

CONTRIBUTION TO THE FLORA OF THE SOUTH AEGEAN VOLCANIC ARC: THE METHANA PENINSULA (SARONIC GULF, GREECE)

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The Methana Peninsula (Saronic Gulf, Greece) constitutes the youngest and northwestern part of the South Aegean Volcanic Arc. The flora of the Methana Peninsula consists of 620 taxa, 101 of which are under some protection status, while 35 are Greek endemics and 380 are reported here for the first time. The study area has the highest percentage of endemism in the Saronic Gulf. Additionally, for some endemic taxa, their known distribution is expanded. These include *Crocus sieberi* subsp. *atticus* and *Ophrys oestriifera* subsp. *leptomera*, reported for the first time for the phytogeographical region of the Peloponnese; *Campanula andrewsii* subsp. *hirsutula* and *Colchicum psaridis*, reported for the first time for the North Peloponnese; and *Trigonella rechingeri*, reported for the first time from the Greek mainland. The floristic affinities between the study area and the large islands of the Saronic Gulf are examined by the application of Sørensen's index to investigate the relationships between them.

Keywords. Methana Peninsula, peninsular endemism, South Aegean Volcanic Arc, volcanic flora.

INTRODUCTION

The Methana Peninsula is located in the Saronic Gulf, northwest of the island of Poros and south of Aegina (Fig. 1). It appears to be the youngest part of the South Aegean Volcanic Arc (SAVA), with an age of c.0.9 million years. Most of Aegina, the southernmost part of Poros and the Methana Peninsula constitute the northwestern part of the aforementioned volcanic arc. The Hellenic volcanic arc was formed as a result of the subduction of the African plate beneath the Eurasian plate (Dewey *et al.*, 1989). This arc is outlined from west to east mainly by the Methana Peninsula and the islands of Milos, Santorini and Nisyros (Mayley & Johnson, 1971). There are four active volcanoes in the arc, namely Santorini, Nisyros, Milos and the study area.

The Methana Peninsula extends over an area of 58 km² and has c.2100 inhabitants. There are indications that the Methana Peninsula was first inhabited c.5000 years ago.

The Methana Peninsula is almost an island, connected to the mainland only by a 300 m wide isthmus. Its almost circular shape is broken to the northwest by

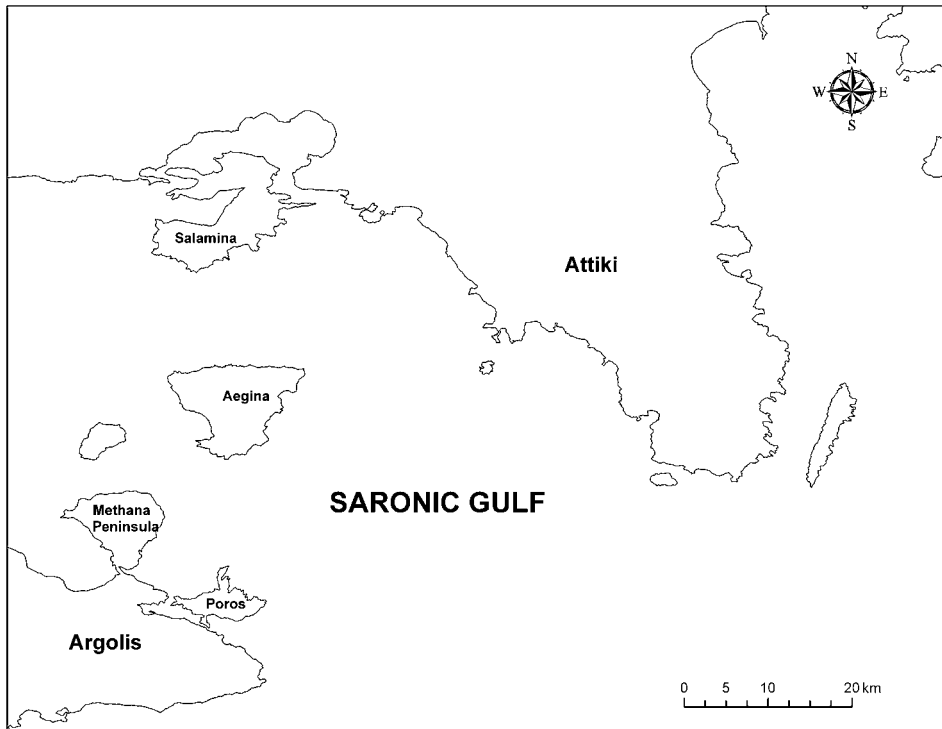


FIG. 1. The Saronic Gulf and the Methana Peninsula.

a projection formed by the hill of Panaghia – a mass of grey limestone (Upper Triassic–Lower Jurassic), and to the south by the limestone of Mali Bardi (Upper Jurassic–Cretaceous) extending to the isthmus (Fig. 2) (Dietrich *et al.*, 1991). These formations are the sedimentary substrate of the Methana volcanoes at depths not exceeding c.1000 m below sea level (Volti, 1999). Geotectonically, the study area belongs to the Pelagonic–Subpelagonic zone (Katsikatsos, 1992).

The volcanic sequences of the peninsula consist principally of andesitic and dacitic lava domes and flows (Fig. 2) extending radially from its central part (Pe-Piper & Piper, 2002). The topography shows that the domes were partially formed by thick streamlets of viscous lava issuing from separate fissures (Pe, 1973). The volcanic activity probably started at the Plio-Pleistocene boundary, although the oldest dated rocks are 0.9 million years old. The most recent volcanic activity was a weak eruption that produced andesitic lava from Kameno Vouno in 230 BC and was described by Strabo (Stothers & Rampino, 1983). The volcanism is believed to be associated with the subduction of the eastern Mediterranean beneath the Aegean Plate (McKenzie, 1970; Nicholls, 1971).

The study area is mainly mountainous, the highest peak being Mt. Chelona (740 m), while small and scattered gravelly beaches can be found on the coast. The

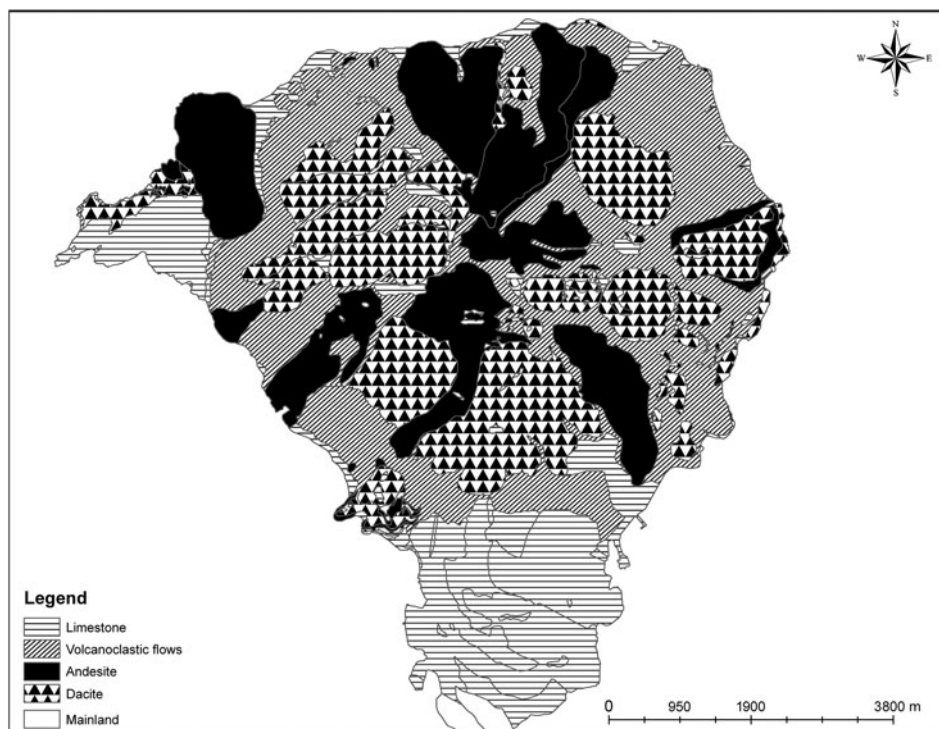


FIG. 2. Simplified geological map of the Methana Peninsula (according to Dietrich *et al.*, 1991).

hydrographical network is extremely limited, with no obvious run-off, not even as rivulets. This may be due to the substrate type (volcanic), which is rich in fissures and cracks into which rainwater disappears, rather than to the low annual precipitation. Thermal sulphuric springs exist at sea level near to the town of Methana and in the northern part of the peninsula.

The Methana Peninsula is in an arid part of Greece (Kotini-Zampakas, 1983; Lienau, 1989; Ministry of Development, 2003). According to the climatic diagrams in Emberger (1952) and Sauvage (1961) the study area belongs to the semi-arid bioclimatic zone with a mild winter. According to the xerothermic index (x) (Bagnouls & Gaussen, 1953) it also belongs to the strong Thermo-mediterranean zone, with a long dry period from early May to mid September.

Hausknecht (1893–1899) was the first botanist to report on plants from the Methana Peninsula. Most records, however, are from Rechinger (1943), and in more recent times from Strid & Tan (1997, 2002). Information on some endemic taxa occurring in the area is given by Tan & Iatrou (2001). However, none of the abovementioned botanists focused their research in the Methana Peninsula. Therefore, the aim of the present study was to thoroughly investigate the flora of the Methana Peninsula.

The phytogeographical affinities between the Methana Peninsula and the large islands of the Saronic Gulf, Poros (Zaganiaris, 1940; Rechinger, 1943; Strid & Tan, 1997, 2002; Tan & Iatrou, 2001), Salamina and Aegina (Vallianatou, 2005), are also examined.

MATERIALS AND METHODS

Several collecting and field observation trips to the study area were undertaken between autumn 2007 and spring 2011 in order to acquire an integrated knowledge of its flora and vegetation. Herbarium specimens are deposited at the Botanical Museum of the University of Patras (UPA). Species identification and nomenclature are according to Tutin *et al.* (1964–1980, 1993), Pignatti (1982), Tan & Iatrou (2001), Greuter *et al.* (1984–1989), Greuter (2008) and Strid & Tan (1997, 2002). For family delimitation we follow APG III (2009). The nomenclature and status of the endemic taxa recorded in the Methana Peninsula was based on Tan & Iatrou (2001) and Georgiou & Delipetrou (2010). The life-form categories follow Raunkiaer (1934), while Pignatti's (1982) classification was used for the chorological analysis (see the Appendix for abbreviations used). To assess the Methana Peninsula's floristic affinities we used bibliographical data for Salamina and Aegina (Vallianatou, 2005) and Poros (Zaganiaris, 1940; Rechinger, 1943; Strid & Tan, 1997, 2002; Tan & Iatrou, 2001). Sørensen's index (Sørensen, 1948), as well as the statistical software SPSS 16, was used for the cross-correlation between the islands.

RESULTS

Flora

The vascular flora of the Methana Peninsula comprises 620 taxa, belonging to 322 genera and 81 families (Table 1).

The literature survey revealed 240 bibliographical reports for the study area (Haussknecht, 1893–1899; Rechinger, 1943; Strid & Tan, 1997, 2002; Tan & Iatrou, 2001) in which 380 taxa were not recorded as previously known from the Methana Peninsula (see the Appendix). Thirty-five taxa are Greek endemics, 20 of which are

TABLE 1. Number of vascular plant taxa in the flora of the Methana Peninsula

Systematic unit	Families	Genera	Taxa	%
Pteridophytes	4	7	8	1.29
Gymnospermae	3	4	4	0.65
Dicotyledones	59	249	496	80.00
Monocotyledones	15	62	112	18.06
Total	81	322	620	100.00

new records for the study area. Eight Balkan endemics are also new records for the peninsula. Sixty-two of the new records and 101 taxa overall are under some protection status.

