Floristic diversity on small islands and islets: Leros islets' group (East Aegean area, Greece)

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Abstract. The floristic analysis of Leros islet groups (18 small islands and islets) of the East Aegean area gave interesting results concerning floristic diversity. The floristic comparisons between the islets showed that there was no one taxa common to all of them while there were 232 out of the 519 recorded in total, not present on more than one islet. The species-area and species-elevation relations are significant in the area. The floristic richness of the studied area has been demonstrated by a comparison between the main island and other neighboring islands, as well as between the islets studied. The similarity coefficient values were low to medium for the islands while a hierarchical cluster analyses showed high floristic dissimilarity which means also high floristic independence. A comparative study of these islets of the East Aegean area's islets group showed significant floristic differences from islet to islet.

Key words: Aegean Islands, flora, diversity, islets, Leros

Introduction

A floristic inventory of the island of Leros was always a goal for the authors precisely because this island has been used as one of the main base stations for the organization of the field trips needed for the floristic exploration of the remote and isolated East Aegean islets (Panitsa 1997; Panitsa & Tzanoudakis 1991, 1993, 1997, 1998, 2001; Panitsa & al. 1994). Keeping in mind the diversity and the peculiarities of the Aegean flora (Runemark 1969, 1971; Greuter 1979) the goal of the present study is not restricted to the inventory of the plant species found on the island of Leros and the 17th offshore islets but also to contribute to the knowledge and understanding of the floristic diversity and dynamics in the Aegean area. Concequently the floristic data available from the neighboring islands of Patmos, Leipsoi (or Lipsos) and Kalymnos are also taken into consideration. These data are analyzed in different ways and floristic comparisons have been made not only between the individual floras of the islets studied but also, in case that data are available, between the floristic composition of the same islet at different periods of time (Panitsa & al. 2006, 2008).

The area investigated consists of 18 small island and islets of the Eastern Aegean area and belong to the Greek prefecture of Dodekanisos (Fig. 1). The total land surface of the area investigated is *ca*. 5551 ha. The main island of Leros has a surface of 5.300 ha and maximum altitude of 321m and is the only inhabited one of the island group. The islets studied vary concerning their size, elevation and distance from the main island and the related geographical information is summarised in Table 1. In this part of the East Aegean area, the sea depth does not exceed 100m and consequently the formation and the isolation of the islets studied from each other and the Anatolia continent must be quite recent (Parmakelis & al. 2006; Pou-

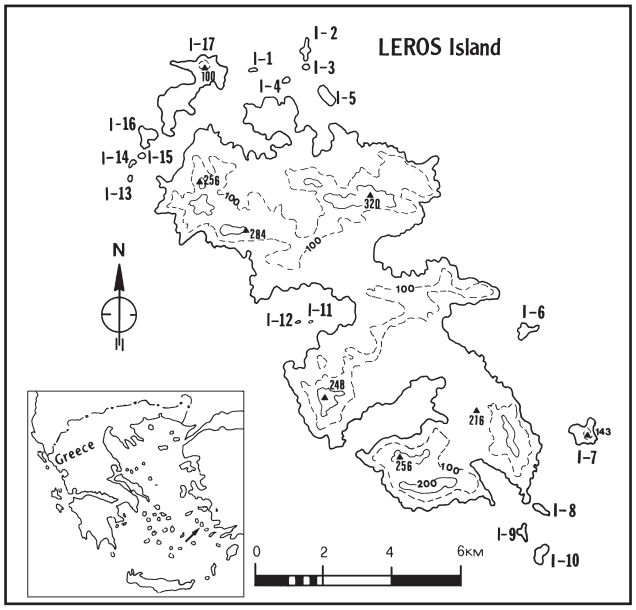

Fig. 1. Map of the study area with Leros main island and 17 surrounding islets. (Abbreviations as in Table 1).

Table 1. Geographical data and number of plant taxa found on Leros islets' complex: A – Area (ha); E – Elevation (m); Ds – Minimum distance from Leros (km); S – Number of plant taxa.

Islands and islets	Longitude	Latitude	A	E	Ds	S
Leros (L)			5300	321		440
Patelidi (I-1)	26°47'30"	37°12'40"	2.5	5	0.7	14
Megali Tripiti (I-2)	26°48'55"	37°12'55"	7.2	30	1	78
Mikri Tripiti (I-3)	26°48'55"	37°12'50"	2	15	0.8	48
Plakousa (I-4)	26°49'00"	37°12'10"	5	10	0.6	26
Stroggili (I-5)	26°48'45"	37°12'50"	15	76	0.5	42
Agia Kiriaki (I-6)	26°52'45"	37°09'50"	15	76	1.3	82
Peganousa (I-7)	26°54'00"	37°07'50"	35	139	0.7	132
Belona (I-8)	26°53'20"	37°05'50"	7	15	0.3	91
Graronisi N (I-9)	26°52'55"	37°05'30"	3	15	0.7	85
Glaronisi S (I-10)	26°53'00"	37°05'10"	9	28	1.3	73
Gourna E (I-11)	26°48'10"	37°09'50"	0.8	10	0.5	35
Gourna W (I-12)	26°48'15"	37°09'50"	0.6	8	0.5	9
Faradonisi SW (I-13)	26°45'40"	37°11'50"	2	10	0.9	25
Faradonisi NW (I-14)	26°45'50"	37°11'55"	4	10	1.3	41
Faradonisi Mikro (I-15)	26°45'40"	37°11'55"	2.5	5	0.7	31
Faradonisi Megalo (I-16)	26°45'45"	37°11'53"	16	55	0.8	88
Archaggelos (I-17)	26°46'38"	37°12'11"	124	90	0.4	62

lakakis & al. 2008). According to the meteorological data of the Leros station available the area investigated belong to the subhumid bioclimatological stage with mild winters. More information regarding the geology and the climate of the area studied is given by Panitsa & Tzanoudakis (Panitsa & Tzanoudakis 1991, 1993, 1997). In spite of the fact that in the area studied, all the islets (except the main island of Leros) remain uninhabited; human interference is not uncommon in both uninhabited and inhabited ones. Overgrazing and fires are among the most common and traditional impacts but on the main island, building tourist facilities, road constructions, water overgrowing etc. are also not uncommon.

