: Chorology = see Table 3

Life - forms = see Table 2

obs. = observation only, no herbarium specimens

! = herbarium specimens examined by the author

\* = new record for Ikaria

#### *Pteridophyta*

##### *Equisetaceae*

*Equisetum ramosissimum*: Grhiz, Circumbor.; LD! -Stream, rivulets.

\* *E. telmateia*: Grhiz, Circumbor.; UPA! -Pools.

##### *Isoetaceae*

*Isoetes histrix*: Gbulb, Med.-Atl. (St.); LD! -Rills.

##### *Ophioglossaceae*

*Ophioglossum vulgatum*: Grhiz, Circumbor.; LD! -Streams.

##### *Polypodiaceae*

*Adiantum capillus-veneris*: Grhiz, Pantrop.; LD!, UPA! -Wet shaded rocks by streams and springs.

*Anogramma leptophylla*: Thcaesp, Cosmop.; LD!, UPA! -Streams, stone walls, rocks.

\* *Asplenium adiantum-nigrum*: Hros, Paleotemp.; (STRID, pers. comm.) LD -Cliffs in rivulet ravines.

*A. ceterach* subsp. *ceterach*: Hros, Paleotemp.; LD!, UPA! -Cliffs, stone walls.

*A. obovatum*: Hros, St. Med.; LD!, UPA! -Rock crevices.

*A. onopteris*: Hros, Med.-Atl.; LD!, UPA! -Rock crevices.

*A. trichomanes* subsp. *quadrivalens*: Hros, Cosmop.; LD! -Cliffs, caves.

*Athyrium filix-femina*: Hros, Subcosmop.; LD! -Rocks, valleys.

\* *Cheilanthes guanchica*: Hros, St. Med.; (RUNEMARK, unpublished).

*C. pteridioides*: Hros, Med.-Turan.; UPA! -Rock and cliff crevices.

*C. vellea*: Hros, Med.-Turan.; (RUNEMARK, unpublished).

*Cystopteris fragilis* (*C. filix-fragilis*): Hcaesp, Cosmop.; (RECHINGER 1943:81) -Caves, rocks.

*Dryopteris pallida* subsp. *pallida*: Grhiz, Eu. Med.; LD!, UPA! -Rock and cliff crevices, valleys.

*Polypodium cambricum* (*P. australe*): Hros, Eu. Med.; (STRID, pers. comm.) LD -Cliffs.

\* *P. interjectum*: Hros, Paleotrop.; UPA! -Rocks by streams

*Pteridium aquilinum*: Grhiz, Cosmop.; obs. -Cleared woodland, shores.

*Pteris dentata* subsp. *dentata*: Hros, E. Afr.; LD! -Streams, cliffs, valleys.

*P. vittata*: Hros, Pantrop.; LD!

##### *Selaginellaceae*

*Selaginella denticulata*: Chrept, St. Med.; LD!, UPA! -Shady rocks.

##### *Gymnospermae*

##### *Cupressaceae*

*Juniperus oxycedrus* subsp. *macrocarpa*: Phcaesp, Eu. Med.; obs. -Coastal habitats.

- J. phoenicea*: Phcaesp, Eu. Med.; obs.  
-Phrygana, scrub.
- Ephedraceae**  
*Ephedra campylopoda*: NPh, E. Med.;  
obs. -Cliffs, rocky ground.
- Pinaceae**  
*Pinus brutia*: Phscap, E. Med.; obs.  
-Dominant forest tree.
- Dicotyledones**
- Acanthaceae**  
\* *Acanthus spinosus*: Hscap, E. Med.;  
obs. -Roadsites, fields.
- Aizoaceae**  
\* *Mesembryanthemum nodiflorum*:  
Thscap, Eu. Med.; obs. -Sea shores.
- Amaranthaceae**  
\* *Amaranthus hypochondriacus*: Natu-  
ralized; LD! -Along rills.
- Anacardiaceae**  
*Pistacia lentiscus*: Phcaesp, St. Med.;  
obs. -Macchie, phrygana.  
\* *P. terebinthus*: Phcaesp, Eu. Med.; obs.  
-Cliffs, macchie.
- Apocynaceae**  
*Nerium oleander* subsp. *oleander*:  
Phcaesp, St. Med.; obs. -Stream  
banks.  
*Vinca major* subsp. *major*: Natural-  
ized; (DAVIS 1978:163).
- Araliaceae**  
\* *Hedera helix* subsp. *helix*: Phlian,  
Med.-Atl. (Eu.); obs. -Stream banks,  
forest.
- Aristolochiaceae**  
*Aristolochia hirta*: Gbulb, E. Med.;  
LD! -Meadows, below cliffs.
- Asclepiadaceae**  
\* *Cionura erecta*: Chsuffr, E. Med.; LD!  
-Siliceous rocks, along rills.  
*Vincetoxicum canescens* subsp. *canes-  
cens*: Hscap, Ir.- Anat.; (DAVIS  
1978:169) -Rocky slopes.  
*V. canescens* subsp. *pedunculatum*:  
Hscap, E. Med.; LD! -Cliffs, gravel.
- Betulaceae**  
*Alnus glutinosa* subsp. *glutinosa*:  
Phscap, Paleotemp.; LD!, UPA!  
-Stream banks.
- Boraginaceae**  
\* *Alkanna tinctoria*: Hscap, St. Med.;  
LD!, UPA! -Phrygana, scree.  
*Achusa hybrida*: Hscap, St. Med.;  
LD!, UPA! -Phrygana, roadsides.
- Borago officinalis*: Thscap, Eu. Med.;  
LD! -Stream banks.
- \* *Echium italicum*: Hscap, Eu. Med.;  
LD!, UPA! -Fields.  
*E. parviflorum*: Thscap, St. Med.; LD!  
-Roadsides, fields, cliffs.  
*E. plantagineum*: Thscap, Eu. Med.;  
LD!, UPA! -Fields, sandy sea-  
shores.
- \* *Heliotropium hirsutissimum*: Thscap,  
E. Med.; LD! -Fields.  
\* *H. suaveolens*: Thscap, E. Med.; UPA!  
-Fallow fields.
- \* *Lithospermum arvense*: Thscap, Eu.  
Med.; UPA! -Roadsides.  
*Myosotis incrassata*: Thscap, E. Med.;  
LD!, UPA! -Rocky slopes.  
*M. ramosissima* subsp. *ramosissima*:  
Thscap, Euras.; LD!, UPA! -Stream  
banks.  
*Onosma graeca*: Thscap, E. Med.;  
UPA! -Rocky slopes.
- \* *O. kaheirei* TEPPNER ("*O. auchera-  
num*")? Chsuffr, Greek; LD!, UPA!  
-Cliffs.  
*Symphytum circinale*: Hscap, E. Med.;  
LD!, UPA! -Stream banks, cliffs.  
*S. icaricum*: Hscap, Endem.; LD!,  
UPA! -Shady siliceous rocks, cliffs.
- Cactaceae**  
\* *Opuntia ficus-barbarica*: Naturalized;  
obs. -Stony soils near villages.
- Callitrichaceae**  
*Callitriche stagnalis*: Hydrad, Euras.;  
LD! -Streams.
- Campanulaceae**  
\* *Asyneuma virgatum* subsp. *cichorii-  
forme*: Hbienn, E. Med.; UPA!  
-Open rocky slopes.  
*Campanula calaminthifolia*: Hscap,  
Aegean; (DAVIS 1978: 34) -Cliffs.  
*C. delicatula*: Thscap, E. Med.; LD!  
-Garigue.  
*C. erinus*: Thscap, St. Med.; (RECHIN-  
GER 1943:601).  
*C. incurva*: Hscap, Greek; LD!, UPA!  
-Limestone cliffs.  
*C. lyrata* subsp. *lyrata*: Hscap, E.  
Med.; LD! -Siliceous rocks.  
*C. lyrata* subsp. *icarica*: Hscap, Ae-  
gean; LD!, UPA! -Cliffs, phrygana.
- Legousia pentagonia*: Thscap, E. Med.;  
UPA! -Fields, dry open places.



*Capparaceae*

- \* *Capparis orientalis*: NPh, Euras.; obs.  
-Waste places, cliffs.

*Caprifoliaceae*

*Lonicera etrusca*: Phlian, Eu. Med.;  
obs. -Cliffs, hedges, damp places.

*Caryophyllaceae*

*Agrostemma githago*: Thscap, Paleotemp.; LD! -Fields.

- \* *Arenaria deflexa* subsp. *deflexa*:  
Chsuffr, E. Med.; UPA! -Rocks,  
screes.

*A. graveolens*: Thscap, E. Med.; LD!  
-Cliffs.

*A. leptoclados*: Thscap, Paleotemp.;  
UPA! -Rocks.

- \* *A. muralis*: Thscap, E. Med.; LD!  
-Cliffs.

*A. runemarkii* PHITOS: Thscap, En-  
dem.; LD!, UPA! -Cliffs.

- \* *Cerastium brachypetalum* subsp. *roeseri*:  
Thscap, Eu. Med.; (STRID, pers.  
comm.) G -Shady schistaceous  
rocks.

*C. commatum*: Thscap, E. Med.; LD!,  
UPA! -Phrygana, cliffs.

*C. glomeratum*: Thscap, Subcosmop.;  
LD!, UPA! -Fields, phrygana.

*C. semidecandrum*: Thscap, Cosmop.;  
(DAVIS 1967:83).

- \* *Corrigiola litoralis*: Thscap, Med.-Atl.;  
LD! -Moist stream banks.

*Dianthus elegans*: Chsuffr, E. Med.;  
LD!, UPA! -Cliffs, rocks.

- \* *Herniaria hirsuta*: Thscap, Paleotemp.;  
LD!, UPA! -Sandy sea-shores,  
stream banks, rocky places.

*H. micrantha*: Thscap, E. Med.; LD!,  
UPA! -Rocky slopes.

*Minuartia attica* subsp. *idaea* (HAL.)  
KAMARI & CONSTANTINIDIS: Chsuffr,  
Aegean; LD! -Siliceous rocks,  
gravel.

- \* *M. hybrida* subsp. *hybrida*: Thscap,  
Paleotemp.; UPA! -Fields, rocky  
places.

- \* *M. mediterranea*: Thscap, Eu. Med.;  
LD! -Roadsides, cliffs.

*Moenchia graeca*: Thscap, E. Med.;  
LD!, UPA! -Rocky slopes.

- \* *M. mantica*: Thscap, Eu. Med.; (STRID,  
pers. comm.) ATH -Stony and rocky  
ground.

*Paronychia echinulata*: Thscap, St.  
Med.; LD! -Rocks, stream banks.

- \* *P. macrosepala*: Hcaesp, E. Med.; UPA!  
-Sandy sea-shores.

*Petrorhagia velutina*: Thscap, Eu.  
Med.; LD!, UPA! -Phrygana, stream  
banks.

*Polycarpon tetraphyllum* subsp. *di-  
phyllum*: Thscap, St. Med.; LD!,  
UPA! -Phrygana, cliffs, rocks,  
fields.

*Sagina apetala*: Thscap, Eu. Med.; LD!

*S. maritima*: Thscap, Med.-Atl. (St.);  
LD! -Sandy sea-shores.

- \* *S. procumbens*: Hcaesp, Subcosmop.;  
LD! -Along rills, siliceous rocks.

- \* *Scleranthus perennis* subsp. *dichotomus*:  
Hcaesp, E. Med.; LD!, UPA!  
-Siliceous rocks, gravel.

*S. perennis* subsp. *marginatus*:  
Hcaesp, Eu. Med.; (DAVIS 1967:263).

*Silene aegaea* OXELMAN: Thscap, Ae-  
gean; ATH, GB, LD, UPA! -Road-  
sides, gravel.

*S. behen*: Thscap, St. Med.; LD!, UPA!  
-Fields, stream banks, below cliffs.

*S. colorata*: Thscap, St. Med.; LD!,  
UPA! -Roadsides, littoral rocks,  
fields, phrygana.