The largest family in the flora of the Methana Peninsula is the Fabaceae (88 taxa), followed by the Asteraceae and Poaceae (79 and 53 taxa, respectively). These three families account for more than one third of the total flora (36%). The dominance of Fabaceae in the study area can be attributed to the volcanic substrate, which favours the establishment of taxa belonging to this family as it is nitrogen deficient. Lamiaceae (28 taxa), Brassicaceae (28 taxa), Caryophyllaceae (26 taxa) and Scrophulariaceae (20 taxa) are also well represented.

In life forms (Table 2) therophytes dominate, followed by hemicryptophytes, geophytes, phanerophytes and chamaephytes.

According to their general distribution, the area's taxa can be classified into 16 main chorological groups (Table 3).

The endemic group (Greek and Balkan endemics) represents 6.94% of the total flora with 43 taxa. Phytogeographically this is the most important group and is discussed separately. The Mediterranean chorological group predominates, highlighting the geographical position and climatic characteristics of the study area. Within this group, the Stenomediterranean and Eurymediterranean elements are dominant. The other elements are represented in lower percentages, with a relatively small contribution to the island's flora of cosmopolitan and subcosmopolitan elements, and also of invasive elements, indicating little human pressure in the study area.

According to Tan & Iatrou (2001), the most species-rich genera in the Peloponnese are *Trifolium*, *Silene*, *Allium*, *Ranunculus*, *Galium*, *Euphorbia* and *Astragalus*. This pattern also seems to be true in the study area, although with some modifications (*Vicia* and *Campanula* are more abundant than *Silene*, while *Allium* representatives are fewer than those of *Euphorbia*, *Medicago*, *Ranunculus*, *Galium* and *Bromus*).

Endemism

According to Tan & Iatrou (2001), 2960 taxa are found in the Peloponnese phytogeographical region, 355 of which are considered endemics (12%). In the

TABLE 2. Life forms in the flora of the Methana Peninsula

Life form	Total no. of taxa	%
Phanerophytes	56	9.03
Chamaephytes	47	7.58
Hemicryptophytes	127	20.48
Therophytes	316	50.97
Geophytes	73	11.77
Hydrophytes	1	0.16
Total	620	100

TABLE 3. Chorological groups in the flora of the Methana Peninsula

Chorological group	No. of taxa	%	Total	
			No. of taxa	%
1. <i>Widely distributed taxa</i>			130	20.97
Cosmopolitan	36	5.81		
Boreal	4	0.65		
Tropical	14	2.26		
Temperate	37	5.97		
Eurasian	33	5.32		
European	5	0.81		
African	1	0.16		
2. <i>Mediterranean taxa</i>			441	71.13
Mediterranean	58	9.35		
Eurymediterranean	112	18.06		
Stenomediterranean	124	20.00		
E Mediterranean	71	11.45		
Mediterranean-Submediterranean	76	12.26		
3. <i>Balkan taxa</i>			8	1.29
Balkan	8	1.29		
4. <i>Endemic taxa</i>			35	5.65
Endemic	35	5.65		
5. <i>Cultivated – Adventive taxa</i>			6	0.97
Cultivated – Adventive	6	0.97		
Total	620	100.00	620	100.00

Methana Peninsula, 35 endemic taxa were found (Table 5), 5.65% of its flora. The number of endemic taxa is low compared with the total, but when one takes into consideration the small size of the study area (approximately 58 km²), its geographic position (the Methana Peninsula is not close to known areas of high endemism and is far from any high mountains) and its climate (the Methana Peninsula belongs to an arid part of Greece, stressful for all plant taxa), this amount is rather significant. Furthermore, compared with the levels of endemism in Aegina, Salamina and Poros (3.30%, 5.25% and 5.17%, respectively; Table 4), islands neighbouring Methana but which have a more humid climate and much larger size, the Methana Peninsula's level of endemism is remarkably high and actually appears to be the highest in the Saronic Gulf.

Among the 35 Greek endemic taxa, *Crocus sieberi* subsp. *atticus* and *Ophrys oestrifera* subsp. *leptomera* are the most interesting members of this chorological unit as they are found for the first time, not only in the Methana Peninsula, but also in the phytogeographical area of the Peloponnese. Until recently they were thought to occur only in the phytogeographical areas of Sterea Ellas and Evvia.

It is also worth mentioning that *Trigonella rechingeri* was found for the first time on the Greek mainland (although the Methana Peninsula is effectively an ecological

TABLE 4. Endemism in the phytogeographical area of Peloponnese, Salamina, Aegina, Poros and the study area

Region	No. of endemic taxa	%
Peloponnese	355	11.99
Methana Peninsula	35	5.65
Salamina	33	5.25
Aegina	26	3.30
Poros	29	5.17

island). Previously it was only known from islands of the Aegean (Snogerup & Snogerup, 2004).

A very interesting record is *Campanula andrewsii* subsp. *hirsutula*, a taxon thought to be endemic to the Malea Peninsula but now also found in the Methana Peninsula and, therefore, recorded for the first time in the Northeastern Peloponnese.

Colchicum psaridis is recorded for the first time in the Northern Peloponnese. It was previously thought to be a steno-endemic taxon of the Southern Peloponnese.

Astragalus maniaticus, which seems to be closely related to *Astragalus tuberosus* subsp. *haarbachii*, was previously only known from the Southeastern Peloponnese (Tan & Iatrou, 2001; Kalpoutzakis & Konstantinidis, 2009) and is reported here from the Methana Peninsula, near Kameni Chora. This is included in the new records since no exact locality has previously been given.

The protection status of the Greek endemic taxa of the Methana Peninsula, as well as their evaluation status in the Natura 2000 Network, is shown in Table 5. Twenty-nine out of 35 endemic taxa are under some protection status.

Phytogeographical relationships within the Saronic Gulf

Several islets and islands lie in the Saronic Gulf, the largest of them being Aegina, Poros and Salamina. We focused on these three large islands in order to examine phytogeographical affinities of the Methana Peninsula within the Saronic Gulf. Aegina and Poros are in the same bioclimatic zone and phytogeographical region as the study area but Salamina is not.

In Table 6 Sørensen's index values for each island pair show that Aegina has the strongest phytogeographical affinity with the study area.

DISCUSSION

The marked differences in the genera that dominate the study area are due to the geology of the Methana Peninsula. The volcanic substrate favours not only the establishment of taxa belonging to the Fabaceae but also the creation of several ecological niches due to different substrate types (several categories of volcanic

TABLE 5. Greek endemic taxa from the Methana Peninsula and their protection and evaluation status according to European and national legislation and lists

Family	Taxon	Protection status	Natura 2000
Aristolochiaceae	<i>Aristolochia microstoma</i> Boiss. & Spruner	WCMC	B
Asteraceae	<i>Centaurea raphanina</i> subsp. <i>mixta</i> (DC.) Runemark	—	B
Asteraceae	<i>Crepis hellenica</i> Kamari subsp. <i>hellenica</i>	—	B
Asteraceae	<i>Inula methanea</i> Hausskn.	—	B
Asteraceae	<i>Leontodon graecus</i> Boiss. & Heldr.	PD	B
Asteraceae	<i>Scorzonera crocifolia</i> Sibth. & Sm.	PD, WCMC	B
Boraginaceae	<i>Alkanna methanea</i> Hausskn.	WCMC	B
Boraginaceae	<i>Anchusella variegata</i> (L.) Bigazzi, Nardi & Selvi	—	B
Brassicaceae	<i>Erysimum corinthium</i> (Boiss.) Wettst.	WCMC	B
Brassicaceae	<i>Erysimum graecum</i> Boiss. & Heldr.	—	B
Brassicaceae	<i>Malcolmia graeca</i> Boiss. & Spruner subsp. <i>graeca</i>	—	B
Campanulaceae	<i>Campanula andrewsii</i> A.DC. subsp. <i>andrewsii</i>	—	B
Campanulaceae	<i>Campanula andrewsii</i> subsp. <i>hirsutula</i> Phitos	—	B
Campanulaceae	<i>Campanula celsii</i> A.DC. subsp. <i>celsii</i>	WCMC	—
Campanulaceae	<i>Campanula drabifolia</i> Sm.	WCMC	B
Campanulaceae	<i>Campanula topaliana</i> Beauverd subsp. <i>topaliana</i>	—	B
Caryophyllaceae	<i>Silene corinthiaca</i> Boiss. & Heldr.	—	B
Caryophyllaceae	<i>Silene italica</i> (L.) Pers. subsp. <i>peloponnesiaca</i>	—	—
Caryophyllaceae	<i>Silene vulgaris</i> (Moench) Garcke subsp. <i>megalosperma</i> (Sart. ex Heldr.) Hayek	—	—
Fabaceae	<i>Astragalus maniaticus</i> Tan & Strid	NT (IUCN)	—
Fabaceae	<i>Melilotus graecus</i> (Boiss. & Spruner) Lassen	WCMC	B
Fabaceae	<i>Trigonella rechingeri</i> Širj.	WCMC	B
Fabaceae	<i>Vicia villosa</i> subsp. <i>microphylla</i> (D'Urv.) P.W.Ball	—	—
Lamiaceae	<i>Nepeta argolica</i> Bory & Chaub. subsp. <i>argolica</i>	—	B
Lamiaceae	<i>Stachys swansonii</i> Benth. subsp. <i>argolica</i> Phitos & Damboldt	—	B
Primulaceae	<i>Cyclamen peloponnesiacum</i> (Grey-Wilson) Kit Tan subsp. <i>peloponnesiacum</i>	NT (IUCN)	—
Rubiaceae	<i>Galium capitatum</i> Bory & Chaub.	PD, WCMC	B
Rubiaceae	<i>Galium peloponnesiacum</i> Ehrend. & Krendl	WCMC	B

TABLE 5. (Cont'd)

Scrophulariaceae	<i>Scrophularia heterophylla</i> Willd. var. <i>heterophylla</i>	—	—
Scrophulariaceae	<i>Verbascum epixanthinum</i> Boiss. & Heldr.	WCMC	B
Asparagaceae	<i>Ornithogalum prasinantherum</i> Zahar.	WCMC	B
Colchicaceae	<i>Colchicum psaridis</i> Heldr.	NT (IUCN)	—
Iridaceae	<i>Crocus sieberi</i> subsp. <i>atticus</i> (Boiss. & Heldr.) Mathew	—	B
Orchidaceae	<i>Ophrys oestrifera</i> subsp. <i>leptomera</i> (Delforge) Kreutz	—	—
Orchidaceae	<i>Ophrys oestrifera</i> subsp. <i>schlechteriana</i> (Soó) Kreutz	—	—

Abbreviations:

IUCN: *Red List of Threatened Plants* (IUCN, 2010), with the following classification system: NT: the species population is nearly threatened.

Natura 2000 (Dafis *et al.*, 1996): The database created after the Directive 43/1992, where the plants are evaluated as: B: Greek endemics.

PD: Greek Presidential Decree 67/1981 (1981), on the protection of the native flora and wild fauna of Greece.

WCMC: The directive for the Threatened (Endangered, Vulnerable, Rare or Data Deficient) taxa according to the World Conservation Monitoring Centre.

substrates along with the existence of limestone and ultramafic rocks) and variations in substrate morphology (large rocks, steep slopes).

As Strid (1989) states, the importance of the Balkan endemic chorological group gradually decreases in Sterea Ellas and the Peloponnese, whilst in Crete it is represented at a minimal scale. Therefore, it is unsurprising that we find only a few Balkan endemics in the Methana Peninsula. Moreover, as Balkan endemics decrease in number from north to south, a reverse trend is observed for Greek endemics (Strid, 1989). Thus, the proportion of Balkan endemics to Greek endemics found in the Methana Peninsula is expected to be low (1:4.38).

Finally, the flora of the Methana Peninsula is more similar to that of Aegina than to Poros and Salamina. As was to be expected, the study area has higher floristic affinities with islands belonging to the phytogeographical region of the Peloponnese (Aegina and Poros) than with islands belonging to the phytogeographical region of Sterea Ellas (Salamina).