In order to continue our studies about the East Aegean flora, this paper aims to a) provide a reasonably complete account of the flora of Leros islets' group, b) examine the similarities/ dissimilarities among the islets floras and with the main island's flora and c) try to find the geographical parameters through which the registered floristic diversity could be explained.

Materials & Methods

The floristic data given in the present paper are based mainly on the authors' plant collections and field observations during their several visits to the island of Leros and the neighboring islets. Names, code numbers and other geographical informations for the island/islets studied are given in Figure 1 and Table 1. For the preparation of the plant list of the area studied, however, 100 species mentioned in *Flora Aegaea* (Rechinger 1943), 87 in *Flora of Turkey and the East Aegean islands* (Davis 1965–1985) and 57 in the *Flora Hellenica* (Strid & Tan 1997, 2002), are also considered. In the final plant list, names of taxa were converted to the nomenclature of Strid & Tan (1997, 2002) whenever possible, Turland & al. (1993) and Davis & al. (1965–1985).

A number of islets (I-2, I-3, I-6, I-8, I-9, I-11-I-14) have been floristically investigated by Runemark and Bothmer in 1974 and the material collected (deposited in Lund) as well as their field notes have been taken into consideration.

For the floristic comparisons between the main island of Leros and its neighbouring islands of Patmos, Leipsoi (or Lipsos) and Kalymnos, as well as between the islets studied, tables presenting floristic similarities have been prepared using Sorensen's similarity coefficient [$Cs=2j/(a+b)$, where j = the number of plant taxa found on both of the two islets compared, a = the total plant taxa number found on islet 1 and b = the total plant taxa number found on islet 2].

For each islet the following geographical data were considered: area (km^2, A), elevation (m, E) and distance from the nearest island (km, D_S). Island area, el-

evation, and distance from the main island were determined by topographic maps of the Hellenic Military Geographical Service. Distance from the main island is the shortest distance from Leros island.

In order to test the species-area and the species-elevation relations of our data, we applied one of the more common linear model (log S / log A and log S / log E) according to the behaviour of residuals and the total variance explained (R^2). In order to find the floristic relations between the islets studied, a hierarchical cluster analyses with the presence-absence matrix of the floristic data was performed using the UPGMA linkage method and the Sorensen (Bray-Curtis) distance measure (PC-Ord program). Sorensen's similarity coefficient was also used for floristic comparisons among the main island of Leros and other neighboring islands.

Results

The flora of the studied islets group has been approached in two different ways. The first one concerns the individual floras of the main island (Leros) and the islets (see Annex I) and the second one the differences in the floristic composition, between the islets.

Out of the whole Leros islets group 519 taxa have been registered. According to our data, the flora of the main island of Leros consists of 440 taxa which belong to 79 families and 284 genera. *Leguminosae*, *Compositae*, *Gramineae*, *Labiatae* and *Umbelliferae* with 71, 61, 39, 24 and 15 taxa, respectively, are the five richer in taxa families and consist the 50 % of Leros' flora.

Based on the results of the biological analysis, the therophytes predominate in the biological spectrum of the main island with 50.5 %, the hemicryptophytes follow with 18.1 %, the geophytes with 12.2 % and the phanerophytes and the chamaephytes with 9.6 %. As concerns the chorological analysis of our data, the Mediterranean element represents the 72.4 % of chorological spectrum of the main island. Among the East Mediterranean taxa (24.2 %) there are some which have a rather restricted distribution in the Anatolian-Aegean area and these are: *Campanula lyrata* subsp. *lyrata*, *Filago cretensis* subsp. *cretensis*, *Quercus aucheri*, *Verbascum mucronatum*, *Galium brevifolium* subsp. *insulare*, *Centaurea aciculari*, *Scorzonera elata*, *Muscari macrocarpum*, *Stachys cretica* subsp. *smyrnaea*, *Nigella arvensis* subsp. *glauca*, *Galium graecum* subsp. *graecum*, *Daphne gnidioides*, *Tordylium hirtocarpum*, *Colchicum balansae*. Among the endemic taxa of the main island there are Greek-Aegean endemic taxa such as *Anchusella variegata*, *Centaurea raphanina* subsp. *mixta*. and *Crocus tournefortii*. The Aegean endemic taxa included in the flora of Leros are *Corynephorus articulatus* and *Bryonia cretica* subsp. *cretica*.

The comparison of the floras of the neighboring inhabited islands of Leros, Patmos (Møller 1994) (379 taxa), Leipsoi (Panitsa 1997; Panitsa & Tzanoudakis 1997) (470 taxa) and Kalymnos (Hansen 1980; Zervou & al. 2009) (741 taxa) gives interesting results. Based on the present study and the available literature on all four islands 949 taxa have been registered and only 153 (16.1 %) are found on all of them, 191 on three, 205 on two and 400 on only one of them. 52 taxa are found only on Leros, 44 only on Patmos, 247 only on Kalymnos and 57 on Leipsoi. Of the 949 taxa in total, the 36.6 % belong to the three richer families of *Gramineae*, *Compositae* and *Leguminosae*. Among the 153 taxa found on all the 4 islands the 45.1 % belong to these 3 families, while among the taxa found on three, two or one of these islands the corresponding percentage is 41.9, 34.6 and 33.0, respectively. Regarding taxa registered on only one of the islands studied, the representation of these three richer families is 34.6 % for Leros, 38.6 % for Patmos, 32.4 % for Kalymnos and 28.1 % for Leipsoi. Table 2 gives the numbers of common taxa between these 4 islands and underlines their floristic dissimilarity by the rather low values of Jaccard's coefficient. The islands of Leros, Kalymnos and Leipsoi have 106 taxa in common, while Leros, Patmos and Kalimnos have 23 taxa and Leros, Patmos and Leipsoi have 12 taxa in common. In addition 15 taxa are found only on Leros and Patmos, 51 on Leros and Kalymnos and 21 on Leros and Leipsoi.