*S. cretica*: Thscap, St. Med.; LD!,  
UPA! -Fields, allong rills.

*S. cythnia*: Hros, Aegean; (STRID,  
pers. comm.) LD -Rocks.

*S. fabaria*: Hscap, E. Med.; LD!, UPA!  
-Cliffs, rocks,

*S. gallica*: Thscap, Subcosmop.; LD!,  
UPA! -Fields, roadsides, sandy sea-  
shores, stream banks.

*S. gigantea* subsp. *gigantea*: Hros, E.  
Med.; LD!, UPA! -Cliffs.

*S. italica* subsp. *italica*: Hros, Eu.  
Med.; UPA! -Open places in Pinus  
forest, phrygana.

- \* *S. papillosa*: Thscap, E. Med.; LD!  
-Under olive trees.

*S. pentelica*: Thscap, Greek; LD!,  
UPA! -Rocks, stony roadsides.

*S. sedoides* subsp. *sedoides*: Thscap,  
St. Med.; LD!, UPA! -Rocky coasts,  
sandy shores.

*S. vulgaris* subsp. *angustifolia*: Hscap,  
St. Med.; (STRID, pers. comm.) LD  
-Gravel.

- S. vulgaris* subsp. *macrocarpa*: Hscap, St. Med.; UPA! -Fields.
- S. vulgaris* subsp. *vulgaris*: Hscap, Euras.; (STRID, pers. comm.) LD -Fields.
- \* *Spergula arvensis*: Thscap, Subcosmop.; LD! -Siliceous rocks, garigue.
- \* *Spergularia bocconei*: Thscap, Subcosmop.; LD!, UPA! -Sandy sea-shores.
- S. salina*: Thscap, Subcosmop.; (RECHINGER 1943: 132).
- Stellaria cupaniana*: Thrept, St. Med.; LD! -Siliceous rocks.
- \* *S. media*: Thrept, Cosmop.; LD!
- S. pallida*: Thscap, Paleotemp.; LD!, UPA! -Stony places, dry rills.
- \* *Velesia rigida*: Thscap, Med.-Turan.; (RUNEMARK, unpublished).
- Chenopodiaceae**
- \* *Atriplex prostrata*: Thscap, Paleotemp.; UPA! -Sandy sea-shores.
- \* *Beta maritima*: Hscap, Med.-Atl.; (STRID, pers. comm.) ATH -Sandy and shingly shores.
- \* *Chenopodium ambrosioides*: Naturalized; UPA!
- C. giganteum*: Naturalized; (DAVIS 1988:90).
- C. murale*: Thscap, Subcosmop.; LD!, UPA! Ruderal sites, shores.
- \* *C. opulifolium*: Thscap, Paleotemp.; LD! -Along rills.
- Salsola kali*: Thscap, Paleotemp.; LD!, UPA! -Sandy and shingly shores.
- Cistaceae**
- Cistus creticus* subsp. *creticus*: NPh, St. Med.; LD!, UPA! -Phrygana, open woodland.
- C. salvifolius*: NPh, St. Med.; LD!, UPA! -Phrygana, open woodland.
- Fumana arabica*: Chsuffr, Med.-Turan.; LD!, UPA! -Phrygana.
- F. thymifolia*: Chsuffr, St. Med.; LD! -Phrygana.
- Tuberaria guttata*: Thscap, Eu. Med.; LD!, UPA! -Phrygana, stream banks.
- Compositae**
- Aetheorhiza bulbosa* subsp. *microcephala*: Gbulb, E. Med.; UPA! -Stream banks.
- Andryala integrifolia*: Thscap, St. Med.; LD!, UPA! -Phrygana, cliffs, old fields.
- Anthemis auriculata*: Thscap, E. Med.; LD! -Garigue, dry rills.
- A. chia*: Thscap, E. Med.; LD!, UPA! -Roadsides, rocky slopes, fields.
- A. cretica* subsp. *cretica* (*A. cretica* subsp. *leucanthemoides*): Hscap, E. Med.; LD!, UPA! -Rocks, gravel.
- A. rigida*: Thscap, E. Med.; LD!, UPA! -Phrygana, sea-shores.
- \* *Artemisia arborescens*: Subspontaneous; UPA! -Old fields.
- Atrachylis cancellata*: Thscap, St. Med.; obs. -Phrygana.
- A. gummifera*: Hros, St. Med.; LD! -Sand dunes
- Bellis sylvestris*: Hros, St. Med.; LD! -Meadows, garigue.
- Bellium minutum*: Thscap, E. Med.; LD! -Cliffs, sandy sea-shores, roadsides.
- Calendula arvensis*: Thscap, Eu. Med.; LD!, UPA! -Roadsides, cliffs, stream banks.
- \* *Carduus nutans* s.l.: Hbienn, Euras.; LD!, UPA! -Garigue, cliffs.
- C. pycnocephalus* subsp. *pycnocephalus*: Thscap, Eu. Med.; LD!, UPA! -Rocks, cliffs, stream banks.
- Carlina graeca*: Hscap, E. Med.; LD! -Rocks, field edges.
- C. lanata*: Thscap, St. Med.; LD! -Garigue, sandy shores.
- Carthamus lanatus*: Thscap, Eu. Med.; LD! -Garigue, sandy shores.
- C. leucocaulos*: Thscap, Greek; LD! -Garigue, cliffs.
- Centaurea acicularis* (*C. exscapa*): Hros, E. Med.; LD!, UPA! -Cliffs, rocks, phrygana.
- C. raphanina* subsp. *mixta*: Hros, Greek; LD! -Coastal cliffs.
- \* *C. solstitialis* subsp. *solstitialis*: Hbienn, Subcosmop.; LD!, UPA! -Roadsides, phrygana.
- C. spinosa* (*C. spinosa* subsp. *tomentosa*): Chfrut, E. Med.; obs. -Sandy sea-shores.
- \* *Chamaemelum mixtum*: Thscap, St. Med.; UPA! -Coastal beaches.

- Chondrilla juncea*: Hscap, Paleotemp.; LD!, UPA! -Roadsides, phrygana.
- Chrysanthemum coronarium*: Thscap, St. Med.; (DAVIS 1975: 254)
- C. segetum*: Thscap, Eu. Med.; LD!, UPA! -Sea-shores, roadsides, fields.
- Cichorium intybus*: Hscap, Cosmop.; LD! -Sandy shores, cliffs.
- C. spinosum*: Chsuffr, St. Med.; LD! -Rocky and sandy sea-shores, garigue.
- Conyza bonariensis*: Naturalized; LD!
- Crepis foetida* subsp. *commutata*: Thscap, E. Med.; LD!, UPA! -Roadsides, phrygana, cliffs.
- C. fraasii*: Hscap, E. Med.; UPA! -Cliffs, stream banks.
- \* *C. hellenica* KAMARI: Thscap, Greek; UPA! -Stream banks.
- C. multiflora*: Thscap, E. Med.; LD!, UPA! -Phrygana, cliffs, roadsides, shores.
- C. sancta*: Thscap, Med.-Turan.; LD! -Siliceous rocks.
- Crupina crupinastrum*: Thscap, St. Med.; LD!, UPA! -Phrygana, stream banks.
- Doronicum orientale*: Grhiz, SE. Europ.-Caucas.; UPA!
- Echinops viscosus* subsp. *viscosus*: Hscap, E. Med.; LD! -Garigue.
- Evax contracta*: Thrept, E. Med.; LD! -Below cliffs.
- E. pygmaea*: Thrept, St. Med.; LD!
- Filago cretensis* subsp. *cretensis*: Thscap, Aegean; LD!, UPA! -Phrygana, rocky slopes.
- F. eriocephala*: Thscap, E. Med.; LD!, UPA! -Phrygana, roadsides, rocks, cliffs, old fields.
- Hedypnois cretica*: Thscap, St. Med.; LD!, UPA! -Roadsides, cliffs, sandy shores.
- Helichrysum italicum*: Chsuffr, Eu. Med.; LD!, UPA! -Sandy shores, garigue.
- H. orientale*: Chsuffr, E. Med.; LD!, UPA! -Cliffs.
- H. stoechas* subsp. *barrelieri*: Chsuffr, E. Med.; LD!, UPA! -Phrygana, cliffs, old fields.
- Hyoseris scabra*: Thros, St. Med.; LD! -Below cliffs.
- Hypochoeris achyrophorus*: Thscap, St. Med.; LD!, UPA! -Phrygana.
- H. glabra*: Thscap, Eu. Med.; LD!, UPA! -Sandy shores, rocks, phrygana.
- Inula heterolepis*: Chsuffr, E. Med.; LD!, UPA! -Cliffs.
- I. viscosa*: Hscap, Eu. Med.; LD!, UPA! -Wet localities, garigue.
- Jurinea consanguinea*: Hscap, E. Med.; LD!, UPA! -Cliffs, phrygana.
- J. mollis*: Hscap, E. Med.; UPA! -Phrygana.
- \* *Lactuca saligna*: Thscap, Med.-Turan.; LD! -Sandy shores.
- Leontodon tuberosus*: Hros, St. Med.; LD!, UPA! -Stream banks, cliffs, fallow fields.
- Logfia arvensis*: Thscap, Eu. Med. (-S. Siber.); LD!, UPA! -Rocky places, roadsides.
- L. gallica*: Thscap, Eu. Med.; LD!, UPA! -Garigue, cliffs.
- L. minima*: Thscap, Eurosiber.; LD!
- Matricaria chamomilla*: Thscap, Subcosmop.; obs. -Roadsides.
- Notobasis syriaca*: Thscap, St. Med.; LD!
- Onopordum majori*: Hbienn, Aegean; LD!, UPA! -Cliffs, garigue.
- Otanthus maritimus*: Chsuffr, Med.-Atl. (St.); LD!, UPA! -Sandy sea-shores.
- Pallenis spinosa* subsp. *spinosa*: Thscap, Eu. Med.; LD!, UPA! -Cliffs, rocky places.
- Phagnalon graecum*: Chsuffr, E. Med.; LD!, UPA! -Cliffs, garigue.
- Picnomon acarna*: Hscap, St. Med.; LD! -Phrygana, roadsides.
- \* *Picris altissima*: Thscap, St. Med.; LD! -Sandy shores.
- P. pauciflora*: Thscap, Eu. Med.; LD!, UPA! -Cliffs.
- \* *Pilosella piloselloides* subsp. *megalomastix*: Hscap, Eurosiber.; UPA! -Rocky places.
- Ptilostemon chamaepeuce*: Chfrut, E. Med.; LD! -Cliffs.
- P. gnaphaloides* subsp. *pseudofruticosus*: Chfrut, Greek; LD!, UPA! -Cliffs.