TABLE 6. Sørensen's index values for each island compared with the Methana Peninsula

Pair with Methana	Sørensen's index
Aegina	48.2
Poros	45.8
Salamina	42.6

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APPENDIX

Abbreviations and symbols used:

*: New records.

?: Literature records that have not been found by the authors.

KK: K. Kougioumoutzis observations and/or vouchers.

FA: Flora Aegaea (Rechinger, 1943).

EPGP: *Endemic Plants of Greece. The Peloponnese* (Tan & Iatrou, 2001).

FH 1: *Flora Hellenica*, vol. 1 (Strid & Tan, 1997).

FH 2: *Flora Hellenica*, vol. 1 (Strid & Tan, 2002).

LIFE FORMS**Therophytes (T)**

Tcaesp	T. caespitose
Tpar	T. parasite
Trept	T. reptant
Tros	T. rosulate
Tscap	T. scapose
Tscand	T. scandent
Tsucc	T. succulent

Geophytes (G)

Gbulb	G. bulbous
Grad	G. radicose
Grhiz	G. rhizomatous

Hydrophytes (I)

Irad	I. radicose
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Hemicryptophytes (H)

Hbienn	H. biennial
Hcaesp	H. caespitose
Hrept	H. reptant
Hros	H. rosulate
Hscand	H. scandent
Hscap	H. scapose

Chamaephytes (Ch)

Chsucc	Ch. succulent
Chsuffr	Ch. suffruticose
Chrept	Ch. reptant
Chfrut	Ch. fruticose

Phanerophytes (P)

Pcaesp	P. caespitose
Pfrut	P. fruticose
Plian	P. scandent
Prept	P. reptant
Pscap	P. scapose
Psucc	P. succulent
Psuffr	P. suffruticose

Mega-phanerophytes (MP)**Nano-phanerophytes (NP)**

CHOROLOGICAL GROUPS**Widely distributed taxa**

Cosmopolitan (Subcosmop., Cosmop.)
 Circumboreal (Circumbor.)
 American Tropics (America-tropic.)
 Neotropics (Neotropic.)
 Paleosubtropics (Paleosubtrop.)
 Paleotropics (Paleotrop.)
 Pantropics (Pantrop.)
 Subtropics (Subtrop.)
 North-American (Northamer.)
 Palaeotemperate (Palaeotemp.)
 W Palaeotemperate (W-Palaeotemp.)
 Eurasian (Euras.)
 North-Eurasian (N.-Euras.)
 Eurosiberian (Eurosib.)
 European-Caucasian (Europ.-Caucas.)
 E European-Pontic (E-Europ.-Pont.)
 S European-Pontic (S-Europ.-Pont.)
 European-West-Asian
 (Europ.-W-Asiat.)
 S European-West-Asian
 (S-Europ.-W-Asiat.)
 Central-European-Pontic
 (Centroeurop.-Pont.)
 Southeastern-European/South-Siberian
 (SE-Europ./S-Sib.)
 Southeastern-European-Caucasian
 subalpine (Orof.-SE-Europ.-Caucas.)
 SE Asiatic (SE-Asiat.)
 Submediterranean-Eurasian
 (Submed.-Euras.)
 Eurasian-Submediterranean-
 Mediterranean (Euras.-submed.-med.)
 European (Europ.)
 SE European (SE-Europ.)
 Southeastern-European subalpine
 (Orof.-SE-Europ.)
 South-African (Sudafr.)

Mediterranean taxa

Mediterranean (Med.)
 C Mediterranean (C-Med.)
 E Mediterranean (E-Med. & Omed.)
 Eurymediterranean (Eurymed.)
 E Stenomediterranean (E-Stenomed.)
 Mediterranean-Eastern (Med.-Orient.)
 NE Mediterranean (NE-Med.)
 N Mediterranean (N-Med.)
 Southeastern-Mediterranean (SE-Med.)

South-Mediterranean (S-Med.)
 Stenomediterranean (Stenomed.)
 Stenomediterranean-North Africa
 Coasts (Stenomed.-Meridionali.)
 Stenomediterranean-Balkan
 (Stenomed.-Nordorient.)
 Stenomediterranean-Western (Stenomed.-Occid.)
 Stenomediterranean-Eastern (Stenomed.-
 Orient. & (Steno-)Med.-Centro-Orient.)
 Western Mediterranean (W-Med.)
 Central-Mediterranean-Turanian
 (Centromed.-Turan.)
 East-Mediterranean-Pontic (E-Med.-Pont.)
 East-Mediterranean-Turanian (E-Med.-Turan.)
 Eurymediterranean-Atlantic (Eurymed.-Atl.)
 Eurymediterranean-Pontic (Eurymed.-Pont.)
 Eurymediterranean-Subatlantic
 (Eurymed.-Subatl.)
 Eurymediterranean-Turanian
 (Eurymed.-Turan.)
 Mediterranean-Atlantic (Med.-Atl.)
 Mediterranean-Atlantic-Turanian
 (Med.-Atl.-Turan.)
 Mediterranean-Continental (Med.-Kont.)
 Mediterranean-Mountainous (Med.-Mont.)
 Mediterranean-Pontic (Med.-Pont.)
 Mediterranean-Submediterranean
 (Med.-Submed.)
 Mediterranean-Turanian (Med.-Turan.)
 East-Submediterranean(-Continental)
 (Ost. Submed.-Kont.))
 South-Mediterranean-Macaronesian
 (S-Med.-Macarones.)
 Stenomediterranean-Macaronesian
 (Stenomed.-Macarones.)
 Stenomediterranean-Pontic (Stenomed.-Pont.)
 Stenomediterranean-Turanian
 (Stenomed.-Turan.)
 SubMediterranean (Submed.)
 SubMediterranean-Mediterranean
 (Submed.-Med.)
 SubMediterranean-Subatlantic
 (Submed.-Subatl.)
Balkan (Balkan)
Endemic (Endemic)
Adventive (Adv.)
Cultivated (Cult.)

FERNS AND FERN ALLIES**Aspleniaceae**

Asplenium ceterach L.: Hros, Paleotemp.; FA, KK 1229.

**Asplenium obovatum* Viv.: Hros, Stenomed.; KK 1177.

Polypodiaceae

**Polypodium vulgare* L.: Hros, Circumbor.; KK 1231.

Pteridaceae

**Adiantum capillus-veneris* L.: Grhiz, Pantrop.; KK 1232.

Anogramma leptophylla (L.) Link: Tcaesp, Cosmop.; FA, KK 1228.

Cheilanthes acrostica Tod.: Hros, Stenomed.-Turan.; FA, KK 1230.

Cosentinia vellea (Aiton) Tod.: Hros/caesp, Med.-Kont.; FA, KK 1233.

Selaginellaceae

Selaginella denticulata (L.) Spring: Chrept, Stenomed.; FA, KK 566.

GYMNOSPERMAE**Cupressaceae**

**Cupressus sempervirens* L.: MPscap, E-Med. (Euri-); KK obs.

**Juniperus phoenicea* L.: N/MPcaesp/scap, Eurymed.; KK 306, 672, 73, 998, 307, 1060.

Ephedraceae

**Ephedra foeminea* Forssk.: NPcaesp, E-Med.; KK 1064.

Pinaceae

**Pinus halepensis* Mill. subsp. *halepensis*: MPscap, Stenomed.; KK obs.

ANGIOSPERMAE**Acanthaceae**

**Acanthus spinosus* L.: Hscap, E-Med.; KK 858.

Aceraceae

**Acer sempervirens* L.: Pcaesp, E-Med.; KK 787, 1225, 1146.

Aizoaceae

**Carpobrotus edulis* (L.) N.E.Br.: Chsuffr, Sudafr.; KK obs.

Amaranthaceae

Amaranthus retroflexus L.: Tscap, Northamer.; FA, KK 564.

?*Amaranthus silvestris* Vill.: Tscap, Palaeosubtrop.; FA.

Amaryllidaceae

**Allium ampeloprasum* L.: Gbulb, Eurymed.; KK 732, 989, 1095.

**Allium chamaespathum* Boiss.: Gbulb, Balkan; KK 1048.

**Allium guttatum* Stev.: Gbulb, E-Med.; KK 102.

**Allium roseum* L.: Gbulb, Med.; KK 586.

?*Allium sphaerocephalon* L.: Gbulb, Euras.; FA.

**Allium subhirsutum* L.: Gbulb, Stenomed.; KK 374, 853, 746, 599, 854.

**Allium trifoliatum* Cirillo: Gbulb, Stenomed.; KK 731.

**Sternbergia sicula* Tin. ex Guss.: Gbulb, Omed.; KK 1055.

Anacardiaceae

Pistacia atlantica Desf.: Pcaesp, Med.-Atl.-Turan.; FA, KK 1072.

**Pistacia lentiscus* L.: Pcaesp, Stenomed.; KK 862, 151.

**Pistacia terebinthus* L.: NP, Eurymed.; KK 202, 877.

**Rhus coriaria* L.: NP, Med.-Submed.; KK obs.

Apiaceae

**Bupleurum fruticosum* Boiss. & Spruner: Pcaesp, Stenomed.; KK 196, 1139.

Bupleurum trichopodium Boiss. & Spruner: Tscap, E-Med.; FA, KK 560, 543, 539, 302.

**Crithmum maritimum* L.: Chsuffr, Med.-Atl.; KK 244, 1035, 1034.

**Daucus carota* L.: Hscap, Subcosmop.; KK 1101.

Daucus guttatus Sm.: Tscap, E-Med.; FA, KK 296.

?*Daucus involucratus* Sm.: Tscap, E-Med.; FA.

Elaeoselinum asclepium L.: Hscap, Stenomed.; FA, KK 199.

**Foeniculum vulgare* Mill.: Hscap, S-Med.; KK 1148.

**Lagoecia cuminoides* L.: Tscap, Eurymed.; KK 1085, 1165.

**Orlaya daucooides* (L.) Greuter: Tscap, Med.; KK 389, 355, 573, 431.

**Pimpinella saxifraga* L.: Hscap, Europ.-Caucas.; KK 1036.

Scaligeria napiformis (Sprengel) Grande: Hbienn, E-Med.; FA, KK 31, 30, 604, 680, 813, 602, 574.

**Scandix australis* L. (s.l.): Tscap, Eurymed.; KK 484, 893.

**Smyrniium olusatrum* L.: Hbienn, Med.-Atl.; KK 710.

**Smyrniium rotundifolium* Mill.: Hscap, Med.; KK 282.

**Tordylium apulum* L.: Tscap, Stenomed.; KK 494.

Torilis arvensis subsp. *heterophylla* (Guss.) Thell.: Tscap, Eurymed.; FA, KK 495.

Torilis leptophylla (L.) Rchb.f.: Tscap, Med.-Turan.; FA, KK 416, 487, 264, 783, 663, 679.

?*Torilis nodosa* (L.) Gaertn.: Tscap, Eurymed.-Turan.; FA.

Apocynaceae

**Nerium oleander* L.: Pcaesp, Stenomed.; KK obs.

**Vinca major* L.: Chrept, Eurymed.; KK 833.

Araceae

**Arisarum vulgare* Targ.-Tozz.: Grhiz, Stenomed.; KK 883, 1075.

Aristolochiaceae

?*Aristolochia microstoma* Boiss. & Spruner: Gbulb, Endemic; FH 1.

Asclepiadaceae

?*Periploca graeca* L.: Plian, NE-Med. (Steno-); FA.