Table 2. Floristic correlations of Leros and its neighbouring islands (number of taxa on each island on the diagonal, number of common taxa among the islands below the diagonal and value of Sorensen's coefficient above the diagonal). A – area; E – elevation.

	Leros	Patmos	Leipsoi	Kalimnos
Leros A = 5300 ha, E = 321 m	**440**	0.5	0.64	0.56
Patmos A = 3400 ha, E = 270 m	203	**379**	0.53	0.49
Leipsoi A = 1593 ha, E = 277 m	292	222	**470**	0.61
Kalimnos A = 7000 ha, E = 679 m	333	277	369	**741**

The study of the floristic diversity and the floristic comparisons between the islets surrounding the main island of Leros, has given interesting results as is analyzed below. The total number of plant taxa registered on the 17 studied islets is 271 among which 78 not found on the main island. The islets flora consists of 193 dicotylous taxa, 73 monocotylous, 1 gymnosperm and 4 pteridophytes which belong to 59 families and 182 genera. The five richer in taxa families of *Compositae*, *Gramineae*, *Leguminosae*, *Labiatae* and *Umbelliferae* consist the 41.7 % of the islets' flora with 43, 25, 21, 11 and 11 taxa, respectively.

Another interesting point of the floristic analysis of these islets is that none of the 271 taxa comprising the flora of the 17 studied islets was found on all, 17, of them while 41 were not present on more than one islet (and not on the main island). Among the most common plant taxa are: *Silene sedoides* and *Lotus cytisoides* (on 15 islets), *Sedum litoreum*, *Parietaria cretica* and *Convolvulus oleifolius* (on 13 islets), *Mercurialis annua* and *Pistacia lentiscus* (on 12 islets). Plant species that prefer islet biotopes, known as «islet specialist plant taxa », often have a low frequency of presence since they prefer isolated islets unaffected by human activities although some of them may also be found on larger islands or in continental areas, on isolated cliffs. Such species are *Convolvulus oleifolius* (on 13 islets), *Allium commutatum* (on 9 of the islets), *Anthemis scopulorum* and *Helichrysum orientale* (on 4 of the islets), *Lavatera arborea* (on 3 islets), *Silene holzmannii* and *Scorzonera cretica* (on 1 islet). It is worthnoting that many of these species do not occur on the larger islands of the study area.

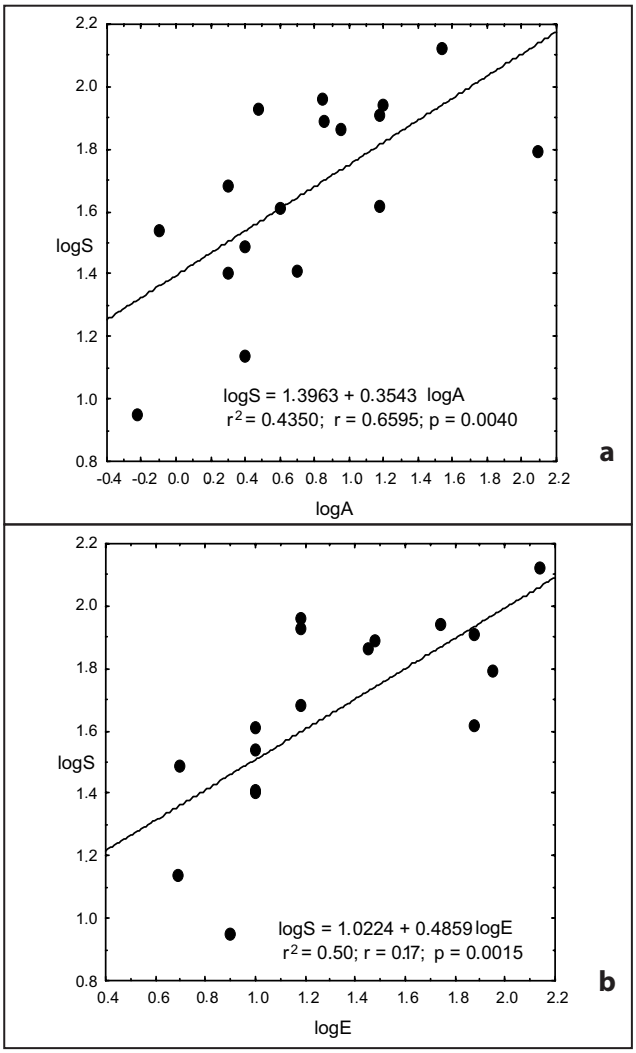

Fig. 2. **a**, species (S) – area (A); **b,** species – elevation (E) relationship of the islets studied (main island excluded).

Additionally, we tried to find the species-area and the species-elevation relations as well as the florisitic relations between the islets studied. Figure 2 presents the logarithmic relations of number of taxa with surface and elevation at the islets studied. The independent parameter of the area can explain the 43.5 % of the variance observed while 50 % of the variance can be explained by elevation. The distances between the islets and the main island doesn't seem to have significant relation to the number of taxa found on them ($R=0.14$, $R^2=0.02$, $P>0.05$). Figure 3 shows the floristic independence of the islets studied since their similarity in plant species composition is low (Hierarchical Cluster Analysis, Distance measure: Sorensen (Bray-Curtis), Linkage method: UPGMA).