- Reichardia picroides*: Hscap, St. Med.; LD!, UPA! -Phrygana, cliffs, sandy shores.
- Rhagadiolus stellatus*: Thscap, Eu. Med.; LD!, UPA! -Rocky places.
- Scariola viminea*: Hbienn, Eu. Med.; LD!, UPA! -Cliffs, garigue.
- Scolymus hispanicus*: Hbienn, Eu. Med.; obs. -Roadsides.
- Senecio bicolor* subsp. *bicolor*: Chsuffr, E. Med.; LD! -Cliffs.
- S. vernalis*: Thscap, Euras.; LD!, UPA! -Along rills, garigue, roadsides.
- S. vulgaris*: Thscap, Cosmop.; LD! -Along rills, below cliffs, garigue.
- \* *Solidago virgaurea*: Hscap, Paleotemp.; LD! -Ravines.
- Sonchus asper* subsp. *glaucescens*: Thscap, Paleotemp.; LD!, UPA! -Stream banks, fields, garigue.
- S. oleraceus*: Thscap, Subcosmop.; LD! UPA! -Ruderal places, field margins.
- \* *Steptorhamphus tuberosus*: Hscap, E. Med.; LD!, UPA! -Cliffs.
- \* *Taraxacum minimum*: Hros, Eu. Med.; UPA! -Rocky slopes.
- \* *T. serotinum*: Hros, Euras.; UPA! -Rocky slopes.
- Tolpis barbata*: Thscap, St. Med.; LD!, UPA! -Phrygana, macchie.
- T. virgata*: Hscap, St. Med.; LD!, UPA! -Phrygana, cliffs, sandy shores.
- \* *Tragopogon longirostris*: Hbienn, E. Med.; UPA! -Roadsides
- T. porrifolius*: Hbienn, Eu. Med.; LD!, UPA! -Roadsides, phrygana.
- Tyrimnus leucographus*: Thscap, St. Med.; LD!, UPA! -Roadsides, phrygana.
- Urospermum picroides*: Thscap, Eu. Med.; LD!, UPA! -Phrygana, cliffs.
- \* *Xanthium strumarium*: Naturalized; UPA! -Sandy shores.
- Convolvulaceae**
- \* *Calystegia soldanella*: Grhiz, Cosmop.; UPA! -Coastal sands.
- Convolvulus althaeoides*: Hscand, St. Med.; (RECHINGER 1943:440).
- \* *C. elegantissimus*: Hscand, St. Med.; UPA! -Rocky ground, phrygana.
- C. oleifolius*: Chfrut, St. Med.; LD!, UPA! -Cliffs.
- \* *C. siculus* subsp. *siculus*: Thscap, St. Med.; LD! -Cliffs, damp meadows.
- Cuscuta approximata* subsp. *approximata*: Thpar, Paleosubtrop.; LD! -On Crepis.
- C. epithymum* subsp. *epithymum*: Thpar, Euras.; LD! -Garigue.
- C. palaestina*: Thpar, E. Med.; LD!, UPA! -Garigue.
- C. cf. planiflora*: Thpar, Eu. Med.; LD! -Damp meadows (on *Crepis*).
- Crassulaceae**
- Crassula tillaea*: Thscap, Med.-Atl.; LD! -Stream banks, garigue.
- Rosularia serrata*: Hros, E. Med.; LD! -Cliffs.
- Sedum amplexicaule* subsp. *tenuifolium*: Chsucc, St. Med.; LD! -Garigue, cliffs.
- S. caespitosum* (*S. rubrum*): Thscap, St. Med.; (RECHINGER 1943: 294).
- S. cepaea*: Thscap, Med.-Atl. (Eu.); LD!, UPA! -Cliffs, rocks, damp meadows.
- \* *S. delicum*: Thscap, Greek; UPA!
- S. hispanicum*: Thscap, Med. (E.) -Turan.; LD!, UPA! -Cliffs, rocks, phrygana.
- S. litoreum*: Thscap, St. Med.; LD!, UPA! -Shores, scree, stone walls.
- \* *S. rubens*: Thscap, Med.-Atl. (Eu.); LD!, UPA! -Cliffs, stone walls, bushes.
- \* *Umbilicus chloranthus*: Gbulb, E. Med.; UPA! -Stream banks.
- U. horizontalis*: Gbulb, St. Med.; UPA! -Cliffs, rocks.
- U. rupestris*: Gbulb, Med.-Atl.; UPA! -Rocks.
- Cruciferae**
- Aethionema saxatile* subsp. *creticum*: Chsuffr, E. Med.; LD!, UPA! -Cliffs, rocks.
- Alyssum foliosum*: Thscap, E. Med.; LD!, UPA! -Cliffs.
- \* *A. minutum*: Thscap, E. Med.; LD!
- A. simplex*: Thscap, Med.-Turan.; LD! -Garigue.
- A. umbellatum*: Thscap, E. Med.; LD!, UPA! -Garigue, meadows, stream banks.
- Arabidopsis thaliana*: Thscap, Cosmop.; LD! -Rills, paths, cliffs.

- Arabis verna*: Thscap, St. Med.; LD!, UPA! -Phrygana, meadows.
- Biscutella didyma*: Thscap, Med.-Turan.; LD!, UPA! -Rocky slopes, stream banks, phrygana.
- Brassica cretica* subsp. *aegaea* (HELDL. & HAL.) SNOG. & al.: Chsuffr, E. Med.; LD!, UPA! -Cliffs.
- \* *Bunias erucago*: Thscap, Eu. Med.; LD!, UPA! -Stream banks, garigue, field edges, roadsides.
- \* *Cakile maritima* subsp. *maritima*: Thscap, Med.-Atl.; LD!, UPA! -Sandy and shingly shores.
- Calepina irregularis*: Thscap, Med.-Turan.; LD!, UPA! -Streamsides.
- Capsella bursa-pastoris*: Thscap, Cosmop.; LD!, UPA! -Roadsides, phrygana.
- \* *Cardamine graeca*: Thscap, Eu. Med.; UPA! -Streamsides.
- C. hirsuta*: Thscap, Cosmop.; UPA! -Rocks.
- Clypeola jonthlaspi*: Thscap, St. Med.; LD!, UPA! -Cliffs.
- Erophila macrocarpa*: Thscap, E. Med.; LD! -Cliffs.
- E. verna*: Thscap, Circumbor.; (RUNEMARK, unpublished).
- Erysimum senoneri* subsp. *icaricum*: Chsuffr, Endem.; LD!, UPA! -Cliffs.
- Hirschfeldia incana*: Hscap, Eu. Med.; UPA! -Fields.
- Iberis runemarkii*: Chsuffr, Endem.; LD! -Cliffs.
- Lepidium spinosum*: Thscap, E. Med.; LD! -Damp meadows.
- Malcolmia chia*: Thscap, E. Med.; LD!, UPA! -Cliffs.
- M. flexuosa* subsp. *naxensis*: Thscap, E. Med.; LD!, UPA! -Sandy and rocky coasts.
- \* *Matthiola incana* subsp. *incana*: Spontaneous; UPA! -Roadsides.
- M. sinuata*: Hscap, Med.-Atl.; LD!, UPA! -Sandy and rocky coasts.
- M. tricuspidata*: Thscap, St. Med.; UPA! -Sandy sea-shores.
- Nasturtium officinale*: Hscap, Cosmop.; LD!
- \* *Raphanus raphanistrum* subsp. *raphanistrum*: Thscap, Circumbor.; LD!, UPA! -Pastures, fields, roadsides.
- Rorippa icarica*: Hscap, Endem.; LD!, UPA! -Cliffs.
- Sinapis alba*: Thscap, Paleotemp.; LD!
- Sisymbrium officinale*: Thscap, Subcosmop.; LD! -Below cliffs, stream-sides.
- S. orientale*: Thscap, Eu. Med.; UPA!
- S. polyceratium*: Thscap, Eu. Med.; LD! -Garigue.
- Teesdalia coronopifolia*: Thscap, Eu. Med.; LD!, UPA! -Garigue, stream-sides.
- Thlaspi bulbosum*: Chsuffr, Greek; UPA! -Stony slopes.
- \* *T. perfoliatum*: Thscap, Paleotemp.; LD! -Streamsides.
- Cucurbitaceae**
- Ecballium elaterium*: Gbulb, Eu. Med.; obs. -Roadsides.
- Cynocrambaceae**
- Theligionum cynocrambe*: Thscap, St. Med.; LD! -Cliffs, olive-groves, along rivulets.
- Dipsacaceae**
- Cephalaria squamiflora* subsp. *squamiflora*: Chfrut, Aegean; LD!, UPA! -Cliffs.
- Knautia integrifolia*: Thscap, Eu. Med.; LD!, UPA! -Phrygana, cliffs, sandy shores.
- \* *Pteroccephalus plumosus*: Thscap, Med.(E.)-Turan.; UPA! -Phrygana, cliffs.
- Ericaceae**
- Arbutus andrachne*: Phcaesp, E. Med.; obs. -Macchie, woodland.
- A. unedo*: Phcaesp, St. Med.; obs. -Macchie, woodland.
- Erica arborea*: Phcaesp, St. Med.; LD!, UPA! -Macchie, garigue, Pinus forest.
- E. manipuliflora*: NPh, E. Med.; LD!, UPA! -Phrygana, macchie, Pinus forest.
- Euphorbiaceae**
- Euphorbia acanthothamnos*: Chfrut, E. Med.; LD!, UPA! -Phrygana, cliffs.
- E. dendroides*: NPh, St. Med.; obs. -Cliffs.
- \* *E. exigua*: Thscap, Eu. Med.; LD! -Streamsides, sandy shores.

- \* *E. helioscopia*: Thscap, Cosmop.; UPA!  
-Fallow fields.
- \* *E. herniariifolia*: Hrept, E. Med.; UPA!  
-Rocks.
- \* *E. hirsuta*: Grhiz, Eu. Med.; LD!  
-Damp meadows.
- \* *E. peplis*: Thscap, Eu. Med.; LD!,  
UPA! -Sandy and shingly shores.  
*E. peplus*: Thscap, Cosmop.; LD!,  
UPA! -Phrygana, old fields, stream-  
sides, roadsides.
- \* *Mercurialis annua*: Thscap, Paleo-  
temp.; LD!, UPA! -Phrygana,  
streamsides, roadsides.

#### Fagaceae

- \* *Castanea sativa*: Phscap, Paleotemp.;  
obs.  
*Quercus coccifera*: Phcaesp, St. Med.;  
obs. -Phrygana, macchie, forest.
- Q. ilex*: Phscap, St. Med.; obs. -Mac-  
chie, forest.
- Q. ithaburensis* subsp. *macrolepis*:  
Phscap, E. Med.; LD!, UPA!
- Q. pubescens*: Phcaesp, Eu. Med.; LD!,  
UPA! -Canyons.

#### Frankeniaceae

- \* *Frankenia hirsuta*: Chsuffr, Med.-  
Turan.; LD! -Sandy shores.
- \* *F. pulverulenta*: Thscap, Med.-Turan.;  
LD! -Sandy shores.

#### Gentianaceae

- Blackstonia perfoliata*: Thscap, Eu.  
Med.; LD!, UPA! -Moist places.
- Centaurium erythraea*: Hbienn, Paleo-  
temp.; LD! -Rivulets.
- C. maritimum*: Thscap, St. Med.; LD!
- C. pulchellum*: Thscap, Paleotemp.;  
LD! -Rivulets, fields.
- \* *C. tenuiflorum* subsp. *tenuiflorum*:  
Thscap, St. Med.; UPA! -Phrygana.

#### Geraniaceae

- Erodium botrys*: Thscap, St. Med.;  
LD!, UPA! -Roadsides.
- E. ciconium*: Thscap, Eu. Med.; (RE-  
CHINGER 1943:281).
- E. cicutarium*: Thscap, Subcosmop.;  
LD!, UPA! -Garigue, roadsides, for-  
est.
- E. gruinum*: Thscap, Med. (E.) -Turan.;  
UPA! -Phrygana.
- \* *E. malacoides*: Thscap, St. Med.; LD!  
-Roadsides, olive groves, meadows.

- \* *E. moschatum*: Thscap, Eu. Med.; LD!,  
UPA! -Roadsides.
- \* *Geranium columbinum*: Thscap, Pa-  
leotemp.; LD! -Ravines.
- G. dissectum*: Thscap, Subcosmop.;  
(DAVIS 1967: 461).
- G. lucidum*: Thscap, Eu. Med.; LD!,  
UPA! -Rocks.
- \* *G. molle* subsp. *molle*: Thscap, Sub-  
cosmop.; LD!, UPA! -Damp locality,  
cliffs.
- G. molle* subsp. *brutium*: Thscap, E.  
Med.; (DAVIS 1967:460).
- G. robertianum* subsp. *purpureum*:  
Thscap, Eu. Med.; LD!, UPA!  
-Cliffs, rocky slopes.
- G. rotundifolium*: Thscap, Paleotemp.;  
LD!, UPA! -Pinus forest, stream-  
sides, sandy shores.

#### Guttiferae

- Hypericum cuisinii*: Hscap, Aegean;  
LD!, UPA! -Cliffs, rocks.
- H. perfoliatum*: Hscap, St. Med.; LD!,  
UPA! -Damp places.
- \* *H. perforatum*: Hscap, Subcosmop.;  
LD!, UPA! -Phrygana, roadsides.
- H. polyphyllum* subsp. *subcordatum*:  
Hscap, E. Med.; LD!, UPA! -Rocks,  
sandy shores.
- \* *H. triquetrifolium*: Hscap, Eu. Med.;  
LD! -Fields, sandy shores.