Asparagaceae

**Agave americana* L.: MPsucc, Adv.; KK obs.

**Asparagus acutifolius* L.: Grhiz/NP, Stenomed.; KK 1053, 1052.

**Drimis maritima* (L.) Baker: Gbulb, Stenomed.; KK obs.

**Muscari comosum* (L.) Mill.: Gbulb, Eurymed.; KK 322, 346, 344, 631.

**Muscari neglectum* Guss. in Tenore: Gbulb, Eurymed.; KK 377, 932.

**Ornithogalum prasinantherum* Zahar.: Gbulb, Endemic; KK 339.

**Ornithogalum umbellatum* L.: Gbulb, E-Med.; KK 362, 701, 799.

**Scilla autumnalis* L.: Gbulb, Eurymed.; KK 986, 1049, 1054.

Asteraceae

?*Achillea maritima* (L.) Ehrend. & Y.P.Guo: Chsuffr, Med.-Atl.; FA.

Andryala integrifolia L.: Tscap, Stenomed.; FA, KK 109, 110.

**Anthemis arvensis* L.: Tscap(-Hscap), Stenomed.; KK 649.

Anthemis auriculata Boiss.: Tscap, E-Med.; FA, KK 212, 1201, 1200, 1116.

- **Anthemis chia* L.: Tscap, E-Med.; KK 876, 1234.
 ?*Anthemis ruthenica* M.Bieb.: Tscap, Centroeurop.-Pont. (Steppica); FA.
 ?*Anthemis tomentosa* L.: Tscap, NE-Med.; FA.
 **Calendula arvensis* L.: Tscap, Eurymed.; KK 936, 960, 499, 422, 441.
 **Calendula officinalis* L.: Tscap, Eurymed.; KK 900, 1226.
 **Carduus pycnocephalus* L.: Tscap, Eurymed.; KK 345, 724.
 **Carthamus lanatus* L.: Tscap, Eurymed.; KK 1141.
 **Centaurea benedicta* (L.) L.: Tros, Med.; KK 1027, 1140.
 **Centaurea raphanina* subsp. *mixta* (DC.) Runemark: Hros, Endemic; KK 675.
 **Cichorium intybus* L.: Hscap, Cosmop.; KK 1023, 54.
 **Cichorium spinosum* L.: Chsuffr, Stenomed.; KK 329.
 **Cladanthus mixtus* (L.) Chevall.: Tscap, Stenomed.; KK 740a.
 ?*Crepis commutata* (Spreng.) Greuter: Tscap(-Hbienn), E-Med.; FA.
 ?*Crepis dioscoridis* L.: Tscap, E-Med.; FA.
Crepis foetida L.: Tscap(-Hbienn), Eurymed.; FA, KK 74.
 **Crepis hellenica* Kamari subsp. *hellenica*: Tscap, Endemic; KK 360.
 **Crepis multiflora* Sm.: Tscap, E-Med.; KK 61.
 **Crepis neglecta* L. subsp. *neglecta*: Tscap, Balkan; KK 383.
 **Crepis rubra* L.: Tscap, NE-Stenomed.; KK 1236.
 **Crupina crupinastrum* (Moris) Vis.: Tscap, Stenomed.; KK 806, 808, 1097.
 **Dittrichia graveolens* (L.) Greuter: Tscap, Med.-Turan.; KK 1008, 1006, 1028.
 **Dittrichia viscosa* (L.) Greuter: Hscap, Eurymed.; KK 707, 997.
 **Doronicum orientale* Hoffm.: Grhiz, Orof.-SE-Europ.-Caucas.; KK 688.
Erigeron bonariensis L.: Tscap, America-tropic.; FA, KK 497.
 **Evax pygmaea* (L.) Brot.: Trept, Stenomed.; KK 1237.
 **Filago eriocephala* Guss.: Tscap, E-Stenomed.; KK obs.
Filago gallica L.: Tscap, Eurymed.; FA, KK 131A, 79.
Filago germanica (L.) Huds.: Tscap, Paleotemp.; FA, KK 180, 131b.
Filago pyramidata L.: Tscap, Eurymed.; FA, KK 270.
 **Geropogon hybridus* (L.) Sch.Bip.: Tscap, Med.; KK 492, 507.
 **Glebionis coronaria* (L.) Spach: Tscap, Stenomed.; KK 44, 408.
 **Glebionis segetum* (L.) Fourr.: Tscap, Eurymed.; KK 157, 330.
 **Hedypnois rhagadioloides* (L.) F.W.Schmidt: Tscap, Stenomed.; KK obs.
 **Helichrysum stoechas* subsp. *barrelieri* (Ten.) Nyman: Chsuffr, E-Med.; KK 41.
 **Hypochaeris achyrophorus* L.: Tscap, Stenomed.; KK 273, 646, 429, 402, 423, 1015.
 **Hypochaeris cretensis* (L.) Bory & Chaub.: Hscap, NE-Med.; KK 424, 172.
 **Hypochaeris radicata* L.: Hros, Europ.-Caucas.; KK 467, 354.
Inula methanea Hausskn.: Chsuffr, Endemic; FA, KK 195, 550.
Lactuca tuberosa Jacq.: Hscap, E-Med.-Turan.; FA, KK 1115, 1210.
 **Lamyropsis cynaroides* (Lam.) Dittrich: Tros, E-Med.; KK 65, 1156.
 **Leontodon biscutellifolius* DC.: Hros, Europ.-Caucas.; KK 686, 687.
Leontodon graecus Boiss. & Heldr.: Hros, Endemic; FA, KK 263.
 **Leontodon hispidus* L.: Hros, Europ.-Caucas.; KK 407.
 **Leontodon saxatilis* Lam.: Tscap/Hscap, Med.-Mont.; KK 784.
Leontodon tuberosus L.: Hros, Stenomed.; FA, KK 945, 498, 444, 640, 641.
 **Limbarda crithmoides* (L.) Dumort.: Chsuffr, Med.-Atl.; KK 1021.
Matricaria chamomilla L.: Tscap, SE-Asiat.; FA, KK 1127.
 **Notobasis syriaca* (L.) Cass.: Tscap, Stenomed.; KK 1151.
Onopordum tauricum Willd.: Hbienn, SE-Europ.; FA, KK 154.
 **Pallenis spinosa* (L.) Cass.: Tscap, Eurymed.; KK 677, 825, 1110.

- Phagnalon rupestre* subsp. *graecum* (Boiss. & Heldr.) Batt.: Chsuffr, E-Med.; FA, KK 924, 816, 673, 493, 375, 879.
- ?*Phagnalon saxatile* (L.) Cass.: Chsuffr, W-Med.; FA.
- ?*Picris pauciflora* Willd.: Tscap, N-Med.; FA.
- **Picris rhagadioloides* (L.) Desf. in Lam.: Tscap, Med.; KK 57, 238.
- **Pilosella piloselloides* subsp. *bauhinii* (Schult.) S.Bräut. & Greuter: Hscap, SE-Europ./S-Sib.; KK 223, 224, 221.
- **Pilosella piloselloides* subsp. *praealta* (Gochnat) S.Bräut. & Greuter: Hscap, Europ.-Caucas.; KK 222.
- **Ptilostemon chamaepeuce* (L.) Less.: Chfrut, E-Med.; KK 903, 179, 995, 58.
- **Ptilostemon gnaphaloides* (Cirillo) Soják: Chfrut, Med.; KK 1176, 1175.
- **Pulicaria dysenterica* (L.) Bernh.: Hscap, Eurymed.; KK 911.
- **Reichardia picroides* (L.) Roth: Hscap, Stenomed.; KK 644, 59, 158, 239, 910, 925, 639, 1026, 1022, 1025.
- **Rhagadiolus stellatus* (L.) Gaertn.: Tscap, Eurymed.; KK 500.
- **Scolymus hispanicus* L.: Hbienn, Eurymed.; KK 823.
- **Scorzonera crocifolia* Sm.: Hscap, Endemic; KK 568, 569, 817, 1107, 1106.
- **Senecio leucanthemifolius* subsp. *vernalis* (Waldst. & Kit.) Greuter: Tscap, Ost. Submed. (-Kont.); KK 927, 536, 935, 896, 561, 613, 697, 1217.
- **Senecio squavidus* L.: Hbienn/Hscap, Orof.-SE-Europ.; KK 884.
- **Silybum marianum* (L.) Gaertn.: Hbienn, Med.-Turan.; KK 352.
- **Sonchus asper* (L.) Hill: Tscap, Euras.; KK 173, 401, 403.
- Sonchus oleraceus* L.: Tscap, Subcosmop.; FA, KK 361, 630, 371.
- **Sonchus tenerrimus* L.: Tscap, Stenomed.; KK 1111.
- **Taraxacum campyloides* G.E.Haglund: Hros, Circumbor.; KK 445, 944, 460, 404, 406, 1024, 1020.
- **Taraxacum minimum* (Guss.) N.Terrac.: Hros, Med.-Mont.; KK 1238.
- Tolpis barbata* (L.) Gaertn.: Tscap, Stenomed.; FA, KK 256, 111, 112, 1100.
- **Tragopogon porrifolius* L.: Hbienn (Tscap), Eurymed.; KK 268, 357.
- Urospermum picroides* (L.) Scop.: Tscap, Eurymed.; FA, KK 261, 62.
- **Xanthium strumarium* L.: Tscap, Northamer.; KK 531.

Boraginaceae

- Alkanna methanaea* Hausskn.: Hscap, Endemic; FA, KK 764, 713, 216, 215, 214, 227, 779, 786, 278, 486, 763.
- **Alkanna orientalis* (L.) Boiss.: Hscap, E-Med./Turan.; KK obs. UPA!
- **Alkanna tinctoria* Tausch: Hscap, Stenomed.; KK 177, 287.
- **Anchusa hybrida* Ten.: Hscap, Stenomed.; KK 1237.
- **Anchusa italica* Retz.: Hscap, Eurymed.; KK 721.
- **Anchusa officinalis* L.: Hscap/Hbienn, Med.-Pont.; KK 289.
- **Anchusa undulata* L.: Hbienn, Stenomed.-Occid.; KK 98.
- **Anchusella variegata* (L.) Bigazzi, Nardi & Selvi: Tscap, Endemic; KK 1239.
- **Cynoglossum columnae* Ten.: T/H-scrap, Omed.; KK 742.
- **Cynoglossum creticum* Mill.: Hbienn, Eurymed.; KK 810, 372.
- **Echium italicum* L.: Hbienn, Eurymed.; KK 835.
- **Echium plantagineum* L.: Tscap, Eurymed.; KK 324, 842, 843.
- **Heliotropium dolosum* De Not.: Tscap, Med.-Turan.; KK 1077.
- **Heliotropium europaeum* L.: Tscap, Eurymed.-Turan.; KK 549.
- Heliotropium hirsutissimum* Grauer: Tscap, E-Med.; FA, KK 326.
- **Lithospermum arvense* L.: Tscap, Euras.-submed.-med.; KK 897.
- **Myosotis arvensis* Hill: T/Hscap, N.-Euras.; KK 470, 627, 708.

- **Myosotis incrassata* Guss.: Tscap, E-Med.; KK 948.
Onosma frutescens Lam.: Chsuffr, Stenomed.; FA, KK 807, 325, 756, 757.
 **Symphytum bulbosum* C.Schimper: Grhiz, SE-Europ.; KK 219.