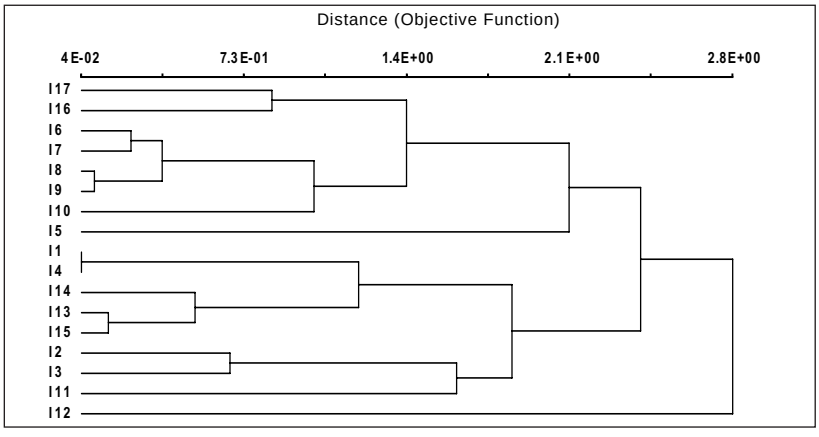

Fig. 3. Hierarchical Cluster Analysis showing floristic relations between Leros islets (main island excluded). Linkage method: UPGMA, Distance measure: Sorensen (Bray-Curtis); Percent chaining = 21.95 (Abbreviations as in Table 1).

Discussion

From the analysis of the floristic data of Leros' islets group different levels of diversity can be distinguished focusing on species or on islands and islets. The number of species per surface unit is an important parameter (9.31 species/km^2), because it gives an idea of the role these small islands have in the conservation of the diversity of the Aegean area when a comparison is made with ca. 0.4 species/km^2 for the whole East Aegean area and with *ca.* 0.54 species/km^2 for the Cyclades (Phitos & al. 1995).

The good response of species richness to area and elevation comes to ensure the significant role of the islets in biodiversity. The fact that none of the 519 taxa comprising the flora of the 18 small island and islets studied occur in all of them while 233 out of 519 taxa were not present on more than one islet should be underlined. One of them is the Aegean endemic taxon, *Silene holzmannii* (found only on one of the islets) which is among the taxa of priority for protection of the Annex I of the Directive 92/43/EEC and a vulnerable taxon (V) according the lists of IUCN. This taxon is also among the taxa that prefer islet biotopes and play an important role in the formation of their vegetation. Such species are *Allium commutatum*, *Anthemis scopulorum*, *Convolvulus oleifolius*, *Lavatera arborea*, *Silene holzmannii*, *Helichrysum orientale* and *Scorzonera cretica.* Even these plant taxa that seem to be well adapted to such small islet ecosystems ('islet specialists') show an uneven distribution in the area studied. Similar observations concerning small island phenomena have been reported by Runemark (1969), Snogerup (1985), Snogerup & Snogerup (1987, 2004), Carlström (1987), Höner & Greuter (1988), Höner (1991) and Panitsa & Tzanoudakis (1997).

Significant differences from islet to islet were also revealed by the comparisons of the individual floras of the islets using Sorensen (Bray-Curtis) distance measure. The comparison between islets of the same group has given a very low value for the similarity coefficient; this indicates the floristic independence of each one of them.

According to size and also, the impact of human influence, it is obvious that islets with a very small size (I-1, I-3, I-4, I-9, I-11-I-14) have a significant floristic independence. The floristic composition differs from islet to islet and is based on random factors as well as on micro-ecological differences. The presence on one or two of the islets, of taxa which are "oriental" predominantly adapted to steppe environments, like *Armeria cariensis* and *Goniolimon collinum*, is remarkable and it is also among others, an example of uneven random distribution. Magyari & al. (2008) suggested that oriental species (with Pontic distributions and distributed principally in Asia Minor) had opportunities for west ward range expansions due to the wide extension of steppe types of vegetation throughout the lowlands around the Meditteranean basin during late Quartenary glacial stages, the relatively continental climate of these stages in this region and the reduction in sea level by *ca.* 120 m during glacial maxima.

Islets relatively medium-sized (I-2, I-5-I-8, I-10, I-16), with a well-established phrygana vegetation, that are grazed and sometimes burnt; present a low to moderate floristic similarity. Factors influencing the results of such comparisons are the different stages in vegetation evolution after fire and grazing intensity which also differs from one to another; this depends on the distance between the islet and the larger inhabited one or its relief, etc. The floristic comparison of islands which are larger, have more similar, constant and balanced floras as also demonstrated by the Sorensen's coefficient values (0.50–0.64). Human activities such as agriculture, grazing, fires, road construction and development, etc., exist on these islands, forcing changes in their floristic composition and vegetation. These changes concern the introduction of therophytes with widespread distribution and the increase of the percentage of Leguminous taxa.

Panitsa & al. (2008) suggest that the East Aegean islet communities have suffered a 10 % loss of plant species during 20 years. The fact that the vast majority of immigrant and extinct species occurred on one islet only, combined with the generally low values of all species occurrences, indicate the dynamic character of the flora of the East Aegean islets. Contributing factors, which have played an important role to the quantitative and qualitative fluctuation of the floristic composition of each one of these islets, as well as to the diversity observed from islet to islet, random factors, human interference and micro-ecological differences, can be mentioned.