#### Juglandaceae

- \* *Juglans regia*: Cultivated; obs. -Ra-  
vines.

#### Labiatae

- \* *Ajuga chamaepitys* subsp. *palaestina*:  
Hscap, E. Med.; LD!
- A. orientalis*: Hscap, E. Med.; LD!,  
UPA! -Rocky slopes, roadsides,  
phrygana.
- Ballota acetabulosa*: Chfrut, E. Med.;  
LD!, UPA! -Cliffs, phrygana, road-  
sides.
- \* *B. nigra* subsp. cf. *uncinata*: Hscap, St.  
Med.; LD! -Streamsides.
- Coridothymus capitatus*: Chfrut, St.  
Med.; LD!, UPA! -Phrygana, sandy  
shores.
- Lamium amplexicaule*: Thscap, Paleo-  
temp.; LD!, UPA! -Furrows, rocky  
slopes.
- L. moschatum*: Thscap, E. Med.; LD!  
-Roadsides.

- Lavandula stoechas* subsp. *stoechas*: NPh, St. Med.; LD!, UPA! -Phrygana, roadsides.
- Melissa officinalis* subsp. *altissima*: Hscap, Eu. Med.; LD!, UPA! -Streamsides.
- Mentha longifolia* subsp. *typhoides*: Hscap, Ir-Anat.; LD! -Streambeds.
- M. pulegium*: Hscap, Subcosmop.; LD!, UPA! -Damp localities.
- Origanum onites*: Chsuffr, E. Med.; LD!, UPA! -Phrygana, rocky slopes.
- O. vulgare* subsp. *hirtum*: Hscap, E. Med.; UPA! -Rocks.
- Prasium majus*: Chfrut, St. Med.; LD!, UPA! -Cliffs, streamsides.
- Salvia fruticosa*: Phcaesp, E. Med.; LD!, UPA! -Phrygana, cliffs.
- S. pomifera* subsp. *calycina*: Phcaesp, E. Med.; LD! -Cliffs.
- S. verbenaca*: Hscap, Med.-Atl.; LD!, UPA! -Phrygana, fields.
- S. viridis*: Thscap, St. Med.; (RECHINGER 1943:521).
- Satureja graeca* (*Micromeria graeca*): Chsuffr, St. Med.; (RECHINGER 1943:526).
- S. graveolens*: Thscap, E. Med.; LD! -Streamsides.
- S. icarica*: Chfrut, Endem.; LD!, UPA! -Schists.
- S. juliana*: Chsuffr, St. Med.; LD!, UPA! -Cliffs, phrygana.
- S. myrtifolia*: Chsuffr, E. Med.; LD!, UPA! -Phrygana, cliffs.
- S. thymbra*: Chfrut, St. Med.; LD!, UPA! -Phrygana.
- Scutellaria brevibracteata* subsp. *icarica*: Hscap, Aegean; LD!, UPA! -Cliffs, rocks, phrygana.
- Sideritis curvidens*: Thscap, E. Med.; LD!, UPA! -Phrygana, cliffs.
- S. lanata*: Thscap, E. Med.; LD!, UPA! -Rocks, cliffs, phrygana, roadsides.
- S. sipylea*: Chsuffr, E. Med.; LD!, UPA! -Cliffs, rocky slopes.
- Stachys arvensis*: Thscap, Subcosmop.; (DAVIS 1982:253).
- St. cretica* subsp. *smyrnaea*: Hscap, E. Med.; LD! -Below cliffs, sandy shores.
- St. spinulosa*: Thscap, E. Med.; LD!, UPA! -Cliffs, gravel, fields.
- Teucrium capitatum*: Chsuffr, Eu. Med.; LD!, UPA! -Phrygana, rocks.
- \* *T. divaricatum*: Chfrut, E. Med.; LD!, UPA! -Cliffs.
- Lauraceae**
- \* *Laurus nobilis*: Phcaesp, St. Med.; obs. -Ravines.
- Leguminosae**
- Anagryis foetida*: Phcaesp, St. Med.; obs. -Cliffs, phrygana.
- Anthyllis hermanniae*: Chfrut, St. Med.; LD!, UPA! -Phrygana.
- A. vulneraria* subsp. *rubriflora*: Hscap, St. Med.; LD!, UPA! -Phrygana, cliffs.
- Astragalus echinatus*: Thscap, St. Med.; LD! -Garigue.
- A. hamosus*: Thscap, Med.-Turan; LD! -Garigue.
- A. pelecinus*: Thscap, St. Med.; LD! -Streamsides.
- Bituminaria bituminosa*: Hscap, Eu. Med.; LD! -Roadsides.
- Calicotome villosa*: Phcaesp, St. Med.; LD!, UPA! -Phrygana.
- Ceratonia siliqua*: Phscap, St. Med.; obs. -Macchie.
- \* *Colutea melanocalyx* subsp. *davisiana*: Phcaesp, E. Med.; UPA! -Rocky slopes.
- Coronilla scorpioides*: Thscap, Eu. Med.; UPA! -Phrygana.
- \* *Dorycnium hirsutum*: Chsuffr, Eu. Med.; LD! -Cliffs.
- \* *D. rectum*: Chsuffr, St. Med.; UPA! -Wet localities.
- Genista acanthoclada*: NPh, E. Med.; obs. -Rocky slopes.
- \* *G. monspessulana*: Phcaesp, St. Med.; UPA! -Rocky slopes.
- Hippocrepis biflora*: Thscap, Eu. Med.; LD!, UPA! -Cliffs, phrygana.
- H. ciliata*: Thscap, St. Med.; LD!, UPA! -Cliffs, phrygana.
- H. emerus* subsp. *emeroides*: NPh, E. Med.; obs. -Cliffs.
- Hymenocarpus circinnatus*: Thscap, St. Med.; LD!, UPA! -Rocky slopes, phrygana, fallow fields.
- \* *Lathyrus aphaca*: Thscap, Eu. Med.; LD! -Damp meadows.
- L. cicera*: Thscap, Med.-Turan; LD! -Roadsides.

- L. clymenum*: Thscap, St. Med.; LD!, UPA! -Fields, roadsides.
- L. setifolius*: Thscap, Eu. Med.; LD! -Cliffs, streamsides, olive groves.
- L. sphaericus*: Thscap, Eu. Med.; LD! -Garigue.
- \* *Lotus angustissimus*: Thscap, Eu. Med.; LD!, UPA! -Rocks, open places.
- L. cytisoides*: Chsuffr, St. Med.; LD!, UPA! -Sand dunes, cliffs, phrygana.
- L. divaricatus*: Thscap, E. Med.; LD! -Damp valleys, streamsides.
- L. edulis*: Thscap, St. Med.; LD!, UPA! -Olive groves, sandy shores, streamsides.
- \* *L. glaber*: Hscap, Paleotemp.; UPA! -Damp localities.
- \* *L. hispidus*: Thscap, St. Med.; LD! -Shores.
- L. ornithopodioides*: Thscap, St. Med.; LD! -Streamsides, old fields.
- L. peregrinus*: Thscap, E. Med.; (RECHINGER 1943:371).
- L. tetragonolobus*: Thscap, St. Med.; LD! -Shores, below cliffs.
- Lupinus albus* subsp. *graecus*: Thscap, E. Med.; UPA! -Roadsides.
- L. angustifolius* subsp. *angustifolius*: Thscap, St. Med.; UPA! -Roadsides.
- L. luteus*: Thscap, St. Med.; (DAVIS 1988:114).
- L. pilosus*: Thscap, E. Med.; LD!, UPA! -Phrygana, stony places.
- Medicago coronata*: Thscap, St. Med.; LD!, UPA! -Cliffs, fields.
- \* *M. disciformis*: Thscap, St. Med.; LD! -Rocks, fallow fields.
- \* *M. littoralis*: Thscap, Eu. Med.; LD! -Sandy shores.
- M. marina*: Chrept, Eu. Med.; LD! -Sandy shores.
- M. monspeliaca*: Thscap, Eu. Med.; LD! -Roadsides.
- \* *M. murex*: Thscap, St. Med.; UPA! -Sandy shores.
- M. orbicularis*: Thscap, Eu. Med.; LD!, UPA! -Fields.
- M. phrygia* (*Trigonella aurantiaca*): Thscap, Ir.-Anat.; (RECHINGER 1943:345) -Shores.
- M. polymorpha*: Thscap, Subcosmop.; LD!, UPA! -Olive groves, streamsides.
- M. praecox*: Thscap, St. Med.; LD! -Garigue, streamsides.
- \* *M. sativa*: Naturalized?; LD! -Sandy shores.
- M. truncatula*: Thscap, St. Med.; LD!  
*M. tuberculata*: Thscap, St. Med.; LD!, UPA! -Field margins.
- \* *Melilotus messanensis*: Thscap, St. Med.; (STRID,pers.comm.).
- M. neapolitanus*: Thscap, Eu. Med.; UPA! -Sandy shores, cliffs.
- \* *M. officinalis*: Hbienn, Subcosmop.; UPA! -Roadsides.
- Onobrychis caput-galli*: Thscap, St. Med.; LD!
- O. gracilis*: Hscap, E. Med.; LD! -Garigue.
- \* *Ononis ornithopodioides*: Thscap, St. Med.; UPA! -Phrygana.
- O. reclinata*: Thscap, Eu. Med.; LD!, UPA! -Field margins, stony slopes.
- \* *O. spinosa* subsp. *antiquorum*: Chsuffr, Eu. Med.; LD! -Sandy shores.
- O. viscosa* subsp. *breviflora*: Thscap, St. Med.; LD! -Field margins.
- Ornithopus compressus*: Thscap, Eu. Med.; LD!, UPA! -Rocks, fallow fields.
- O. pinnatus*: Thscap, Med.-Atl.; LD!, UPA! -Streamsides, garigue.
- Scorpiurus muricatus*: Thscap, Eu. Med.; LD!, UPA! -Cliffs, phrygana.
- Securigera cretica*: Thscap, E. Med.; LD! -Damp meadows, ravines.
- S. parviflora*: Thscap, E. Med.; LD!, UPA! -Olive groves, old fields, damp meadows.
- S. securidaca*: Thscap, Eu. Med.; LD! -Old fields, ravines, cliffs.
- Spartium junceum*: Phcaesp, Eu. Med.; LD!, UPA! -Macchie, damp meadows.
- Trifolium affine*: Thscap, E. Med.; LD!, UPA! -Phrygana, roadsides, rocky slopes.
- T. angustifolium*: Thscap, Eu. Med.; LD! -Field margins.
- T. arvense*: Thscap, Paleotemp.; LD!, UPA! -Roadsides, phrygana.