Brassicaceae

- **Alyssum strigosum* Banks & Sol.: Tscap, E-Med.-Mont.; KK 1240.
 **Arabidopsis thaliana* (L.) Heynh.: T/H-scap, Euras.; KK 477.
 **Arabis verna* (L.) R.Br.: Tscap, Med.; KK 440, 447.
Biscutella didyma L.: Tscap, Stenomed.-Turan.; KK 242.
 **Brassica cretica* subsp. *aegaea* (Heldr. & Halácsy) Snogerup *et al.*: Chsuffr, E-Med.; KK 891.
Brassica geniculata (Desf.) Snogerup & B.Snogerup: Chsuffr, Euras.; KK 759.
Bunias erucago L.: Tscap, N-Med.; KK 148.
 **Cakile maritima* Scop. subsp. *maritima*: Tscap, Med.-Atl.; KK 908, 1032, 1033.
 **Capsella bursa-pastoris* (L.) Medik.: Tscap, Cosmop.; KK 705, 952, 955.
 **Erysimum cheiri* (L.) Crantz: Chsuffr, Submed.-med.; KK 476.
 **Clypeola jonthlaspi* subsp. *microcarpa*: Tscap, Stenomed.; KK 114, 439, 448.
 **Erophila verna* (L.) Chevall.: Tscap, Circumbor.; KK 956.
 **Eruca vesicaria* (L.) Cav.: Tscap, Med.-Turan.; KK 437.
Erysimum corinthium (Boiss.) Wettst.: Hscap, Endemic; KK 528, 1009.
 **Erysimum graecum* Boiss. & Heldr.: Hscap, Endemic; KK 133, 928.
Malcolmia flexuosa (Sm.) Sm. subsp. *naxensis* (Rech.f.) Stork: Tscap, SE-Europ.;
 KK 1009, 1125.
Malcolmia graeca Boiss. & Spruner subsp. *graeca*: Tscap, Endemic; KK 1178, 1179, 1181.
 **Matthiola incana* (L.) R.Br. in Aiton: Chfrut/NP, Stenomed.; KK 832.
 **Matthiola sinuata* (L.) R.Br. in Aiton: Hscap, Med.-Atl.; KK 380.
 **Matthiola tricuspitata* R.Br.: Tscap, Stenomed.; KK 516.
 ?*Neslia apiculata* Fisch. *et al.*: Tscap, Euras.; KK.
 **Raphanus raphanistrum* L.: Tscap, Paleotemp.; KK 901.
Rapistrum rugosum (L.) All. s.l.: Tscap/caesp, Med.(subatl.); KK 323, 1126.
Sinapis alba L.: Tscap, Paleotemp.; KK 398, 841, 898.
 **Sinapis arvensis* L.: Tscap, Eurymed.; KK 1180.
Sisymbrium orientale L.: Tscap, Eurymed.; KK 605.
 **Teesdalia coronopifolia* (J.P.Bergeret) Thell.: Tscap, Eurymed.; KK 969.
 **Turritis glabra* L.: Hscap, Med.-Mont.; KK 532, 1130.

Cactaceae

- **Opuntia ficus-indica* Mill.: Psucc, Neotropic.; KK obs.

Campanulaceae

- **Campanula andrewsii* A.DC. subsp. *andrewsii*: Hscap, Endemic; KK 187.
 **Campanula andrewsii* subsp. *hirsutula* Phitos: Hscap, Endemic; KK 525, 610, 526.
 **Campanula celsii* A.DC. subsp. *celsii*: Hscap, Endemic; KK 565.
Campanula drabifolia Sm.: Tscap, Endemic; FA, KK 839, 105, 130, 240.
Campanula ramosissima Sm.: Tscap, Stenomed.; FA, KK 253.
 **Campanula spatulata* Sm. (s.l.): Hscap, Balkan; KK 289.
 **Campanula spatulata* subsp. *spruneriana* (Hampe) Hayek: Grhiz, Balkan; KK 376.
 **Campanula topaliana* Beauverd subsp. *topaliana*: Hscap, Endemic; KK 99, 275, 933.

Capparaceae

- **Capparis spinosa* subsp. *rupestris* (Sm.) Nyman: NPcaesp, Med.; KK 146, 183, 872.

Caprifoliaceae

- **Lonicera etrusca* G.Santi: Plian, Eurymed.; KK 70.

Lonicera implexa Aiton: Plian (Pcaesp), Stenomed.; FA, KK 7, 1059.

Caryophyllaceae

- Cerastium comatum* Desv.: Tscap, Stenomed.; FH 1, KK 552.
 **Cerastium glomeratum* Thuill.: Tscap, Eurymed.; KK 481, 950, 475, 717, 1017.
Herniaria hirsuta L.: Tscap/Hcaesp, Eurymed.; FH 1, KK 80.
 ?*Minuartia globulosa* (Labill.) Schinz & Thell.: Tscap, E-Med.; FA.
Minuartia hybrida (Vill.) Schischk.: Tscap, Paleotemp.; FH 1, KK 653, 657.
 ?*Paronychia capitata* (L.) Lam.: Hcaesp, W-Med.; FH 1.
Petrorhagia dubia (Raf.) G.López & Romo: Tscap, Stenomed.; FA, KK 90, 280, 643, 363, 593.
Polycarpon tetraphyllum L.: Tscap, Eurymed.; FH 1, KK 81, 82, 129.
Sagina apetala Ard.: Tscap, Eurymed.; FH 1, KK 118.
 ?*Scleranthus annuus* subsp. *polycarpus* (L.) Thell.: Tscap/Hbienn, Med.-Atl.; FA.
Silene behen L.: Tscap, Stenomed.; FH 1, KK 409, 410, 798.
 **Silene colorata* Poir.: Tscap, Eurymed.-Atl.; KK 522, 880.
 ?*Silene conica* L.: Tscap, Paleotemp.; FA.
Silene corinthiaca Boiss. & Heldr.: Tscap, Endemic; FH 1, KK 85, 86, 87, 189, 228, 234.
Silene cretica L.: Tscap, Stenomed.; FH 1, KK 279, 479, 758.
Silene gallica L.: Tscap, Med. (Eu.)-Atl.; FH 1, KK 254, 387, 597, 598, 629, 720, 1099.
Silene italica (L.) Pers. (s.l.): Hros, Eurymed.; FH 1, KK 681, 682, 684.
 **Silene italica* subsp. *peloponnesiaca* Greuter: Hros, Endemic; KK 1241.
 ?*Silene nocturna* L.: Tscap, S-Med.-Macarones.; FH 1.
Silene sedoides Poiret subsp. *sedoides*: Tscap, Stenomed.; FH 1, KK 38, 39.
Silene vulgaris subsp. *megalosperma* (Sart. ex Heldr.) Hayek: Hscap, Endemic; EPGP, KK 204, 490, 930.
 **Spergula pentandra* L.: Tscap, Med.-Atl.; KK 970.
Spergularia bocconei (Scheele) Asch. & Graebn.: Tscap(-Hbienn), Subcosmop.; FA, KK 517.
Spergularia salina J.Presl & C.Presl: Tscap, Subcosmop.; FH 1, KK 540.
 **Stellaria media* (L.) Vill.: Trept/Hbienn, Cosmop.; KK 369, 472, 548, 553, 582, 957, 795, 1240.
 **Stellaria pallida* (Dumort.) Piré: Trept, Europ.; KK 967.

Chenopodiaceae

- **Atriplex prostrata* Boucher ex DC.: Tscap, Paleotemp.; KK 150, 976, 982, 1069, 1070.
 **Atriplex tatarica* L.: Tscap, Med.-Turan.; KK 520.
 ?*Chenopodium vulvaria* L.: Tscap, Eurymed.; FA.
 **Salsola kali* L.: Tscap, Paleotemp.; KK 1066.
Salsola soda L.: Tscap, Paleotemp.; KK 1065, 1068.
 **Sarcocornia fruticosa* (L.) A.J.Scott: Chsuffr/succ, Med.; KK 518.
Suaeda maritima (L.) Dumort.: Tscap, Cosmop.; FA, KK 147.

Cistaceae

- **Cistus creticus* L.: NP, Stenomed.; KK 45.
 **Cistus salviifolius* L.: NP, Stenomed.; KK 366, 671, 887.
Fumana arabica (L.) Spach: Chsuffr, Med.-Turan.; FA, KK 51, 814.
Fumana thymifolia (L.) Webb: Chsuffr, Stenomed.; FA, KK 567, 575, 894, 1019.
 **Tuberaria guttata* (L.) Fourr.: Tscap, Eurymed. (Subatl.); KK 611.

Colchicaceae

- **Colchicum bivonae* Guss.: Gbulb, Omed.; KK 1050, 1051.
 **Colchicum cupanii* Guss.: Gbulb, Stenomed.; KK 1003.
 **Colchicum psaridis* Heldr.: Gbulb, Endemic; KK 656.

?*Colchicum variegatum* L.: Gbulb, E-Med.; FA.

Convolvulaceae

- **Calystegia sepium* (L.) R.Br.: Hscand, Paleotemp.; KK 4.
- **Calystegia sylvatica* (Kit.) Griseb.: Hscap, Med.-Submed.; KK 749.
- **Convolvulus althaeoides* L.: Hscand, Stenomed.; KK 430.
- Convolvulus elegantissimus* Mill.: Hscand, Med.; FA, KK 255, 850.
- **Convolvulus siculus* L. subsp. *siculus*: Tscap, Stenomed.; KK 251.
- Cuscuta epithymum* (L.) L.: Tpar, Euras.; FA, KK 414.
- ?*Cuscuta planiflora* Ten.: Tpar, Eurymed.; FA.

Crassulaceae

- **Sedum amplexicaule* subsp. *tenuifolium* (Sm.) Greuter: Chsucc, Med.; KK 347.
- Sedum caespitosum* (Cav.) DC.: Tsucc, Med.; FH 1, KK 538, 801.
- ?*Sedum littoreum* Guss.: Tscap, (Steno)Med.-Centro-Orient.; FH 1.
- Sedum rubens* L.: Tscap, Eurymed.-Subatl.; FH 1, KK 1089.
- **Sedum sediforme* (Jacq.) Pau: Chsucc, Stenomed.; KK 76, 89, 991.
- Umbilicus horizontalis* (Guss.) DC.: Gbulb, C-Med.; FH 1, KK 235.
- Umbilicus rupestris* (Salisb.) Dandy: Gbulb, Med.-Atl.; FH 1, KK 303, 489, 754, 882.

Cucurbitaceae

- **Bryonia cretica* L.: Grhiz, Eurymed.; KK 1104.

Cyperaceae

- Carex distachya* Desf.: Hcaesp, Stenomed.; FA, KK 751, 752.
- ?*Carex distans* L.: Hcaesp, Eurymed.; FA.
- ?*Carex extensa* Good.: Hcaesp, Med.-Atl.; FA.
- **Carex illegitima* Ces.: Hcaesp, E-Med.; KK 194, 669, 670, 1002, 1011.

Dioscoreaceae

- **Dioscorea communis* (L.) Caddick & Wilkin: Grad, Eurymed.; KK 1128.

Dipsacaceae

- **Knautia integrifolia* (L.) Bertol.: Tscap, Eurymed.; KK 63, 370.

Ericaceae

- **Arbutus andrachne* L.: NP, Med.; KK 865, 874.
- Arbutus unedo* L.: Pcaesp, Stenomed.; FA, KK obs.
- Erica arborea* L.: Pcaesp, Stenomed.; KK 961.
- **Erica manipuliflora* Salisb.: Chsuffr/NP, E-Med. (Steno-); KK 870, 996, 1000, 1010, 1012, 1074.

Euphorbiaceae

- ?*Chrozophora tinctoria* L.: Tscap, Med.-Turan.; FA.
- **Euphorbia acanthothamnos* Boiss.: Chfrut, Omed.; KK 1122.
- ?*Euphorbia aleppica* L.: Tscap, Centromed.-Turan.; FA.
- **Euphorbia characias* L.: NP, Stenomed.; KK 857.
- **Euphorbia dendroides* L.: NPcaesp, Med.; KK 840.
- Euphorbia exigua* L.: Tscap, Eurymed.; FA, KK 412.
- ?*Euphorbia falcata* L.: Tscap, Eurymed.-Turan.; FA.
- ?*Euphorbia myrsinites* L.: Chrept, S-Europ.-Pont.; FA.
- ?*Euphorbia paralias* L.: Chfrut, Eurymed.-Atl.; FA.
- Euphorbia peplus* L.: Tscap, Cosmop.; FA, KK 91, 125, 846, 1237.
- **Euphorbia taurinensis* All.: Tscap, Eurymed.; KK 551.

**Mercurialis annua* L.: Tscap, Paleotemp.; KK 615, 915, 922.

**Ricinus communis* L.: Tscap, Cult.; KK obs.

Fabaceae

Anagyris foetida L.: Pcaesp, S-Med.; FA, KK obs.