In small plant communities as those of the islets, a large number of taxa have small populations and consequently a large number of taxa of the islets flora risks becoming extinct. As a consequence of the great importance of the reproductive drift, the competitive

ability of taxa in a small plant community plays a dependent role. The possibility of an introduced taxon's establishment is much higher in a small plant community than in a higher. This advantage is balanced in reality, by the much smaller surface which is occupied by the small plant community (Runemark 1969).

What has to be mentioned is the importance of the similarity of competitors which as much similar they are to demands (place, habitat etc.), as smaller is the zone of their geographical interaction or the habitats they prefer and their coexistence becomes vulnerable. Human interference (temporary grazing, fires, etc.) influences the islets balance and give the ability to new taxa to be established to biotopes which were used by others.

Experiments of introducing new taxa, with seeds or/and bulbs, have been done by Honer through 1991 and Honer & Greuter – 1988 to the islets around Karpathos, with characteristic examples, the ones of *Allium commutatum*, *Anthemis scopulorum*, *Convolvulus oleifolius* subsp. *scopulorum*, *Silene holzmannii*, etc. If seeds of a plant taxon are introduced for some periods in significant quantities, a successful establishment can happen. Characteristic examples of introduction and establishment of plant taxa are these of *Pistacia lentiscus* (found on Leros main island and on 12 of the islets studied) and *Olea europaea* subsp. *oleaster* (on Leros main island and on 9 of the islets studied), seeds of which are introduced to islets with sea birds. Vidal & al. (1998) have also remarked that more than half of the current plant species on Jarron Island were not present 35 years ago on this island. This proportion is generally higher on small than on large islands.

A successful colonization can happen when the situation of the vegetation in an area is at least partly disturbed. On islets, intense storms or cover of the land by the waves, give the chance of immigration to seeds of plant taxa which are transferred by the sea (*Silene holzmannii*, *Atriplex recurva* and *A. halimus*), or by sea birds.

The effect of island size on the functional patterns (notably the dispersal) and on the diversity of the newly established plant has been illustrated by Vidal & al. (1998), which have also noticed that «as a matter of fact, below a certain threshold-area, islets are subject to an important variability of their environmental conditions, which is able to destroy their phytocenosis. The original dynamics and ecological structure, referred to as «small islands effect» described by Mac Arthur & Wilson (1967) concern the effect of island size on the functional patterns (notably the dispersal) and on the diversity of the newly established plant species.

It should be noted that islets are very fragile (vulnerable) ecosystems on which intense environmental fluctuations (storms, wave-action) or human interference even of a low intensity can affect the flora and vegetation very greatly. The small species populations are consequently threatened and risk being eliminated.

Annex I

Floristic list (Abbreviations as in Table 1)

Pteridophytes

Adianthaceae
Adiantum capillus-veneris L. – L

Aspleniaceae
Ceterach officinarum Willd. subsp. *officinarum* – L, I-16

Polypodiaceae
Polypodium cambricum L. subsp. *australe* (Fée) Greuter & Burdet – L, I-16, I-17

Selaginellaceae
Selaginella denticulata (L.) Spring – L

Sinopteridaceae
Cheilanthes pteridioides (Reichard) C. Chr. – I-16
Ch. vellea (Aiton) Tod. – I-16
Anogramma leptophylla (L.) Link – L
Cosentinia vellea (Aiton) Tod. – L

Spermatophyta-Gymnospermae

Cupressaceae
Cupressus sempervirens L. – L
Juniperus phoenicea L. – L

Pinaceae
Pinus halepensis Mill. subsp. *brutia* (Ten.) Holmboe – L

Ephedraceae
Ephedra foeminea Forssk. – L, I-10

Spermatophyta-Angiospermae-Dicotyledonae

Aizoaceae

Mesembryanthemum nodiflorum L. – L, I-13, I-14

Anacardiaceae

Pistacia lentiscus L. – L, I-1, I-2, I-4, I-5, I-7, I-8, I-9, I-10, I-14, I-16, I-17

Apocynaceae

Nerium oleander L. subsp. *oleander* – L

Aristolochiaceae

Aristolochia hirta L. – L
A. parvifolia Sm. – L, I-6

Boraginaceae

Anchusella variegata (L.) Bigazzi, Nardi & Selvi – L
Cynoglossum columnae Ten. – I-7
C. creticum Mill. – L
Echium parviflorum Moench – I-10, I-17
Heliotropium europaeum L. – L
H. supinum L. – L
Myosotis ramosissima Rochel. – I-2
Neatostema apulum (L.) I.M. Johnst. – L, I-2, I-4, I-8, I-9, I-16, I-17
Onosma graeca Boiss. – I-10

Campanulaceae

Campanula erinus L. – L, I-4, I-7, I-10, I-17
C. lyrata Lam. subsp. *lyrata* – L, I-7
Legousia pentagonia (L.) Druce – L

Capparaceae

Capparis spinosa L. subsp. *rupestris* (Sm.) Nyman – L, I-1, I-2, I-3, I-5, I-6, I-7, I-8, I-9, I-11, I-14

Caprifoliaceae

Lonicera etrusca Santi – L

Caryophyllaceae

Cerastium glomeratum Thuill. – L
Holosteum umbellatum L. subsp. *umbellatum* – L
Minuartia hybrida (Vill.) Sschischk. – L
Paronychia macrosepala Boiss. – L
Petrorhagia dubia (Raf.) G. Lopez & Romo – L
Polycarpon tetraphyllum (L.) L. – L
Silene behen L. – L
S. colorata Poir. subsp. *colorata* – L, I-6, I-7
S. gallica L. – L, I-6
S. holzmanni Heldr. – I-3
S. nocturna L. – L
S. sedoides Poir. subsp. *sedoides* – L, I-1, I-2, I-3, I-4, I-5, I-6, I-7, I-8, I-9, I-10, I-13, I-14, I-15, I-17
S. vulgaris (Moench) Garcke subsp. *macrocarpa* Turrill – L
Spergularia salina J. Presl & C. Presl – L, I-12
Velezia quadridentata Sm. – L