- T. campestre*: Thscap, Paleotemp.; LD!, UPA! -Phrygana, streamsides, meadows, roadsides, cliffs.
- \* *T. clusii*: Thrept, Eu. Med.; LD! -Garigue, field margins, roadsides.
- T. clypeatum*: Thscap, E. Med.; LD!, UPA! -Roadsides, phrygana, meadows.
- T. filiforme*: Thscap, Paleotemp.; LD! -Streamsides.
- T. globosum*: Thrept, E. Med.; LD!, UPA! -Roadsides, stone walls.
- T. glomeratum*: Thscap, Eu. Med.; LD!, UPA! -Garigue, streamsides, meadows.
- T. grandiflorum*: Thscap, E. Med.; LD!, UPA! -Streamsides, cliffs, meadows.
- T. hirtum*: Thscap, Eu. Med.; LD!, UPA! -Roadsides, streamsides, meadows.
- T. infamia-ponertii*: Thscap, Eu. Med.; LD! -Fields, streamsides.
- \* *T. lappaceum*: Thscap, Eu. Med.; UPA! -Roadsides.
- T. nigrescens* subsp. *petrisavii*: Thscap, E. Med.; LD, UPA! -Scrub.
- T. physodes*: Hscap, Eu. Med.; LD!, UPA! -Rocks, gravel.
- T. pilulare*: Thrept, E. Med.; LD! -Roadsides.
- \* *T. purpureum*: Thscap, Eu. Med.; UPA! -Roadsides.
- \* *T. resupinatum*: Thrept, Paleotemp.; LD! -Streamsides.
- T. scabrum*: Thscap, Eu. Med.; LD!, UPA! -Phrygana, fields, roadsides, streamsides.
- T. spumosum*: Thscap, St. Med.; LD! -Streamsides, field margins, meadows.
- T. stellatum*: Thscap, Eu. Med.; LD!, UPA! Phrygana, streamsides, olive groves.
- T. subterraneum*: Thrept, Eu. Med.; LD! -Streamsides, meadows.
- T. tomentosum*: Thrept, Paleotemp.; LD! -Cliffs, streamsides.
- T. uniflorum*: Hcaesp, St. Med.; LD!, UPA! -Streamsides, olive groves, roadsides.
- Trigonella balansae*: Thscap, E. Med.; LD!, UPA! -Sandy shores, meadows, roadsides.
- Tripodion tetraphyllum*: Thscap, St. Med.; LD! -Olive groves, streamsides.
- Vicia articulata*: Thscap, St. Med.; LD! -Shores, meadows.
- V. cretica*: Thscap, E. Med.; LD!, UPA! -Streamsides, meadows, rocky places.
- V. cuspidata*: Thscap, E. Med.; LD!, UPA! -Pinus forest, streamsides.
- V. hybrida*: Thscap, Eu. Med.; LD!, UPA! -Phrygana, damp meadows, streamsides.
- V. lathyroides*: Thscap, Eu. Med.; LD! -Garigue.
- \* *V. pannonica*: Thscap, Eu. Med.; UPA! -Roadsides.
- V. villosa* subsp. *microphylla*: Thscap, E. Med.; LD!, UPA! -Cliffs, olive groves.
- V. villosa* subsp. *eriocarpa*: Thscap, E. Med.; LD! -Garigue, cliffs, olive groves, roadsides.
- Linaceae*
- Linum bienne*: Hscap, Med.-Atl (Eu.); LD!, UPA! -Fields, phrygana.
- L. gyaricum* subsp. *icaricum* CHRISTODOUL.: Chsuffr, Endem.; LD!, UPA! -Cliffs.
- \* *L. strictum* subsp. *spicatum*: Thscap, St. Med.; LD!, UPA! -Phrygana, fields.
- \* *L. trigynum*: Thscap, Eu. Med.; LD!, UPA! -Phrygana.
- \* *Radiola linoides*: Thscap, Paleotemp.; LD! -Streamsides.
- Lythraceae*
- \* *Lythrum hyssopifolia*: Thscap, Subcosmop.; LD!, UPA! -Damp localities.
- Malvaceae*
- Alcea lavateriflora*: Hscap, E. Med.; LD!, UPA! -Roadsides, cliffs.
- \* *Lavatera cretica*: Thscap, St. Med.; LD!, UPA! -Streamsides, roadsides.
- L. punctata*: Thscap, St. Med.; LD! -Roadsides, ruderal places, cliffs.
- Malva cretica* subsp. *cretica*: Thscap, St. Med.; LD!, UPA! -Phrygana.
- M. parviflora*: Thscap, Eu. Med.; LD! -Rills.
- M. sylvestris*: Hscap, Subcosmop.; LD!, UPA! -Fields, meadows.

**Moraceae**

- \* *Ficus carica*: Phscap, Med.-Turan.;  
obs. -Cliffs, rocky places.

**Myrtaceae**

- Myrtus communis* subsp. *communis*:  
Phcaesp, St. Med.; obs. -Streams,  
damp places.

**Nymphaeaceae**

- \* *Nymphaea alba*: Hydrad, Euras.; obs.  
-Shallow water.

**Oleaceae**

- Olea europaea* subsp. *oleaster*:  
Phcaesp, St. Med.; obs. -Phrygana,  
cliffs.

- Phillyrea latifolia*: Phcaesp, St. Med.;  
LD!, UPA! -Macchie, phrygana,  
Pinus forest.

**Onagraceae**

- \* *Epilobium hirsutum*: Hscap, Subcos-  
mop.; LD! -Streams.

- E. lanceolatum*: Hscap, Med.-Atl.(Eu.);  
LD!, UPA! -Cliffs.

- E. obscurum*: Hscap, Med.-Atl.(Eu.);  
LD!, UPA!

- E. parviflorum*: Hscap, Paleotemp.;  
LD!, UPA! -Damp places.

- \* *E. tournefortii*: Hscap, St. Med.; LD!  
-Damp places.

**Orobanchaceae**

- Orobanche crenata*: Thpar, Med.-  
Turan.; LD!, UPA! -Fields, olive  
groves.

- O. pubescens*: Thpar, Eu. Med.; LD!,  
UPA! -Fields, phrygana, stream-  
sides.

- \* *O. ramosa* subsp. *nana*: Thpar, Paleo-  
temp.; LD! -Garigue.

**Oxalidaceae**

- Oxalis pes-caprae*: Naturalized; LD!,  
UPA! -Rills, streamsides, roadsides.

**Paeoniaceae**

- Paeonia mascula* subsp. *icarica*: Grhiz,  
Endem.; UPA! -Rocks, scrub.

**Papaveraceae**

- Corydalis integra*: Gbulb, E. Med.;  
LD!, UPA! -Stony slopes.

- \* *Fumaria bastardii*: Thscap, Med.-Atl.;  
LD! -Rills.

- \* *F. judaica* subsp. *judaica*: Thscap, E.  
Med.; LD! -Ruderal localities.

- \* *F. macrocarpa*: Thscap, E. Med.; LD!  
-Rills.

- \* *F. officinalis*: Thscap, Subcosmop.;  
(RUNEMARK, unpublished).

- F. petteri*: Thscap, E. Med.; LD!

- Papaver argemone* subsp. *nigrotin-*  
*tum*: Thscap, E. Med.; UPA! -Rocky  
slopes.

- P. dubium*: Thscap, Med.-Turan.; (RU-  
NEMARK, unpublished).

- \* *P. hybridum*: Thscap, Med.-Turan.;  
(RUNEMARK, unpublished).

- P. purpureomarginatum*: Thscap, E.  
Med.; (KADEREIT 1988).

- P. rhoeas*: Thscap, Paleotemp.; obs.

**Phytolaccaceae**

- \* *Phytolacca americana*: Subsponta-  
neous; UPA! -Roadsides.

**Plantaginaceae**

- Plantago afra*: Thscap, St. Med.; LD!,  
UPA! -Phrygana, cliffs, roadsides.

- P. bellardii*: Thscap, Eu. Med.; LD!,  
UPA! -Rocks.

- P. cretica*: Thscap, E. Med.; LD!, UPA!  
-Fields, roadsides.

- P. lagopus*: Thscap, St. Med.; LD!,  
UPA! -Streamsides, sandy shores.

- P. lanceolata*: Hros, Cosmop.; LD!,  
UPA! -Rocks, cliffs.

- \* *P. major* subsp. *intermedia*: Hros,  
Subcosmop.; LD! -Rills.

- P. weldenii* subsp. *weldenii*: Thscap,  
Eu. Med.; LD!, UPA! -Phrygana,  
streamsides, sandy shores.

**Platanaceae**

- Platanus orientalis*: Phscap, E. Med.;  
obs. -Streams.

**Plumbaginaceae**

- Armeria icarica*: Hros, Endem.; LD!,  
UPA! -Siliceous and schistose  
rocks.

- Limonium graecum*: Chsuffr, E. Med.;  
LD!, UPA! -Sandy shores, litoral  
rocks.

- L. hyssopifolium*: Chsuffr, Greek; LD!,  
UPA! -Sandy shores, litoral rocks.

- \* *L. sinuatum* subsp. *sinuatum*: Hscap,  
St. Med.; UPA! -Sandy shores.

**Polygalaceae**

- Polygala venulosa*: Hscap, E. Med.;  
LD! -Garigue.

**Polygonaceae**

- \* *Fallopia convolvulus*: Thscap, Circum-  
bor.; LD! -Rills.

- \* *Persicaria lapathifolia*: Thscap, Cosmop.; UPA! -Shores.
- \* *P. maculosa*: Thscap, Subcosmop.; (STRID, pers. comm.) -Moist banks.
- Polygonum icaricum*: Chsuffr, Aegean; LD!, UPA! -Cliffs, rocks.
- \* *P. maritimum*: Hrept, Subcosmop.; UPA! -Sandy shores.
- \* *Rumex acetosella* subsp. *acetoselloides*: Hscap, E. Med.; LD!
- R. bucephalophorus* subsp. *aegaeus*: Thscap, E. Med.; LD!, UPA! -Phrygana, fallow fields, rocky slopes, roadsides.
- \* *R. conglomeratus*: Hscap, Paleotemp.; LD!, UPA! -Stream sides, meadows, sandy shores.
- \* *R. pulcher* subsp. *woodsii*: Hscap, Eu. Med.; LD! -Sandy shores.
- R. pulcher* subsp. *raulinii*: Hscap, E. Med.; LD!, UPA! -Ruderal places, meadows.
- \* *R. pulcher* subsp. *pulcher*: Hscap, Eu. Med.; LD! -Garigue, cliffs.
- \* *R. tuberosus* subsp. *creticus*: Gbulb, E. Med.; LD!, UPA! -Phrygana, rocky slopes.
- Portulacaceae**
- Montia minor*: Thscap, Med.- Atl.; UPA! -Damp places.
- \* *Portulaca oleracea*: Thscap, Subcosmop.; obs. -Moist banks, roadsides.
- Primulaceae**
- Anagallis arvensis*: Thrept, Subcosmop.; LD!, UPA! -Roadsides, fallow fields.
- Asterolinon linum-stellatum*: Thscap, St. Med.; LD!, UPA! -Rocks, streamsides, roadsides.
- Cyclamen hederifolium*: Gbulb, Eu. Med.; LD!, UPA! -Macchie, cliffs.
- Primula acaulis* subsp. *rubra*: Hros, E. Med.-Caucas.; LD! -Canyons.
- Samolus valerandi*: Hscap, Subcosmop.; LD!, UPA! -Damp places.
- Rafflesiaceae**
- Cytinus hypocistis* subsp. *hypocistis*: Gpar, St. Med.; LD! -Phrygana.
- C. hypocistis* subsp. *clusii*: Gpar, St. Med.; LD! -Phrygana.
- Ranunculaceae**
- \* *Anemone coronaria*: Gbulb, St. Med.; LD! -Phrygana, olive groves.
- A. pavonina*: Gbulb, Eu. Med.; LD!, UPA! -Phrygana, roadsides, olive groves.
- Clematis cirrhosa*: Phlian, St. Med.; LD!, UPA! -Cliffs, streamsides.
- Delphinium peregrinum*: Thscap, E. Med.; LD!, UPA! -Phrygana, dry banks.
- \* *D. staphisagria*: Thscap, St. Med.; LD!, UPA! -Rills, stony places.
- Nigella icarica*: Thscap, Endem.; LD!, UPA! -Phrygana, cliffs.
- \* *Ranunculus bulbosus* subsp. *aleae*: Hscap, Eu. Med.; LD!, UPA! -Wet localities.
- \* *R. chius*: Thscap, E. Med.; LD! -Below cliffs, garigue.
- R. ficaria* subsp. *ficariiformis*: Gbulb, Eu. Med.; LD!, UPA! -Wet meadows, scrub.
- \* *R. marginatus*: Thscap, E. Med.; LD! -Damp meadows.
- R. muricatus*: Thscap, Eu. Med.; LD! -Damp localities.
- \* *R. ophioglossifolius*: Thscap, Eu. Med.; LD! -Streamides.
- R. paludosus*: Hscap, St. Med.; LD!, UPA! -Phrygana, rocky slopes.
- R. reuterianus*: Hscap, E. Med.; (DAVIS 1965:178).
- R. rumelicus*: Hscap, E. Med.; (STRID, pers. comm.) ATH -Phrygana, fallow fields.
- R. sprunerianus*: Hscap, E. Med.; LD!, UPA! -Streamides, rocky slopes.
- R. subhomophyllus*: Hscap, Greek; (RECHINGER 1943:190).
- R. thasius*: Hscap, Greek; LD! -Phrygana, rocks.
- Resedaceae**
- \* *Reseda luteola*: Hscap, Paleotemp.; LD! -Garigue.
- Rhamnaceae**
- \* *Rhamnus lycioides* subsp. *graeca*: Phcaesp, E. Med.; UPA! -Rocks.
- Rosaceae**
- Aphanes arvensis*: Thscap, Subcosmop.; LD! -Valleys, cliffs.
- Crataegus monogyna* subsp. *monogyna*: Phcaesp, Paleotemp.; LD!, UPA! -Forest, phrygana, ravines.
- Pyrus spinosa*: Phcaesp, St. Med.; LD!, UPA! -Rocky slopes, valleys.