**Anthyllis hermanniae* L.: Chfrut, Stenomed.; KK 171, 1007.

**Anthyllis vulneraria* subsp. *rubriflora* (DC.) Arcang.: T/Hrept/scap, Med.; KK 276, 790, 578.

**Astragalus hamosus* L.: Tscap, Med.-Turan.; KK 1242.

**Astragalus maniacicus* Strid & Kit Tan: Hros, Endemic; KK 744, 745.

Astragalus pelecinus (L.) Barneby: Tscap, Stenomed.; FA, KK 836, 837.

**Bituminaria bituminosa* (L.) Stirton: Hscap, Eurymed.; KK 55, 320, 321, 635, 788.

**Calicotome villosa* (Poir.) Link: Pcaesp, Stenomed.; KK obs.

**Ceratonia siliqua* L.: MP, Med.; KK 523.

Cercis siliquastrum L.: Pscap, S-Europ.-W-Asiat.; FA, KK 220.

**Colutea arborescens* L.: Pcaesp, E-Europ.-Pont.; KK 1209.

**Dorycnium hirsutum* (L.) Ser.: Chsuffr, Eurymed.; KK 29, 309, 314, 454, 587, 588, 728, 755, 830.

**Genista acanthoclada* DC.: NP, E-Med.; KK 193, 1105, 1222.

**Hippocrepis emerus* subsp. *emeroides* (Boiss. & Spruner) Lassen: Pcaesp, E-Med.-Pont.; KK 393, 942.

**Hippocrepis unisiliquosa* L.: Tscap, Eurymed.; KK 262.

**Hymenocarpus circinnata* (L.) Savi: Tscap, Stenomed.; KK 335, 379, 413, 494, 794, 1136.

**Lathyrus annuus* L.: Tscap, Eurymed.; KK 29, 309, 314, 454, 587, 588, 728, 755, 830.

**Lathyrus aphaca* L.: Tscap, Eurymed.; KK 388, 579, 580, 581.

**Lathyrus cicera* L.: Tscap, Med.-Turan.; KK 777, 1218, 1219.

**Lathyrus clymenum* L.: Tscap, Stenomed.; KK 456, 457, 458, 829, 907, 909.

Lathyrus sphaericus Retz.: Tscap, Med.-Submed.; FA, KK 711.

?*Lens ervoides* (Brign.) Grande: Tscap, Stenomed.-Pont.; FA.

Lotus angustissimus L.: Tscap, Eurymed.; FA, KK 8, 9.

Lotus conimbricensis Brot.: Tcaesp, Med.; FA, KK 760a.

**Lotus corniculatus* L.: Hscap, Paleotemp.; KK 450, 844, 905.

**Lotus cytisoides* L.: Chsuffr, Stenomed.; KK 1239.

**Lotus edulis* L.: Tscap, Stenomed.; KK 333, 313, 328.

**Lotus ornithopodioides* L.: Tscap, Stenomed.; KK 52, 243, 318, 327, 382, 396, 418, 455, 760b, 761.

Lupinus albus subsp. *graecus* (Boiss. & Spruner) Franco & Pinto da Silva: Tscap, E-Med.; FA, KK 1220.

Lupinus angustifolius L.: Tscap, Stenomed.; FA, KK 435, 962, 1215.

**Lupinus micranthus* Guss.: Tscap, Stenomed.; KK 434.

**Medicago arabica* (L.) Huds.: Tscap, Eurymed.; KK 1147.

Medicago coronata (L.) Bartal.: Tscap, Stenomed.; FA, KK 312.

**Medicago lupulina* L.: Tscap(-Hscap), Paleotemp.; KK 959.

**Medicago minima* (L.) Bartal.: Tscap, Paleotemp.; KK 1091, 1118.

?*Medicago monspeliaca* (L.) Trautv.: Tscap, Eurymed.; FA.

**Medicago orbicularis* (L.) Bartal.: Tscap, Eurymed.; KK 206, 334, 729.

Medicago polymorpha L.: Tscap, Subcosmop.; FA, KK 5, 28, 205, 513, 634, 725.

**Medicago scutellata* (L.) Mill.: Tscap, Med.; KK 336, 337, 338, 515, 722.

Medicago tuberculata Willd.: Tscap, Stenomed.; FA, KK 666B.

Melilotus graecus (Boiss. & Spruner) Lassen: Tscap, Endemic; FA, KK 237, 730.

**Melilotus indicus* (L.) All.: Tscap, Med.-Turan.; KK 519.

**Melilotus messanensis* (L.) All.: Tscap, Stenomed.; KK 1121.

- Onobrychis caput-galli* (L.) Lam.: Tscap, Stenomed.; FA, KK 419, 638.
 **Ononis ornithopodioides* L.: Tscap, Stenomed.; KK 637.
 **Ononis pubescens* (DC.) Link: Tscap, Med.; KK 141.
Ornithopus compressus L.: Tscap, Eurymed.; FA, KK 294, 744, 793.
 ?*Ornithopus pinnatus* (Mill.) Druce: Tscap, Med.-Atl.; FA.
 **Pisum sativum* L. (s.l.): T/H-scaph, Cult.; KK 191, 200, 692.
 **Pisum sativum* subsp. *elatius* (M.Bieb.) Asch. & Graebn.: Tscap, Stenomed.-Turan.; KK 690.
 **Scorpiurus muricatus* L.: Tscap, Eurymed.; KK 249, 459, 811.
 **Spartium junceum* L.: Pcaesp, Eurymed.; KK 71.
 **Trifolium angustifolium* L.: Tscap, Eurymed.; KK 395.
Trifolium arvense L.: Tscap, (W)-Paleotemp.; FA, KK 186.
 ?*Trifolium boissieri* Guss.: Tscap, E-Med.; FA.
Trifolium campestre Schreber: Tscap, Paleotemp.; FA, KK 365, 449, 502, 537, 555, 655, 723, 818, 1238.
Trifolium cherleri L.: Tscap, Eurymed.; FA, KK 181.
Trifolium dasyurum C.Presl: Tscap, Omed.; FA, KK 119, 592, 736.
 ?*Trifolium glomeratum* L.: Tscap, Eurymed.; FA.
 **Trifolium grandiflorum* Schreber: Tscap, E-Med.; KK 397.
Trifolium hirtum All.: Tscap, Eurymed.; FA, KK 63.
 **Trifolium hybridum* L.: Hcaesp, Med.-Atl.; KK 27.
 **Trifolium infamia-ponertii* Greuter: Tscap, Eurymed.; KK 213, 292.
 ?*Trifolium lappaceum* L.: Tscap, Eurymed.; FA.
 **Trifolium nigrescens* Viv.: Tscap, Eurymed.; KK 772.
 **Trifolium pignanii* Fauché & Chaub.: Tscap, Balkan; KK 421, 660.
Trifolium scabrum L.: Trept/Tscap, Eurymed.; FA, KK 503.
 **Trifolium spumosum* L.: Tscap, Stenomed.; KK 311, 845.
 **Trifolium stellatum* L.: Tscap, Eurymed.; KK 316, 417, 654.
 ?*Trifolium tenuifolium* Ten.: Tscap, NE-Med.; FA.
 **Trifolium tomentosum* L.: Trept, Paleotemp.; KK 727, 973.
 **Trifolium uniflorum* L.: Hcaesp, Stenomed.; KK 947.
Trigonella balansae Boiss. & Reut.: Tscap, E-Med.; FA, KK 650.
 **Trigonella rechingeri* Sirj.: Tscap, Endemic; KK 737.
 **Tripodion tetraphyllum* (L.) Fourr.: Tscap, Stenomed.; KK 802, 1124, 1157.
 **Vicia benghalensis* L.: Tscap/Hscap, Stenomed.; KK 265, 700.
 **Vicia hybrida* L.: Tscap, Eurymed.; KK 310, 317, 319.
 **Vicia lathyroides* L.: Tscap, Eurymed.; KK 471, 648, 769, 971.
 **Vicia lutea* L. (s.l.): Tscap, Eurymed.; KK 712.
 **Vicia lutea* L. subsp. *lutea*: Tscap, Eurymed.; KK 511, 512, 726.
 **Vicia monantha* Retz.: Tscap, Med.; KK 315, 411, 940.
Vicia sativa subsp. *cordata* (Hoppe) Asch. & Graebn.: Tcaesp, Med.; FA, KK 706, 738.
 **Vicia sativa* L. subsp. *sativa*: Tscap, Cosmop.; KK 331, 436, 780.
 ?*Vicia tenuifolia* subsp. *elegans* (Guss.) Nyman: Tscap, Europ.-Caucas.; FA.
Vicia tetrasperma (L.) Schreb.: Tscap, Paleotemp.; FA, KK 32, 207.
Vicia villosa Roth (s.l.): Tscap (Hbienn), Eurymed.; KK 293, 789.
 **Vicia villosa* subsp. *eriocarpa* (Hauskn.) P.W.Ball: Tscap, E-Med.; KK 298.
Vicia villosa subsp. *microphylla* (D'Urv.) P.W.Ball: Tscap, Endemic; FA, KK 124, 804.

Fagaceae

- **Quercus coccifera* L.: Pcaesp, Stenomed.; KK 859, 1073.
Quercus ilex L.: MPscap, Med.; FH 1, KK 176, 203, 563, 618, 696, 871.
 **Quercus pubescens* Willd.: N/MP, Submed.; KK 1137.

Gentianaceae

- **Blackstonia perfoliata* (L.) Huds. subsp. *perfoliata*: Tscap, Eurymed.; KK 48.
 **Centaurium erythraea* Rafn: Hbienn/Tscap, Paleotemp.; KK 941.
Centaurium pulchellum (Sw.) Druce: Tscap, Paleotemp.; FA, KK 269.
Centaurium tenuiflorum (Hoffmanns. & Link) Fritsch (s.l.): Tscap, Med.; FA, KK 42.
 **Centaurium tenuiflorum* subsp. *acutiflorum*: Tscap, Paleotemp.; KK 36.

Geraniaceae

- **Erodium ciconium* (L.) L'Hér.: Tscap/Hbienn, Eurymed.-Pont.; KK 426, 919, 934, 965.
 **Erodium cicutarium* (L.) L'Her.: Tcaesp/Hros, Subcosmop.; KK 482, 1244.
 **Erodium gruinum* (L.) L'Hér.: Tscap, Med. (E.)-Turan.; KK 805, 851.
 **Geranium dissectum* L.: Tscap, Subcosmop.; KK 733.
 **Geranium molle* L.: Tscap, Subcosmop.; KK 465, 501, 558.
 **Geranium robertianum* L.: T/H-scrap, Euras.; KK 104, 364, 400, 463, 557, 664, 848, 849.
Geranium rotundifolium L.: Tscap, Paleotemp.; FA, KK 291, 300, 399, 852, 899.

Globulariaceae

- **Globularia alypum* L.: Chfrut/NP, Stenomed.; KK 53, 56, 574, 889, 943, 1062.

Hypericaceae

- Hypericum empetrifolium* Willd.: Chsuffr, E-Med.; FA, KK 106, 164, 590, 591, 614, 667, 668, 860, 981, 985, 1004.
 **Hypericum perforatum* L.: Hscap, Subcosmop.; KK 201.

Iridaceae

- **Crocus cancellatus* subsp. *mazziaricus* (Herb.) Mathew: Gbulb, Omed.; KK 1046, 1047, 1215.
 **Crocus sieberi* subsp. *atticus* (Boiss. & Heldr.) Mathew: Gbulb, Endemic; KK 974, 975.
 **Gladiolus italicus* Mill.: Gbulb, Med.; KK 340, 451.
 **Gynandris sisyrrinchium* (L.) Parl.: Gbulb, Stenomed.; KK 496.
 **Hermodactylus tuberosus* (L.) Mill.: Grhiz, Stenomed.; KK 691, 1214.
 **Iris germanica* L.: Grhiz, Adv.; KK 620.
 **Romulea bulbocodium* (L.) Sebast. & Mauri: Gbulb, Stenomed.; KK 1213.
 **Romulea linairesii* subsp. *graeca* Bég.: Gbulb, E-Med.; KK 949, 972.