Chenopodiaceae

Arthrocnemum macrostachyum (Moric) Moris – L, I-2, I-3, I-4, I-5, I-6, I-11, I-12, I-13, I-15
Atriplex halimus L. – L, I-2, I-14
A. patula L. – L
A. portulacoides L. – L, I-14
Beta vulgaris L. *maritima* (L.) Arcang. – L
Chenopodium murale L. – L
Salsola kali L. subsp. *kali* – L

Cistaceae

Cistus creticus L. subsp. *creticus* – L, I-6, I-7, I-10, I-16, I-17
C. parviflorus Lam. – L, I-17
C. salviifolius L.- L
Fumana arabica (L.) Spach – L
F. thymifolia (L.) Spach ex Webb – I-16
Helianthemum salicifolium (L.) Mill. – L
Tuberaria guttata (L.) Fourr. – L, I-10, I-16

Compositae

Anthemis chia L. – L, I-7
A. rigida (Sm.) Boiss. ex Heldr. subsp. *rigida* – L, I-8, I-9, I-10
A. scopulorum Rech. f. – I-12, I-13, I-14, I-15
Atractylis cancellata L. subsp. *cancellata* – L, I-6, I-7, I-8, I-9, I-10, I-17
Bellis annua L. subsp. *annua* – L
B. perennis L. – L
B. sylvestris Cirillo – L
Bellium minutum (L.) L. – L, I-2, I-6, I-7, I-8, I-10, I-14
Calendula arvensis L. – L
Cardopatum corymbosum (L.) Pers. – L
Carduus pycnocephalus L. – L, I-7, I-8
Carlina corymbosa L. – L, I-6, I-8, I-10
C. lanata L. – L, I-2, I-4, I-6, I-7, I-10
Carthamus leucocaulos Sm. – I-10, I-16
Centaurea acicularis Sm. – L, I-7
C. benedicta (L.) L. – L
C. raphanina Sm. subsp. *mixta* (DC.) Runemark – L
C. solstitialis L. – L
C. spinosa L. subsp. *spinosa* – L
Cichorium spinosum L. – L, I-16, I-17
Crepis commutata (Spreng.) Greuter – L, I-2, I-7, I-8, I-9, I-10, I-16, I-17
C. multiflora Sm. – L, I-3, I-6, I-7, I-9, I-10, I-16
C. sancta (L.) Babc. – I-4, I-10, I-11
Crupina crupinastrum (Moris) Vis. – L, I-8, I-10

Cynara cornigera Lindl. – L, I-7, I-8, I-9, I-16, I-17
Dittrichia graveolens (L.) Greuter – L
D. viscosa (L.) Greuter – L, I-1, I-2, I-5, I-9
Echinops spinosissimus Turra subsp. *spinosissimus* – L
E. viscosus DC. subsp. *viscosus* – L, I-7
Filago aegaea Wagenitz subsp. *aristata* Wagenitz – L, I-2, I-4, I-7, I-8, I-10, I-16
F. cretensis Gand. subsp. *cretensis* – L, I-6, I-7
F. eriocephala Guss. – L, I-8, I-9, I-10, I-16
F. gallica L. – L, I-7
F. pyramidata L. – I-7
Geropogon hybridus (L.) Sch.Bip. – L
Glebionis coronaria (L.) Cass. ex Spach. – L, I-13
G. segetum (L.) Fourr. – L
Hedypnois cretica (L.) Dum.Cours. – L, I-7, I-8, I-9, I-16
Helichrysum conglobatum Steud. – L, I-2, I-6, I-7, I-8, I-9, I-10, I-11, I-14, I-15, I-16
H. orientale (L.) Gaertn. – I-2, I-3, I-9, I-15
Hyoseris scabra L. – L, I-7
Hypochaeris achyrophorus L. – L, I-2, I-4, I-6, I-7, I-8, I-16, I-17
Inula heterolepis Boiss. – L, I-7, I-16
Jurinea consanguinea DC. – L
Lactuca acanthifolia (Willd.) Boiss. – L
L. tuberosa Jacq. – L
Leontodon tuberosus L. – L, I-7, I-11, I-16
Limbarda crithmoides (L.) Dumort. subsp. *longifolia* (Arcang.) Greuter – L, I-2, I-3, I-14
Matricaria chamomilla L. – L
Notobasis syriaca (L.) Cass. – L
Onopordum illyricum L. – L
Pallenis spinosa (L.) Cass – L, I-2, I-11
Phagnalon graecum Boiss & Heldr. – L, I-2, I-3, I-6, I-7, I-16, I-17
Picnomon acarna (L.) Cass. – L, I-8
Ptilostemon chamaepeuce (L.) Less. – L
Reichardia picroides (L.) Roth – L, I-2, I-3, I-5, I-6, I-7, I-11, I-14, I-16
Rhagadiolus stellatus (L.) Gaertn. – L
Scolymus hispanicus L. – L
Scorzonera cretica Willd. – I-10
S. elata Boiss. – L, I-2, I-6, I-7, I-9, I-10
Senecio vulgaris L. – L
Sonchus asper (L.) Hill subsp. *glaucescens* (Jord.) P.W. Ball – I-9
S. bulbosus (L.) N. Kilian & Greuter subsp. *microcephalus* (Rech. f.) N. Kilian & Greuter – L, I-4, I-6, I-7, I-8, I-10, I-11, I-16, I-17
S. oleraceus L. – L, I-2, I-3, I-6, I-8, I-9, I-15
S. tenerrimus L. – L, I-5
Taraxacum megalorrhizon (Forssk.) Hand.-Mazz. – L
T. sp. sect. *Scariosa* – I-3, I-6, I-7, I-11, I-13, I-14, I-15
Tolpis barbata (L.) Gaertn. – L
Urospermum picroides (L.) Scop. ex F.W. Schmidt. – L, I-2, I-6, I-7, I-8, I-9, I-10, I-17