- \* *Rosa canina*: NPh, Paleotemp.; UPA!  
-Streamsides.
- \* *R. sempervirens*: NPh, St. Med.; LD!  
-Ravines.
- Rubus sanctus*: NPh, Eu. Med.; LD!  
-Field margins, damp meadows,  
roadsides.
- Sanguisorba minor* subsp. *magnoli*:  
Hscap, Eu. Med.; LD!, UPA!  
-Gravel, roadsides.
- Sarcopoterium spinosum*: NPh, E.  
Med.; obs. -Phrygana, fallow fields.
- Rubiaceae**
- Asperula icarica*: Chsuffr, Endem.;  
LD!, UPA! -Cliffs.
- A. lilaciflora* subsp. *runemarkii*:  
Chsuffr, Endem.; LD! -Cliffs.
- Crucianella imbricata*: Thscap, E.  
Med.; LD!, UPA! -Rocks.
- C. latifolia*: Thscap, St. Med.; LD!,  
UPA! -Rocks, phrygana, fields.
- Galium aparine*: Thscap, Euras.; LD!,  
UPA! -Rills, cliffs, scrub.
- G. divaricatum*: Thscap, St. Med.; LD!
- G. murale*: Thscap, St. Med.; LD!,  
UPA! -Phrygana, roadsides, rills.
- \* *G. recurvum*: Thscap, E. Med.; UPA!  
-Sea-shores.
- G. rivale*: Hscap, Euras.; LD!
- G. samium* KRENDL: Hscap, Aegean;  
UPA! -Cliffs, roadsides.
- \* *G. setaceum*: Thscap, Med.-Turan;  
LD! -Cliffs, rills.
- G. spurium* subsp. *spurium*: Thscap,  
Euras.; (DAVIS 1982: 831).
- Rubia tenuifolia* subsp. *tenuifolia*:  
Phlian, E. Med.; LD! -Cliffs.
- Sherardia arvensis*: Thscap, Subcos-  
mop.; UPA! -Roadsides.
- Valantia hispida*: Thscap, St. Med.;  
LD!, UPA! -Cliffs, rocks.
- V. muralis*: Thscap, St. Med.; LD!,  
UPA! -Rocks, fields.
- Rutaceae**
- \* *Ruta chalepensis*: Chsuffr, St. Med.;  
obs. -Phrygana.
- Salicaceae**
- Salix pedicellata*: Phcaesp, St. Med.;  
(RECHINGER 1943:96).
- Santalaceae**
- Osyris alba*: NPh, Eu. Med.; obs.  
-Phrygana, olive groves.
- Thesium bergeri*: Hscap, E. Med.; LD!,  
UPA! -Phrygana.
- Saxifragaceae**
- Saxifraga graeca*: Hscap, E. Med.;  
UPA! -Shady rocks.
- S. hederacea*: Thrept, E. Med.; LD!  
-Cliffs.
- S. rotundifolia*: Hscap, Eurosiber.;  
UPA! -Shady rocks.
- S. sibirica*: Hscap, SE.Europ.-Caucas.;  
(RECHINGER 1943:298).
- \* *S. tridactylides*: Thscap, Eu. Med.;  
LD! -Cliffs.
- Scrophulariaceae**
- Bellardia trixago*: Thscap, Eu. Med.;  
LD!, UPA! -Field margins, road-  
sides, phrygana.
- Cymbalaria longipes*: Chrept, E. Med.;  
LD!, UPA! -Streams, cliffs.
- C. microcalyx*: Chrept, E. Med.; LD!,  
UPA! -Cliffs.
- Digitalis cariensis*: Hscap, E. Med.;  
UPA! -Macchie.
- D. leucophaea* subsp. *ikarica*: Hscap,  
Endem.; LD!, UPA! -Ravines, gar-  
igue.
- Kickxia commutata* subsp. *graeca*:  
Hrept, E. Med.; LD!, UPA! -Phry-  
gana, fallow fields, cliffs.
- K. elatine* subsp. *crinita*: Thscap, Eu.  
Med.; LD! -Cliffs, sandy shores,  
streams.
- Linaria chalepensis*: Thscap, E. Med.;  
LD! -Below cliffs, streams.
- L. pelisseriana*: Thscap, Med.-Atl.;  
LD!, UPA! -Roadsides, garigue,  
meadows, sandy shores.
- Misopates orontium*: Thscap, Paleo-  
temp.; LD!, UPA! -Roadsides, phry-  
gana.
- Parentucellia latifolia* subsp. *latifolia*:  
Thscap, Eu. Med.; LD!, UPA!  
-Phrygana, rocks.
- Scrophularia canina* subsp. *bicolor*:  
Hscap, E. Med.; LD! -Cliffs, gari-  
gue.
- S. heterophylla*: Hscap, E. Med.; LD!,  
UPA! -Cliffs.
- S. lucida*: Hbienn, Eu. Med.; LD!,  
UPA! -Phrygana, rocks, streams.
- S. peregrina*: Thscap, St. Med.; LD!  
-Streamsides.

- Verbascum ikaricum*: Hbienn, Aegean; LD!, UPA! -Cliffs, garigue, roadsides, olive groves.
- Veronica anagallis-aquatica*: Hscap, Cosmop.; UPA! -Damp places.
- V. arvensis*: Thscap, Subcosmop.; UPA! -Rocks.
- V. cymbalaria*: Thscap, Eu. Med.; UPA! -Rocky slopes, phrygana.
- Solanaceae**
- Hyoscyamus albus*: Hbienn, Eu. Med.; LD!, UPA! -Ruderal places, walls.
- Nicotiana glauca*: Cultivated; UPA! -Roadsides.
- Solanum alatum*: Thscap, Eu. Med.; LD!, UPA! -Streamsides, olive groves.
- \* *S. nigrum* subsp. *schultesii*: Thscap, Cosmop.; UPA! -Sandy shores.
- Styracaceae**
- Styrax officinalis*: Phcaesp, E. Med.; obs. -Scrub, streamsides.
- Thymelaeaceae**
- Thymelaea tartonraira* subsp. *argentea*: NPh, E. Med.; LD!, UPA! -Phrygana.
- Umbelliferae**
- \* *Apium graveolens*: Hscap, Cosmop.; LD! -Roadsides.
- A. nodiflorum*: Hydrad, Eu. Med.; LD! -Streams, damp places.
- Bupleurum gracile*: Thscap, E. Med.; LD!, UPA! -Phrygana.
- \* *B. subovatum*: Thscap, Med.-Turan.; (STRID, pers.comm.) ATH -Fallow fields.
- B. trichopodum*: Thscap, E. Med.; LD!, UPA! -Phrygana, cliffs.
- \* *Carum multiflorum*: Hscap, E. Med.; LD!, UPA! -Cliffs.
- Crithmum maritimum*: Chsuffr, Med.-Atl.; LD!, UPA! -Litoral rocks and cliffs.
- \* *Daucus carota* subsp. *maximus*: Hbienn, Eu. Med.; LD! -Cliffs.
- D. guttatus*: Thscap, E. Med.; LD!, UPA! -Phrygana, roadsides.
- D. involucratus*: Thscap, E. Med.; LD!, UPA! -Phrygana, roadsides, rocks.
- Eryngium campestre*: Hscap, Eu. Med.; LD! -Sandy shores.
- \* *E. maritimum*: Grhiz, Med.-Atl.; obs. -Sandy shores.
- Ferula communis* subsp. *glauca*: Hscap, Eu. Med.; LD! -Cliffs
- \* *Foeniculum vulgare*: Hscap, St. Med.; obs. -Fields, damp meadows.
- Lagoecia cuminoides*: Thscap, Med.-Turan.; obs. -Phrygana, waste places.
- \* *Oenanthe pimpinelloides*: Hscap, Med.-Atl.; LD! -Flooded valleys.
- Opopanax hispidus*: Hscap, E. Med.; (RECHINGER 1943: 412).
- Orlaya daucooides*: Thscap, Eu. Med.; LD!, UPA! -Roadsides, streamsides.
- Pimpinella cretica*: Thscap, E. Med.; LD! -Cliffs, roadsides.
- P. peregrina*: Hbienn, Eu. Med.; LD! -Cliffs, garigue, sandy shores.
- Scaligeria napiformis*: Hbienn, E. Med.; LD!, UPA! -Cliffs, phrygana.
- Scandix australis* subsp. *australis*: Thscap, Eu. Med.; LD!
- S. australis* subsp. *grandiflora*: Thscap, Eu. Med.; LD! -Cliffs, roadsides.
- S. pecten-veneris*: Thscap, Subcosmop.; LD!, UPA! -Roadsides, streamsides, damp meadows.
- \* *Smyrniium creticum*: Hbienn, E. Med.; LD!, UPA! -Cliffs, streamsides, rocky slopes.
- \* *S. olusatrum*: Hbienn, Med.-Atl.; LD!, UPA! -Streamsides.
- Thapsia garganica*: Hscap, St. Med.; LD!, UPA! -Cliffs, roadsides.
- Tordylium aegaeum*: Thscap, E. Med.; LD!, UPA! -Phrygana, field margins.
- T. apulum*: Thscap, St. Med.; LD!, UPA! -Roadsides, phrygana, cliffs, olive groves.
- Torilis arvensis* subsp. *purpurea*: Thscap, Eu. Med.; LD!, UPA! -Cliffs, phrygana.
- T. nodosa*: Thscap, Med.-Turan.; LD! -Garigue, cliffs.
- \* *T. ucranica*: Thscap, Euras.; LD! -Streamsides.
- Urticaceae**
- Parietaria cretica*: Thrept, E. Med.; obs. -Garigue, cliffs, roadsides, walls.
- P. judaica*: Hscap, Med.-Atl.; LD!, UPA! -Cliffs, streamsides, valleys.

\* *P. lusitanica*: Thrept, St. Med.; LD!  
-Valleys.

*Urtica pilulifera*: Thscap, St. Med.;  
obs. -Roadsides.

\* *U. urens*: Thscap, Subcosmop.; LD!  
-Ruderal places, roadsides, culture  
areas.

#### Valerianaceae

*Centranthus calcitrapae*: Thscap, St.  
Med.; LD!, UPA! -Old fields, val-  
leys, rocks.

\* *C. ruber*: Chsuffr, St. Med.; UPA!  
-Walls.

*Valeriana italica* (*V. dioscoridis*):  
Hscap, E. Med.; LD!, UPA! -Cliffs.

*Valerianella discoidea*: Thscap, St.  
Med.; LD! -Below cliffs.

*V. echinata*: Thscap, St. Med.; LD!,  
UPA! -Cliffs, roadsides.

*V. muricata*: Thscap, Med.-Turan.; LD!  
-Fields, below cliffs, streams.

*V. obtusiloba*: Thscap, E. Med.; LD!  
-Roadsides, cliffs, old fields.

\* *V. turgida*: Thscap, E. Med.; UPA!

#### Verbenaceae

*Vitex agnus-castus*: Phcaesp, Med.-  
Turan.; obs. -Streamsides, sandy  
shores.