Juncaceae

- **Juncus acutus* L.: Hcaesp, Subcosmop.; KK 1196.
 ?*Juncus capitatus* Weig.: Tscap, Eurymed.-Atl.; FA.

Lamiaceae

- **Ballota acetabulosa* (L.) Benth.: Gbulb, E-Med.; KK 881.
 **Coridothymus capitatus* (L.) Rchb.f.: Chfrut, Stenomed.-Orient.; KK 1044.
 **Lamium amplexicaule* L.: Tscap, Paleotemp.; KK 931, 938, 964, 968.
 **Lamium moschatum* Mill.: Tscap, E-Med.; KK 259, 415.
Lavandula stoechas L. (s.l.): NP, Stenomed.; FA, KK 866.
 **Lavandula stoechas* L. subsp. *stoechas*: NP, Stenomed.; KK 258, 916.
 **Melissa officinalis* L.: Hscap, Eurymed.; KK 1133.
 ?*Nepeta argolica* Bory & Chaub. subsp. *argolica*: Hscap, Endemic; FA.
Origanum onites L.: Chfrut, E-Med.; FA, KK 78, 231, 612, 286, 1005, 1042, 1098.
Origanum vulgare subsp. *hirtum* (Link) Ietswaart: Chsuffr, E-Stenomed.; FA, KK 211.
Phlomis fruticosa L.: NP, Stenomed.; FA, KK 621.
Prasium majus L.: Chfrut/Chsuffr, Stenomed.; FA, KK 1043.
 **Salvia fruticosa* Mill.: Chfrut/NPcaesp, Omed.; KK 378.

Salvia pomifera subsp. *calycina* (Sm.) Hayek: Hcaesp, E-Med.; FA, KK 260, 678, 820, 855, 856, 984, 993, 1013.

**Salvia verbenaca* L.: Hscap, Med.-Atl.; KK 178.

**Salvia viridis* L.: Tscap, Stenomed.; KK 427.

Satureja graeca L.: Chsuffr, Med.; FA, KK 232, 1041, 1039, 1153.

Satureja juliana L.: Chsuffr, Med.; FA, KK 103, 175, 248, 979.

?*Satureja myrtifolia* (Boiss. & Hohen.) Greuter & Burdet: Chsuffr, E-Med.; FA.

**Satureja nepeta* (L.) Scheele: Hscap (Chsuffr), Med.-Mont.; KK 1037, 1038, 1045.

**Satureja nervosa* Desf.: Chsuffr, S-Med.; KK 867.

**Satureja thymbra* L.: Chfrut, Stenomed.; KK 184, 192, 284, 285.

Sideritis curvidens Stapf: Tscap, E-Med.; FA, KK 1182.

Sideritis lanata L.: Tscap, E-Med.; FA, KK 1241.

?*Stachys germanica* subsp. *cordigera* Briq.: Hscap, Eurosib.; FA.

**Stachys swainsonii* subsp. *argolica* Phitos & Damboldt: Tscap, Endemic; KK 225, 247, 257, 1192, 1193, 1194.

Teucrium divaricatum subsp. *graecum* (Čelak.) Bornm.: Chfrut, Omed.; FA, KK 230, 241, 616, 617, 1114.

Teucrium polium L.: Chsuffr, Med.; FA, KK 43.

Liliaceae

**Gagea graeca* (Kunth) A.Terracc.: Gbulb, E-Med.; KK 349, 373, 559, 748.

**Gagea peduncularis* (C.Presl) Pascher: Gbulb, E-Stenomed.; KK 1227.

Linaceae

**Linum bienne* Mill.: Hscap, Med.-Atl.; KK 1142.

**Linum strictum* L. subsp. *strictum*: Tscap, Stenomed.; KK 64, 126, 246, 266, 359, 1108.

Linum trigynum L.: Tscap, Eurymed.; FA, KK 1117.

Malvaceae

**Althaea officinalis* L.: Hscap, Subcosmop.; KK 122.

?*Lavatera bryoniifolia* Mill.: Pcaesp, E-Med.; FA.

**Lavatera cretica* L.: Tscap, Stenomed.; KK 809.

**Malva parviflora* L.: Tscap, Eurymed.; KK 6.

**Malva sylvestris* L.: Hscap, Subcosmop.; KK 390, 838, 828.

Moraceae

Ficus carica L.: Pscap, Med.-Turan.; FA, KK obs.

Oleaceae

**Olea europaea* L.: Pcaesp/Pscap, Stenomed.; KK 576.

Phillyrea latifolia L.: Pcaesp/Pscap, Stenomed.; FA, KK obs.

Onagraceae

**Epilobium obscurum* Schreb.: Hscap, Submed.-subatl.; KK 1166, 1167.

Orchidaceae

**Anacamptis morio* (L.) R.M.Bateman *et al.*: Gbulb, Europ.-Caucas.; KK 1244.

Anacamptis pyramidalis (L.) Rich.: Gbulb, Eurymed.; FA, KK 826, 827.

**Barlia robertiana* (Loisel) Greuter: Gbulb, Stenomed.; KK 1245.

**Dactylorhiza saccifera* Soó: Gbulb, Paleotemp.; KK 1160, 1120, 1195.

**Limodorum abortivum* (L.) Sw.: Grhiz, Eurymed.; KK 1207, 1208.

**Neotinea maculata* (Desf.) Stearn: Gbulb, Stenomed.; KK 1246.

**Ophrys cornuta* Stev. ex M.Bieb. (s.l.): Gbulb, Med.-Submed.; KK 132.

**Ophrys ferrum-equinum* Desf.: Gbulb, E-Med.; KK 1247.

- **Ophrys fusca* Link.: Gbulb, Stenomed.; KK 1221.
 **Ophrys oestriifera* subsp. *leptomera* (P.Delforge) Kreutz: Gbulb, Endemic; KK 906.
 **Ophrys oestriifera* subsp. *schlechteriana* (Soó) Kreutz: Gbulb, Endemic; KK 661.
 **Ophrys sicula* Tineo: Gbulb, Stenomed.; KK 1248.
 **Ophrys tenthredinifera* Willd.: Gbulb, Stenomed.; KK 812, 821, 822.
 **Orchis anatolica* Boiss.: Gbulb, E-Med.; KK 694.
 **Orchis italica* Poir.: Gbulb, Stenomed.; KK 1249.
 **Serapias bergonii* E.G.Camus: Gbulb, Stenomed.; KK 1250.
 **Serapias lingua* L.: Gbulb, Stenomed.; KK 1103, 1138, 1144.
 **Serapias vomeracea* (Burm.f.) Briq.: Gbulb, Eurymed.; KK 600.

Orobanchaceae

- **Orobanche alba* Willd.: Tpar, Submed.-Euras.; KK 622.
 **Orobanche crenata* Forssk.: Tpar, Med. (Eu.)-Turan.; KK 342, 514, 577, 743, 878.
 **Orobanche ramosa* L.: Tpar, Paleotemp.; KK 332, 343, 819.

Oxalidaceae

- **Oxalis pes-caprae* L.: Gbulb, Cosmop.; KK 1076.

Papaveraceae

- **Fumaria capreolata* L.: Tscap, Eurymed.-Atl.; KK 271, 458, 652, 925.
 ?*Fumaria gaillardotii* Boiss.: Tscap, E-Med. (Steno-); FA.
Fumaria kralikii Jord.: Tscap, E-Med.; FA, KK 466.
 ?*Fumaria macrocarpa* Parl. subsp. *macrocarpa*: Tscap, Stenomed.-Meridionali.; FH 2.
Fumaria officinalis L.: Tscap, Subcosmop.; FH 2, KK 895.
Fumaria petteri Rchb.: Tscap, E-Med.; FH 2, KK 1129, 1241.
 **Glaucium flavum* Crantz: Hscap, Med.-Atl.; KK 341.
 ?*Papaver apulum* Ten.: Tscap, NE-Med.; FH 2.
 **Papaver argemone* subsp. *nigroinctum* (Fedde) Kadereit: Tscap, E-Med.; KK 391, 1014.
Papaver rhoeas L. (s.l.): Tscap, E-Med.; FH 2, KK 392, 594, 595, 596, 609.
 **Papaver rhoeas* subsp. *strigosum* (Boenn.) Soó: Tscap, Paleotemp.; KK 442.

Plantaginaceae

- Plantago amplexicaulis* Cav.: Tros, Med.; FA, KK 236, 245, 1168.
Plantago bellardii All.: Tscap, Eurymed.; FA, KK 425, 741, 1119.
 **Plantago coronopus* L.: Tscap/Hbienn/Hros, Eurymed.; KK 1071.
 **Plantago lagopus* L.: Tscap, Eurymed.; KK 633.
 **Plantago lanceolata* L.: Hros, Cosmop.; KK 1135, 1143.

Plumbaginaceae

- ?*Limonium sieberi* (Boiss.) Kuntze: Chsuffr, E-Med.; FA.

Poaceae

- ?*Aegilops comosa* Sm.: Tscap, E-Med.; FA.
 **Aegilops lorentii* Hochst.: Tcaesp/scap, Med.; KK 169.
Aegilops triuncialis L.: Tscap, Eurymed.; FA, KK 22, 198.
 **Aira elegantissima* Schur: Tscap, Eurymed.; KK 304, 529, 534, 659.
 **Alopecurus myosuroides* Huds.: Tscap, Subcosmop.; KK 75.
 ?*Andropogon distachyos* L.: Hcaesp, Paleotrop.; FA.
Anthoxanthum odoratum L.: Hcaesp, Euras.; FA, KK 695.
 **Arundo donax* L.: Grhiz, Subcosmop.; KK 145.
 **Arundo plinii* Turra: Grhiz, Stenomed.; KK obs.
 **Avena barbata* Pott: Tscap, Eurymed.-Turan.; KK 521.