Convolvulaceae
Convolvulus arvensis L. – L
C. betonicifolius Mill. – L
C. elegantissimus Mill. – L
C. oleifolius Desr. – L, I-2, I-3, I-6, I-7, I-8, I-9, I-10, I-11, I-13, I-14, I-15, I-16

Cuscutaceae
Cuscuta palaestina Boiss. subsp. *palaestina* – L, I-8

Crassulaceae
Sedum litoreum Guss. – L, I-2, I-3, I-4, I-5, I-6, I-7, I-8, I-9, I-10, I-13, I-15, I-16
Umbilicus horizontalis (Guss.) DC. – L, I-16

Cruciferae
Aethionema saxatile (L.) R. Br. subsp. *graecum* (Boiss. & Spruner) Hayek – L
Arabis verna (L.) R. Br. - L
Aurinia saxatilis (L.) Desv. susbp. *megalocarpa* (Hausskn.) T.R. Dudley – L, I-7
Biscutella didyma L. – L
Bunias erucago L. – L
Cakile maritima Scop. – L, I-3
Capsella bursa-pastoris (L.) Medik. – L
Clypeola jonthlaspi L. subsp. *johnthlaspi* – L, I-7
Malcolmia chia (L.) DC. – L
M. flexuosa (Sm.) Sm. subsp. *naxensis* (Rech. f.) Stork – L, I-1, I-2, I-5, I-6, I-8, I-9, I-12, I-13, I-15
Matthiola incana (L.) R. Br. subsp. *incana* – L, I-3
M. sinuata (L.) R. Br. – L, I-2, I-7, I-13
Raphanus raphanistrum L. subsp. *raphanistrum* – L
Sisymbrium orientale L. – L

Cucurbitaceae
Bryonia cretica L. susbp. *cretica* – L, I-4
Ecballium elaterium (L.) A. Rich. – L

Cytinaceae
Cytinus hypocistis (L.) L. – I-17

Dipsacaceae
Knautia integrifolia (L.) Bertol. – L
Tremastelma palaestinum (L.) Janch. – L

Elaeagnaceae
Elaeagnus angustifolia L. – L

Ericaceae
Erica manipuliflora Salisb. – L, I-6, I-10, I-17

Euphorbiaceae
Chrozophora tinctoria (L.) Juss. – L
Euphorbia acanthothamnos Heldr. & Sart. ex Boiss. – L, I-1, I-2, I-4, I-5, I-6, I-7, I-9, I-14, I-16
E. dendroides L. – I-10
E. exigua L. – I-4, I-7, I-8, I-10, I-16
E. peplus L. – L, I-4, I-6, I-7, I-11
Mercurialis annua L. – L, I-1, I-2, I-4, I-5, I-6, I-7, I-8, I-11, I-14, I-15, I-16

Fagaceae
Quercus aucheri Jaub. & Spach. – L
Q. coccifera L. – L
Q. ithaburensis Decaisne subsp. *macrolepis* (Kotschy) Hedge & Yalt – L
Q. pubescens Willd. – L

Frankeniaceae
Frankenia hirsuta L. – L, I-5, I-6, I-8, I-9, I-14
F. pulverulenta L. subsp. *pulverulenta* – I-9, I-12, I-15

Gentianaceae
Blackstonia perfoliata (L.) Huds. subsp. *perfoliata* – L, I-2, I-10, I-16
Centaurium pulchellum (Swartz) Druce – L, I-2, I-3, I-7, I-8, I-9, I-10, I-16

Geraniaceae
Erodium chium (L.) Willd. subsp. *chium* – L, I-8, I-16
E. cicutarium (L.) L' Her. susbp. *cicutarium* – L, I-2, I-7, I-16, I-17
E. malacoides (L.) L' Her. – L, I-4, I-6
Geranium lucidum L. – L
G. molle L. susbp. *molle* – L, I-6, I-7, I-8, I-16
G. rotundifolium L. – L, I-4, I-8, I-9, I-16, I-17
Hypericum triquetrifolium Turra – L

Labiatae
Acinos alpinus (L.) Moench susbp. *meridionalis* (Nyman) P.W. Ball. – L
Ajuga iva (L.) Schreber – L
Ballota acetabulosa (L.) Bentham – L, I-4, I-6, I-7, I-8, I-10, I-17
Coridothymus capitatus (L.) Rchb. f.- L, I-6, I-7, I-10, I-11, I-14, I-16
Lamium amplexicaule L. subsp. *amplexicaule* – L, I-16
L. moschatum Mill. – L
Lavandula stoechas L. susbp. *stoechas* – L
Micromeria juliana (L.) Benth. – L, I-2, I-3, I-16
M. nervosa (Desf.) Benth. – L, I-10, I-17
Origanum onites L. – L, I-7
O. vulgare L. subsp. *hirtum* (Link) Ietsw. – L
Phlomis fruticosa L. – L
Prasium majus L. – L, I-2, I-6, I-7, I-8, I-9, I-10
Rosmarinus officinalis L. – L
Salvia fruticosa Mill. – L, I-3, I-7, I-16
S. verbenaca L. – L
S. viridis L. – L, I-8, I-17
Satureja thymbra L. – L, I-17
Sideritis curvidens Stapf. – L, I-7, I-8
S. lanata L. – L
Stachys cretica L. subsp. *smyrnaea* Rech. f. – L
Teucrium brevifolium Schreb. – L, I-2, I-3, I-4, I-7, I-17
T. divaricatum Sieber ex Heldr. subsp. *divaricatum* – L, I-2, I-3, I-6, I-7, I-8, I-9, I-16
T. polium L. – L, I-2, I-3, I-4, I-6, I-7, I-8, I-9, I-10, I-16, I-17