#### Violaceae

*Viola alba* subsp. *thessala*: Hros, E.  
Med.; UPA!

\* *V. heldreichiana*: Thscap, E. Med.; LD!  
-Sandy rocks.

*V. hymettia*: Thscap, Eu. Med.; UPA!  
-Rocks, scrub.

*V. hymettia* × *V. kitaibeliana*: UPA!  
-Cliffs, rocky slopes.

*V. odorata*: Hros, Eu. Med.; LD!  
-Rocks, cliffs, rills.

*V. reichenbachiana*: Hscap, Eurosiber.;  
LD! -Roadsides, rivulet valleys.

#### Zygophyllaceae

\* *Tribulus terrestris*: Thrept, Cosmop.;  
LD! -Valleys.

#### Monocotyledones

##### Alismataceae

\* *Alisma plantago-aquatica*: Hydrad,  
Subcosmop.; obs. -Shallow water.

##### Amalyllidaceae

*Galanthus ikariae* subsp. *ikariae*:  
Gbulb, Endem.; UPA! -Rivulets,  
among rocks.

*Narcissus tazetta* subsp. *tazetta*:  
Gbulb, St. Med.; LD! -Rocky places,  
scree.

\* *Pancratium maritimum*: Gbulb, St.  
Med.; obs. -Sandy beaches.

*Sternbergia lutea*: Gbulb, Eu. Med.;  
UPA! -Cultivated areas.

\* *S. sicula* Tineo: Gbulb, E. Med.; UPA!  
-Rocky places.

##### Araceae

*Arisarum vulgare* subsp. *vulgare*:  
Grhiz, St. Med.; LD!, UPA!  
-Streams, rocky hillsides.

*Arum nickelii*: Grhiz, E. Med.; LD!

\* *Colocasia esculenta*: Spontaneous;  
UPA! -Streams.

\* *Dracunculus vulgaris*: Grhiz, E. Med.;  
UPA!

##### Cyperaceae

*Carex cretica*: Hcaesp, Aegean; LD!  
-Rivulet valleys.

*C. distachya*: Hcaesp, St. Med.; LD!  
-Cliffs, roadsides, Quercus ilex for-  
est.

*C. distans*: Hcaesp, Eu. Med.; LD!,  
UPA! -Damp meadows, streams.

*C. divisa*: Grhiz, Med.-Atl. (Eu.); LD!  
-Streams.

*C. divulsa* subsp. *divulsa*: Hcaesp, Eu.  
Med.; LD!

*C. flacca* subsp. *serrulata*: Grhiz, Eu.  
Med.; LD! -Garigue, roadsides.

*C. hallerana*: Hcaesp, Eu. Med.; LD!  
-Cliffs

*C. illegitima*: Hcaesp, E. Med.; LD!  
-Garigue.

*C. muricata*: Hcaesp, Euras.; LD!  
-Cliffs, damp localities

*Cyperus glaber*: Thscap, Paleotemp.;  
LD!

*C. longus*: Grhiz, Paleotemp.; LD!,  
UPA! -Wet ground by streams.

\* *C. rotundus*: Grhiz, Subcosmop.; LD!  
-Damp localities.

*Isolepis cernua*: Thscap, Subcosmop.;  
LD!, UPA! -Cliffs, damp localities.

*Pycurus flavescens*: Thcaesp, Subcos-  
mop.; LD!

*Schoenus nigricans*: Hcaesp, Subcos-  
mop.; LD!, UPA! -Streams.

*Scirpoides holoschoenus*: Grhiz, Eu.  
Med.; LD! -Damp meadows, sandy  
shores.

*Dioscoreaceae*

- \* *Tamus communis*: Grhiz, Eu. Med.; LD!, UPA! -Ravines, shaded cliffs.

*Gramineae*

- Aegilops biuncialis*: Thscap, Eu. Med.; LD!, UPA! -Meadows, sandy shores.
- \* *A. triuncialis*: Thscap, Eu. Med.; UPA! *Aira elegantissima* subsp. *ambigua*: Thscap, E. Med.; LD!, UPA! -Garigue, streams, dry slopes.
- Andropogon distachyos*: Hcaesp, St. Med.; LD!, UPA! -Field margins, olive groves, streams.
- \* *Anthoxanthum odoratum*: Hcaesp, Euras.; LD! -Garigue.
- \* *Arrhenatherum palaestinum*: Hcaesp, E. Med.; LD! -Garigue, cliffs.
- \* *Avellinia michelii*: Thscap, St. Med.; LD! -Cliffs, garigue, sandy shores.
- Avena barbata*: Thscap, Eu. Med.; LD!, UPA! -Roadsides, seashores, streamsides.
- A. sterilis*: Thscap, Med.-Turan.; LD!, UPA! -Sandy seashores, streamsides, fields.
- Brachypodium retusum*: Hcaesp, St. Med.; LD!, UPA! -Cliffs, scrub.
- \* *B. sylvaticum*: Hcaesp, Paleotemp.; UPA! -Forested slopes.
- Brizia maxima*: Thscap, Paleosubtrop.; LD!, UPA! -Phrygana, streamsides, rocky places.
- B. minor*: Thscap, Subcosmop.; LD!, UPA! -Damp meadows, streams, sandy shores.
- Bromus alopecuroides* subsp. *caroli-henrici*: Thscap, E. Med.; LD! -Meadows.
- B. fasciculatus*: Thscap, E. Med.; LD! -Cliffs, garigue, field margins, roadsides.
- \* *B. intermedius*: Thscap, Eu. Med.; LD!, UPA! -Roadsides, field margins, cliffs.
- B. madritensis* subsp. *madritensis*: Thscap, Eu. Med.; UPA! -Roadsides, sea-shores, scrub.
- \* *B. madritensis* subsp. *hausknechtii* (BOISS.) SCHOLZ: Thscap, E. Med.; UPA! -Roadsides, fallow fields.
- B. rigidus*: Thscap, Paleosubtrop.; (STRID, pers. comm.) ATH, C -Fallow fields.
- B. rubens*: Thscap, Med.-Turan.; (RECHINGER 1943:759).
- \* *B. scoparius*: Thscap, St. Med.; LD! -Streams
- \* *B. sterilis*: Thscap, Paleotemp.; LD!, UPA! -Phrygana, olive groves, streams.
- B. tectorum*: Thscap, Paleotemp.; LD!, UPA! -Rocky places, streams, damp furrows, fallow fields.
- \* *Calamagrostis epigejos*: Thscap, Euro-siber.; LD! -Streams.
- \* *Catapodium marinum*: Thscap, Med.-Atl.; LD!, UPA! -Sandy coasts.
- C. rigidum*: Thscap, Eu. Med.; LD!, UPA! -Olive groves, sandy coasts, fallow fields.
- \* *Corynephorus divaricatus*: Thscap, St. Med.; LD!, UPA! -Sandy coasts.
- \* *Cutandia stenostachya*: Thscap, E. Med.; LD! -Cliffs, forest.
- \* *Cynodon dactylon*: Grhiz, Cosmop.; LD! -Sandy shores, littoral cliffs, fields.
- \* *Cynosurus echinatus*: Thscap, Eu. Med.; LD!, UPA! -Forest, phrygana, rocks.
- \* *C. effusus*: Thscap, St. Med.; LD! -Cliffs, Quercus forest.
- Dactylis glomerata* subsp. *hispanica*: Hcaesp, St. Med.; UPA! -Rocks, fields, roadsides.
- Dasypyrum villosum*: Thscap, Med.-Turan.; UPA! -Roadsides, phrygana.
- Echinochloa crus-galli*: Thscap, Subcosmop.; (DAVIS 1985:591).
- \* *Elymus farctus* subsp. *farctus*: Grhiz, St. Med.; UPA! -Maritime sands.
- \* *E. farctus* subsp. *rechingeri*: Grhiz; E. Med.; UPA! -Maritime sands.
- Eragrostis pilosa*: Thscap, Cosmop.; (DAVIS 1985:574).
- Festuca jeanpertii*: Hcaesp, E. Med.; UPA! -Rocks.
- \* *Gastridium phleoides*: Thscap, E. Med.; LD!, UPA! -Garigue, roadsides.
- \* *Holcus annuus*: Thscap, St. Med.; LD! -Rivulet valleys.
- \* *Hordeum bulbosum*: Hcaesp, Paleosubtrop.; LD! -Old fields, garigue.
- \* *H. murinum* subsp. *glaucum*: Thscap, Med.-Turan.; UPA! -Roadsides.

- H. murinum* subsp. *leporinum*: Thscap, Eu. Med.; LD!, UPA! -Roadsides, phrygana, sandy shores.
- Hyparrhenia hirta*: Hcaesp, Paleotrop.; LD!, UPA! -Phrygana, old fields, roadsides.
- Imperata cylindrica*: Grhiz, Cosmop.; LD! -Coastal sands and cliffs, damp meadows.
- Lagurus ovatus*: Thscap, Eu. Med.; LD!, UPA! -Phrygana, sandy shores.
- Lolium multiflorum*: Thscap, Eu. Med.; (RECHINGER 1943:788).
- \* *L. perenne*: Hcaesp, Circumbor.; LD! -Silicious rocks.
- \* *L. rigidum* subsp. *rigidum*: Thscap, Paleosubtrop.; UPA! -Ruderal places, roadsides.
- L. rigidum* subsp. *lepturoides*: Thscap, E. Med.; LD!, UPA! -Sandy sea-shores, rocks, valleys.
- \* *L. temulentum*: Thscap, Subcosmop.; LD! -Ruderal places.
- \* *Melica ciliata* subsp. *taurica* (C.KOCH) TZVELEV: Hcaesp, E. Med.; UPA!
- \* *M. minuta*: Hcaesp, St. Med.; LD!, UPA! -Streams, scree.
- \* *Micropyrum tenellum*: Thscap, Eu. Med.; LD! -Rocks.
- Milium vernale*: Thscap, Eu. Med.; LD! -Schistaceous slopes.
- Parapholis incurva*: Thscap, Med.-Atl.; LD!, UPA! -Sandy sea-shores.
- \* *P. marginata*: Thscap, E. Med.; UPA! -Sandy beaches.
- Phleum exaratum* subsp. *exaratum*: Thscap, E. Med.; LD!, UPA! -Phrygana, cliffs, roadsides.
- \* *P. exaratum* subsp. *aegaeum*: Thscap, E. Med.; LD!, UPA! -Phrygana, rocky places.
- \* *Phragmites australis*: Grhiz, Subcosmop.; LD! -Streams.
- Piptatherum coeruleascens*: Hcaesp, St. Med.; LD!, UPA! -Phrygana, roadsides, rocky slopes.
- \* *P. miliaceum* subsp. *thomasi*: Hcaesp, Med.-Turan.; UPA! -Rocky slopes.
- Poa bulbosa*: Hcaesp, Paleotemp.; LD!, UPA! -Cliffs, streams, phrygana.
- P. infirma*: Thscap, Eu. Med.; LD! -Streamsides.
- \* *P. sterilis*: Hcaesp, E. Med.; LD! -Cliffs.
- P. trivialis*: Hcaesp, Paleotemp.; LD! -Streams, cliffs.
- \* *Polypogon maritimus* subsp. *subspathaceus*: Thscap, St. Med.; LD!
- \* *P. maritimus* subsp. *maritimus*: Thscap, Med.-Atl. (St.); LD! -Rivulet valleys.
- \* *P. monspeliensis*: Thscap, Paleosubtrop.; LD!, UPA! -Streams, rivulet valleys.
- P. viridis*: Hcaesp, Paleosubtrop.; LD! -Rivulet valleys.
- Psilurus incurvus*: Thscap, Eu. Med.; LD! -Garigue, old fields, sandy shores.
- \* *Rostraria cristata*: Thscap, Subcosmop.; LD!, UPA! -Streams, sandy shores.
- \* *Sorghum halepense*: Grhiz, Cosmop.; LD!
- \* *Stipa bromoides*: Hcaesp, St. Med.; LD!, UPA! -Cliffs, garigue.
- \* *S. capensis*: Thscap, St. Med.; LD!, UPA! -Phrygana.
- \* *S. holosericea*: Hcaesp, Ir.-Anat.; LD! -Garigue.
- Trachynia distachya*: Thscap, Med.-Turan.; LD!, UPA! -Rocks, streams, sandy shores
- \* *Triplachne nitens*: Thscap, St. Med.; UPA!
- \* *Vulpia ciliata*: Thcaesp, Eu. Med.; LD!, UPA! -Phrygana, cliffs.
- \* *V. muralis*: Thcaesp, St. Med.; LD!, UPA! -Burnt ground, roadsides, furrows.
- \* *V. myuros*: Thcaesp, Subcosmop.; LD! -Roadsides, meadows.
- Iridaceae*
- Crocus biflorus* subsp. *nubigena*: Gbulb, E. Med.; LD! -Garigue.
- \* *Gladiolus anatolicus*: Gbulb, E. Med.; UPA! -Meadows.
- G. italicus*: Gbulb, Eu. Med.; LD! -Valleys.
- \* *Gynandriris sisyrinchium*: Gbulb, St. Med.; LD!, UPA! -Garigue.
- \* *Iris pseudacorus*: Grhiz, Paleotemp.; LD! -Streamsides.