- Brachypodium distachyon* (L.) P.Beauv.: Tscap, Stenomed.-Turan.; FA, KK 510.
 **Brachypodium pinnatum* (L.) P.Beauv.: Hcaesp, Euras.; KK 74, 197.
 **Brachypodium retusum* (Pers.) P.Beauv.: Hcaesp, Stenomed.; KK 95.
 **Brachypodium sylvaticum* (Huds.) P.Beauv.: Hcaesp, Paleotemp.; KK 233.
Briza maxima L.: Tscap, Paleosubtrop.; FA, KK 10, 115, 651, 735.
Briza minor L.: Tscap, Subcosmop.; FA, KK 356, 428, 750.
 **Bromus diandrus* Roth: Tcaesp, Med.; KK 20, 699.
 **Bromus fasciculatus* C.Presl: Tscap, E-Med.; KK 136.
Bromus intermedius Guss.: Tscap, Eurymed.; FA, KK 209.
 ?*Bromus japonicus* Thunb. subsp. *japonicus*: Tscap, Europ.-Caucas.; FA.
 **Bromus madritensis* L.: Tscap, Eurymed.; KK 100, 607.
 **Bromus rigidus* Roth: Tscap, Paleosubtrop.; KK 24, 645, 767.
 **Bromus tectorum* L.: Tscap, Paleotemp.; KK 14, 19, 168, 267.
 **Cynodon dactylon* L.: Grhiz, Cosmop.; KK 766, 1029.
Cynosurus echinatus L.: Tscap, Eurymed.; FA, KK 163, 658, 683.
 **Cynosurus elegans* Desf.: Tscap, Eurymed.; KK 21.
 **Dactylis glomerata* L.: Hcaesp, Paleotemp.; KK 12, 277, 509, 875.
 **Elymus farctus* (Viv.) Runemark ex Melderis: Grhiz, Med.; KK 15, 149.
 ?*Elytrigia scirpea* (C.Presl) Holub: Hcaesp, Eurymed.; FA.
Gastridium ventricosum (Gouan) Schinz & Thell.: Tcaesp/scap, Med.; FA, KK 167, 762.
Hainardia cylindrica (Willd.) Greuter: Tscap, Eurymed.; FA, KK 160.
 ?*Hordeum bulbosum* L.: Hcaesp, Paleosubtrop.; FA.
 **Hordeum marinum* Hudson: Tscap, Med.-Turan.; KK 11.
 ?*Hordeum murinum* subsp. *leporinum* (Link) Arcang.: Tscap, Eurymed.; FA.
Hyparrhenia hirta (L.) Stapf: Hcaesp, Paleotrop.; FA, KK 66, 68, 108, 134, 135, 137, 1030a.
 **Lagurus ovatus* L.: Tscap, Eurymed.; KK 67, 488, 506, 1087.
Lolium rigidum Gaudin: Tscap, Paleosubtrop.; FA, KK 252.
 ?*Lolium temulentum* L.: Tscap, Subcosmop.; FA.
Parapholis incurva (L.) C.E.Hubb.: Tscap, Med. (St.)-Atl.; FA, KK 37.
 **Phalaris aquatica* L.: Hcaesp, Eurymed.; KK 1092, 1093.
 **Phleum phleoides* (L.) Karsten: Hcaesp, Eurosib.; KK 13.
 **Phragmites australis* (Cav.) Trin.: Grhiz, Subcosmop.; KK obs.
 **Piptatherum coerulescens* (Desf.) P.Beauv.: Hcaesp, Stenomed.; KK 18, 994.
 **Piptatherum miliaceum* (L.) Cosson: Hcaesp, Med.-Turan.; KK 156, 1030b, 1197.
 ?*Poa pratensis* L.: Hcaesp, Circumbor.; FA.
 **Poa timoleonis* Heldr. ex Boiss.: Hcaesp, E-Med.; KK 505, 554, 768.
 ?*Polypogon maritimus* Willd.: Tscap, Stenomed.-Macarones.; FA.
Polypogon monspeliensis (L.) Desf.: Tscap, Paleosubtrop.; FA, KK 351.
 ?*Psilurus incurvus* (Gouan) Schinz & Thell.: Tscap, Eurymed.; FA.
 **Sporobolus pungens* (Schreb.) Kunth: Grhiz, Subtrop.; KK 1198.
 ?*Stipa bromoides* (L.) Doerfler: Hcaesp, Stenomed.; FA.
 **Vulpia ciliata* Danth.: Tcaesp, Eurymed.; KK 535, 556.
 **Vulpia fasciculata* (Forssk.) Fritsch: Tcaesp, Med.-Atl.; KK 16, 77.

Polygonaceae

- ?*Polygonum arenarium* Waldst. & Kit.: Trept, Med.; FA.
Rumex bucephalophorus L.: Tscap/caesp, Eurymed.-Atl.; FH 1, KK 117, 542, 937, 1224.
Rumex pulcher L. (s.l.): Hscap, Eurymed.; FH 1, KK 190.
Rumex pulcher L. subsp. *pulcher*: Hscap(-Tscap), Eurymed.; FH 1, KK 719.
 ?*Rumex sanguineus* L.: Hscap, Europ.-Caucas.; FA.

Posidoniaceae

**Posidonia oceanica* (L.) Delile: Irad, Stenomed.; KK obs.

Primulaceae

**Anagallis arvensis* L.: Trept, Subcosmop.; KK 412.

**Asterolinon linum-stellatum* (L.) Duby: Tscap, Eurymed.; KK 301, 504.

Cyclamen graecum Link: Gbulb, E-Stenomed.; FA, KK 674, 778, 987, 1057, 1056, 1244a.

**Cyclamen hederifolium* Aiton: Gbulb, Med.; KK 776, 1061, 1244b.

?*Cyclamen peloponnesiacum* (Grey-Wilson) Kit Tan subsp. *peloponnesiacum*: Gbulb, Endemic; EPGP.

**Samolus valerandi* L.: Hscap, Subcosmop.; KK 782.

Rafflesiaceae

**Cytinus hypocistis* subsp. *clusii* Nyman: Grad, W-Stenomed.; KK 1243.

Ranunculaceae

Anemone coronaria L.: Gbulb, Stenomed.; FH 2, KK 888.

Anemone pavonina Lam.: Gbulb, Eurymed.; FH 2, KK 715, 904.

Clematis cirrhosa L.: Plian, Stenomed.; FH 2, KK 94, 547, 182, 990.

**Clematis flammula* L.: Plian, Med.-Orient.; KK 980.

?*Delphinium peregrinum* L.: Tscap, E-Med.; FH 2.

Nigella damascena L.: Tscap, Eurymed.; FH 2, KK 72, 608.

?*Ranunculus arvensis* L.: Tscap, Paleotemp.; FH 2.

**Ranunculus bulbosus* subsp. *aleae* (Willk.) Rouy & Fouc.: Hscap, E-Med.; KK 281, 1145.

**Ranunculus chius* DC.: Tscap, E-Med.; KK 716.

**Ranunculus millefoliatus* Vahl: Tscap, Eurymed.; KK 218.

?*Ranunculus muricatus* L.: Tscap, Eurymed.; FH 2.

**Ranunculus paludosus* Poir.: Hscap, Stenomed.; KK 791, 693, 698.

**Ranunculus psilostachys* Griseb.: Hscap, Balkan; KK 775.

?*Ranunculus sprunerianus* Boiss.: Hscap, E-Med.; FH 2.

Resedaceae

Reseda alba L.: Tscap, Stenomed.; FH 2, KK 386, 920, 1223.

**Reseda lutea* L.: Hscap, Paleotemp.; KK 46.

Rosaceae

?*Aphanes arvensis* L.: Tscap, Subcosmop.; FA.

**Crataegus monogyna* Jacq.: Pcaesp, Paleotemp.; KK 353.

**Prunus dulcis* (Mill.) D.A. Webb: Pscap, Cult.; KK 704.

**Pyrus spinosa* Forssk.: Pcaesp, Stenomed.; KK 1211.

**Rosa gallica* L.: NP, Centroeuro-pont.; KK 33.

Rubus canescens DC.: NP, N-Med.; FA, KK obs.

**Rubus sanctus* Schreb.: NPfrut, Submed.-med.; KK 217, 305.

**Sanguisorba minor* (L.) Scop. (s.l.): Hscap, Paleotemp.; KK 166.

**Sanguisorba minor* (L.) Scop. subsp. *minor*: Hscand, Submed.-subatl.; KK 26, 831.

Sanguisorba verrucosa (G. Don) Ces.: Hscand, Med.; FA, KK 647.

**Sarcopoterium spinosum* (L.) Spach: NP, E-Med.; KK obs.

Rubiaceae

**Crucianella graeca* Boiss. & Spruner: Tscap, Balkan; KK 83, 84.

Crucianella latifolia L.: Tscap, Stenomed.; FA, KK 250, 1171.

**Galium aparine* L.: Tscap, Euras.; KK 101, 461, 541, 606, 626, 662.

?*Galium capitatum* Bory & Chaub.: Tscap, Endemic; FA.

- Galium divaricatum* Pourr. ex Lam.: Tscap, Stenomed.; FA, KK 792.
 **Galium heldreichii* Halácsy: Hscap, Med.; KK 161, 185.
Galium murale (L.) All.: Tscap, Stenomed.; FA, KK 740b, 765.
 **Galium peloponnesiacum* Ehrend. & Krendl: Hscap, Endemic; KK 1206.
 ?*Galium verrucosum* Huds.: Tscap, Stenomed.; FA.
 ?*Galium setaceum* Lam.: Tscap, Stenomed.-Orient.; FA.
 **Rubia peregrina* L.: Plian, Stenomed.-Macarones.; KK 49, 50.
 **Rubia tinctorum* L.: Hscand, Adv.; KK 210.
 **Sherardia arvensis* L.: Tscap, Subcosmop.; KK 25, 409, 632, 714.
Valantia hispida L.: Tscap, Stenomed.; FA, KK 533, 1172, 1216.

Salicaceae

- **Salix fragilis* L.: Pscap, Paleotemp.; KK 527.

Santalaceae

- ?*Thesium bergeri* Zucc.: Hscap, E-Med.; FH 1.

Saxifragaceae

- **Saxifraga tridactylites* L.: Trept, Med.; KK 1214.

Scrophulariaceae

- **Bellardia trixago* (L.) All.: Tscap, Eurymed.; KK 571, 803, 1109.
Cymbalaria longipes (Boiss. & Heldr.) A.Chev.: Chrept, E-Med.; FA, KK 152.
 **Cymbalaria microcalyx* (Boiss.) Wettst.: Hscap, E-Med.; KK 1235.
Kickxia commutata (Bernh. ex Reichenb.) Fritsch: Hrept, Stenomed.; FA, KK 1079.
 ?*Kickxia elatine* subsp. *crinita* (Mabille) W.Greuter: Tscap, Eurymed.; FA.
Linaria pelisseriana (L.) Mill.: Tscap, Med.-Atl.; FA, KK 747, 781.
 **Misopates orontium* (L.) Raf.: Tscap, Paleotemp.; KK 113, 140, 188, 229, 297, 385, 603, 847.
 **Parentucellia latifolia* (L.) Caruel: Tscap, Eurymed.; KK 485, 703.
 **Scrophularia canina* subsp. *bicolor* (Sm.) Greuter: Hscap, Eurymed.; KK 121.
Scrophularia heterophylla Willd. var. *heterophylla*: Hscap, Endemic; FA, KK 272.
 ?*Scrophularia lucida* L.: Hbienn (Chsuffr), Med.-Mont.; FA.
 ?*Scrophularia peregrina* L.: Tscap, Stenomed.; FA.
 **Verbascum epixanthinum* Boiss. & Heldr.: Hscap, Endemic; KK 1080.
 ?*Verbascum macrurum* Ten.: Hbienn, Med.-Mont.; FA.
 ?*Verbascum phlomoides* L.: Hbienn, Eurymed.; FA.
 **Verbascum sinuatum* L.: Hbienn, Eurymed.; KK 40.
 ?*Verbascum undulatum* Lam.: Hscap, Balkan; FA.
 **Veronica arvensis* L.: Tscap, Subcosmop.; KK 918.
Veronica cymbalaria Bodard: Tscap, Eurymed.; FA, KK 464, 628, 665, 966, 926.
 **Veronica triphyllos* L.: Tscap, Europ.-W-Asiat.; KK 1131.

Smilacaceae

- **Smilax aspera* L.: NPsuffr, Paleosubtrop.; KK 295.

Solanaceae

- **Datura stramonium* L.: Tscap, America-tropic.; KK obs.
Solanum nigrum L. subsp. *nigrum*: Tscap, Cosmop.; FA, KK 1077.

Typhaceae

- **Typha latifolia* L.: Grhiz, Cosmop.; KK obs.

Ulmaceae

- ?*Ulmus minor* Mill. subsp. *minor*: Pscap, Eurymed.-Turan.; FA.

Urticaceae

Parietaria cretica L.: Trept/Hscap, Stenomed.-Orient.; FH 1, KK 128.

?*Parietaria lusitanica* L.: Trept, Stenomed.; FA.

Valerianaceae

**Centranthus calcitrapae* (L.) Dufr.: Tscap, Stenomed.; KK 368, 530, 545, 546, 1213, 1174.

**Centranthus ruber* subsp. *sibthorpii* Hayek: Chsuffr, Eurymed.; KK 917.

**Valerianella coronata* (L.) DC.: Tscap, Eurymed.; KK 474.

Verbenaceae

**Vitex agnus-castus* L.: Pcaesp, Stenomed.-Turan.; KK 1058.

Xanthorrhoeaceae

**Asphodelus aestivus* Brot.: Grhiz, Stenomed.; KK 785.

Zygophyllaceae

**Tribulus terrestris* L.: Trept, Cosmop.; KK 1078.