*Juncaceae*

- Juncus articulatus*: Grhiz, Circumbor.; LD!, UPA! -Wet places.  
*J. bufonius*: Thcaesp, Cosmop.; LD!, UPA! -Wet places.  
*J. capitatus*: Thscap, Med.-Atl.; LD! -Rivulets.  
*J. effusus*: Hcaesp, Cosmop.; UPA! -Damp places.  
*J. heldreichianus* subsp. *heldreichianus*: Hcaesp, E. Med.; LD!, UPA! -Sandy shores, damp places.  
*J. maritimus*: Grhiz, Subcosmop.; (RECHINGER 1943:746).  
*J. minutulus*: Thcaesp, Cosmop.; LD! -Garigue.  
*Luzula forsteri*: Hcaesp, Eu. Med.; LD! -Forest, damp localities.  
*L. multiflora*: Hcaesp, Subcosmop.; LD! -Rivulets.  
*L. nodulosa*: Hcaesp, St. Med.; LD! -Macchie, cliffs.

*Lemnaceae*

- Lemna minor*: Hydnat, Subcosmop.; LD!, UPA! -Streams.

*Liliaceae*

- Allium ampeloprasum*: Gbulb, Eu. Med.; UPA! -Rocks.  
*A. bourgeaui* subsp. *cycladicum*: Gbulb, E. Med.; UPA!  
*A. commutatum*: Gbulb, St. Med.; (DAVIS 1984:166).  
*A. cupani* subsp. *hirtovaginatatum*: Gbulb, Eu. Med.; LD!, UPA! -Cliffs.  
*A. guttatum* subsp. *guttatum*: Gbulb, E. Med.; LD! -Garigue, sandy shores.  
*A. neapolitanum*: Gbulb, St. Med.; LD!, UPA! -Phrygana, cliffs, rivulet valleys.  
\* *A. paniculatum*: Gbulb, Eu. med.; LD! -Rivulet valleys.  
*A. sphaerocephalon* subsp. *trachypus*: Gbulb, E. Med.; LD!, UPA! -Rocks.  
*A. subhirsutum*: Gbulb, St. Med.; LD! -Scrubs.  
*Asparagus acutifolius*: NPh, St. Med.; UPA!  
\* *A. aphyllus* subsp. *orientalis*: NPh, E. Med.; LD! -Streamsides.  
\* *Asphodeline liburnica*: Grhiz, E. Med.; LD!, UPA! -Cliffs.

*Asphodelus aestivus*: Grhiz, St. Med.; obs. -Fields, phrygana.

- \* *Colchicum variegatum*: Gbulb, E. Med.; UPA! -Rocky slopes.  
*Gagea bohemica*: Gbulb, Eu. Med.; LD! -Garigue.  
*G. graeca*: Gbulb, E. Med.; LD!, UPA! -Phrygana, rocky places.  
*G. peduncularis*: Gbulb, St. Med.; (RECHINGER 1943:712).  
*Muscari comosum*: Gbulb, Eu. Med.; LD!, UPA! -Phrygana, roadsides, fields.  
*M. macrocarpum*: Gbulb, E. Med.; (DAVIS 1984:249).  
*M. neglectum*: Gbulb, Eu. Med.; LD!  
*M. weissii*: Gbulb, E. Med.; UPA! -Phrygana.  
*Ornithogalum arabicum*: Gbulb, St. Med.; (DAVIS 1984: 244)  
*O. nutans*: Gbulb, E. Med.; UPA! -Streamsides.  
\* *O. umbellatum*: Gbulb, Eu. Med.; UPA! -Rivulets, fields.  
*Scilla autumnalis*: Gbulb, Eu. Med.; UPA! -Rocks, open woods.  
*S. bifolia*: Gbulb, Eu. Med.; LD! -Phrygana.  
*Urginea maritima*: Gbulb, St. Med.; obs. -Phrygana, olive groves.
- Orchidaceae*
- Anacamptis pyramidalis*: Gbulb, Eu. Med.; LD!, UPA! -Phrygana, cliffs.  
*Barlia robertiana*: Gbulb, St. Med. -Pastures.; (BAUMANN 1990:731).  
*Cephalanthera longifolia*: Grhiz, Euras.; LD!, UPA! -Macchie, Quercus forest.  
*Limodorum abortivum*: Grhiz, Eu. Med.; LD!, UPA! -Garigue, scrub.  
*Neotinea maculata*: Gbulb, St. Med.; (DAVIS 1984:513).  
\* *Ophrys ferrum-equinum*: Gbulb, E. Med.; LD! -Garigue.  
*O. fuciflora* subsp. *fuciflora* (*O. holosericea*): Gbulb, Eu. Med.; LD! -Garigue.  
*O. fusca* subsp. *fusca*: Gbulb, St. Med.; (HIRTH & SPAETH 1990:704).  
*O. icariensis* HIRTH & SPAETH: Gbulb, Endem.; UPA! -Phrygana.

- O. iricolor*: Gbulb, E. Med.; LD!  
*O. lutea* subsp. *lutea*: Gbulb, St. Med.; LD! -Garigue.  
*O. lutea* subsp. *minor*: Gbulb, St. Med.; (BAUMANN 1990: 733).  
*O. mammosa*: Gbulb, E. Med.; LD! -Garigue.  
*O. oestrifera* subsp. *oestrifera*: Gbulb, E. Med.; (HIRTH & SPAETH 1990: 704).  
*O. oestrifera* subsp. *bremifera*: Gbulb, E. Med.?; (BAUMANN 1990: 734).  
*O. spruneri*: Gbulb, Greek; (RECHINGER 1943: 820).  
*O. tenthredinifera* subsp. *villosa*: Gbulb, St. Med.; (HIRTH & SPAETH 1990:704).  
*Orchis anatolica*: Gbulb, E. Med.; LD!, UPA! -Phrygana.  
*O. coriophora* subsp. *coriophora*: Gbulb, Eu. Med.; LD! -Garigue.  
*O. italica*: Gbulb, St. Med.; (HIRTH & SPAETH 1990:704).  
\* *O. laxiflora*: Gbulb, Eu. Med.; LD! -Marshes.
- \* *O. morio*: Gbulb, Eu. Med.; LD! -Garigue.  
*O. sancta*: Gbulb, E. Med.; UPA! -Phrygana.  
*O. sezikiana* (pro hybr. ) B. & H. BAUMANN: Gbulb, E. Med.; UPA!  
*Serapias bergonii* E.G. CAMUS (*S. vomeracea* subsp. *laxiflora*): Gbulb, E. Med.; LD! -Olive groves.  
*S. cordigera*: Gbulb, St. Med.; (RECHINGER 1943:822).  
*S. orientalis* subsp. *carica* BAUMANN & KÜNKELE: Gbulb, E. Med.; UPA! -Phrygana, sandy shores.  
*S. parviflora*: Gbulb, St. Med.; (DAVIS 1984:505).  
*Spiranthes spiralis*: Grhiz, Paleotemp.; (BAUMANN 1990:735).
- Potamogetonaceae*  
\* *Potamogeton nodosus*: Hydrad, Subcosmop.; UPA! -Pools.
- Typhaceae*  
\* *Typha domingensis* (*T. angustata*): Grhiz, Paleosubtrop.; LD!, UPA! -Streams.

#### 4. Discussion and Conclusions

Out of the total number of taxa in the flora of Ikaria, 233 have been recorded from the area for the first time. Three Greek endemics (*Onosma kaheirei*, *Crepis hellenica* and *Sedum delicum*) are new records for the study area, as well as being new records for the whole of the E. Aegean area.

The high proportion of therophytes in biological spectrum can be attributed to the long dry period (Fig. 2), while the relatively high percentage of geophytes (13%) to the extensive arid and stony slopes covered by phryganic plant communities.

Both the Mediterranean and Mediterranean-Turanian elements consist mainly of xerophytes. It is worth noting that the Mediterranean-Turanian element consists principally of grasses and composites. The Palaeotemperate and Eurasiatic elements occur mainly in woodlands, while the Atlantic group on sandy and rocky sea shores or in damp habitats.

The high proportion of the Mediterranean elements, in conjunction with the high proportion of therophytes as mentioned earlier, indicate the strong Mediterranean character of the flora of the studied area.

The highest concentration of endemics occurs in the centre of the island, which is also its oldest part from a geological point of view, as it is formed of pre-alpine metamorphic rocks (see introduction).

Apart from Greek endemics, the occurrence on Ikaria of several taxa that are rare in the Aegean flora is also important. These latter taxa include: *Ophioglossum vulgatum*, *Pteris dentata* subsp. *dentata* (sole European locality), *Ptilostemon gnaphaloides* subsp. *pseudofruticosus*, *Solidago virgaurea*, *Hypericum polyphyllum* subsp. *subcordatum* (sole Aegean locality), *Colutea melanocalyx* subsp. *davisiana*, *Nymphaea alba*, *Primula acaulis* subsp. *rubra*, *Digitalis cariensis* (sole Aegean locality), *Hordeum murinum* subsp. *glaucum*, *Crocus biflorus* subsp. *nubigena*, etc.

The island of Ikaria is apparently of the chersogenous type, according to the distinction made by GREUTER 1979, and shows a predominantly Aegean floristic character. A large number, 521 taxa (63%) of its autochthonous vascular plants, most of them endemics and chasmophytes, are considered remnants of an earlier Aegean continental flora.

The contribution of anthropophytes in the island's flora is also considered significant. This is due to a long history of intense human intervention through agriculture, grazing and wood felling, resulting in the creation of areas suitable for new colonization. However, estimating the proportion of the anthropogenic element is far from simple, as many of the introduced plants are now partially or wholly naturalized. It is believed that 27% (228 taxa) of the entire flora of Ikaria has reached the island as a result of human activity. This figure is not unlike the corresponding one for the flora of the island of Crete, estimated by GREUTER 1971 to represent one-third of the Cretean flora.

The proportion of plants whose presence on the island is due to natural, long-distance dispersal is estimated at 10% (80 taxa). Most halophytes belong to this category, for which diaspore transport is achieved by means of sea currents. The absence of extensive marshy and river areas on the island makes plant dispersal by means of aquatic birds insignificant. Equally insignificant can be regarded the dispersal by means of migrating birds as Ikaria does not lie on the so far known bird migratory routes. The effectiveness of the wind factor in colonization is limited by reproductive drift (see also RUNEMARK 1969) from pre-existent plant communities.

From what has already been mentioned above, it is evident that the island of Ikaria has an interesting and species-rich flora. The flora of the cliffs of its middle part (alt. 300–900 m) and the summit of Mt. Atheras is largely undisturbed and show the highest concentration of local and other rare endemics. To protect this natural heritage, it is suggested that these areas should be declared as a nature reserve.

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