Lauraceae
Laurus nobilis L. – L

Leguminosae
Anagyris foetida L. – L, I-4, I-7, I-10, I-16
Anthyllis hermanniae L. – L, I-6
A. vulneraria L. subsp. *rubriflora* (DC.) Arcang. – L
Astragalus hamosus L. – L
Bituminaria bituminosa (L.) Stirt. – L
Calicotome villosa (Poir.) Link – L, I-10, I-17
Ceratonia siliqua L. – L, I-2, I-3, I-17
Coronilla scorpioides (L.) W.D.J. Koch – L
C. valentina L. – L
Dorycnium hirsutum (L.) Ser. – L
Genista acanthoclada DC. subsp. *acanthoclada* – L, I-2, I-6, I-8, I-9, I-10
Hedysarum coronarium L. – L, I-3, I-16
Hippocrepis ciliata Willd. – I-6
H. unisiliquosa L. subsp. *unisiliquosa* – L, I-10
Hymenocarpos circinnatus (L.) Savi – L, I-16
Lathyrus annuus L. – L
L. aphaca L. – L
L. clymenum L. – L
L. saxatilis (Vent.) Vis. – L, I-6
Lens nigricans (M. Bieb.) Godr. – L, I-7
L. orientalis (Boiss.) Schmalh. – L
Lotus cytisoides L. – L, I-1, I-2, I-3, I-5, I-6, I-7, I-8, I-9, I-11, I-13, I-14, I-15, I-16, I-17
L. edulis L. – L, I-2, I-3, I-6, I-9, I-13, I-14, I-15, I-16, I-17
L. ornithopodioides L. – L
Lupinus angustifolius L. – L

L. pilosus L. – L
Medicago coronata (L.) Bartal. – L, I-4
M. disciformis DC. – L
M. monspeliaca (L.) Trautv. – L, I-7
M. orbicularis (L.) Bartal. – L
M. scutellata (L.) Mill. – L
M. truncatula Gaertn. – L
M. tuberculata (Retz.) Willd. – L
Melilotus segetalis (Brot.) Ser. – L
Onobrychis aequidentata (Sm.) d'Urv. – L
O. caput-galli Lam. – L
O. crista-galli (L.) Lam. – L
Ononis hispanica L. f. subsp. *ramosissima* (Desf.) Förther & Podlech – L, I-7
O. reclinata L. – L, I-7, I-10, I-16
O. spinosa L. subsp. *leiosperma* (Boiss.) Љirj. – L
O. viscosa L. subsp. *breviflora* (DC.) Nyman – L
Ornithopus compressus L. – L
O. pinnatus (Mill.) Druce – L
Pisum sativum L. subsp. *elatius* (MB.) Asch. & Graebn. – L
Scorpiurus muricatus L. – L, I-14, I-16, I-17
Securigera cretica (L.) Lassen – L, I-16
S. securidaca (L.) Degen & Doerfl. – L
Spartium junceum L. – L
Trifolium angustifolium L. – L, I-8
T. arvense L. – L
T. boissieri Guss. – L
T. campestre Schreb. – L, I-6, I-7, I-8
T. clypeatum L. – L
T. dasyurum C. Presl – L
T. grandiflorum Schreb. – L
T. hirtum All. – L
T. lappaceum L. – L
T. nigrescens Viv. – L
T. petrisavii Clementi – L
T. resupinatum L. – L
T. scabrum L. – L, I-6, I-8, I-9, I-10, I-14, I-17
T. stellatum L. – L, I-6, I-8, I-17
T. tomentosum L. – L
T. uniflorum L. – L
Trigonella balansae Boiss. & Reut. – L, I-13, I-15
T. cariensis Boiss. – L
T. spicata Sm. – L
Vicia cretica Boiss. & Heldr. – L, I-7, I-9, I-16
V. hybrida L. – L
V. peregrina L. – L
V. sativa L. subsp. *nigra* (L.) Ehrh. – L, I-17
V. villosa Roth. subsp. *microphylla* (d'Urv.) P.W. Ball – L

Linaceae
Linum trigynum L. – I-3, I-7, I-16
L. bienne Mill. – L, I-3
L. corymbulosum Rchb. – L
L. strictum L. subsp. *spicatum* (Pers.) Nyman – L, I-3, I-6, I-7, I-8, I-9, I-10, I-11

Malvaceae
Alcea biennis Winterl – I-16
Althaea hirsuta L. – I-2, I-6, I-8, I-9, I-10
Lavatera arborea L. – I-1, I-5, I-11
Malva aegyptia L. – L, I-5, I-7, I-8
M. cretica Cav. subsp. *cretica* – L, I-2, I-4, I-7, I-16
M. sylvestris L. – L

Moraceae
Ficus carica L. – L, I-2

Myrtaceae
Myrtus communis L. subsp. *communis* – L

Oleaceae
Olea europaea L. subsp. *oleaster* (Hoffmanns. & Link) Negodi – L, I-1, I-2, I-4, I-5, I-6, I-7, I-8, I-11, I-17

Orobanchaceae
Orobanche minor Sm. – I-2
O. pubescens d'Urv. – L, I-3, I-7, I-9, I-17
O. ramosa L. subsp. *mutelii* (F.W. Schultz) Cout. – L
subsp. *nana* (Reut.) Cout. – L
O. sanguinea C. Presl – L, I-6, I-15, I-17

Oxalidaceae
Oxalis corniculata L. – L
O. pes-caprae L. – L, I-5, I-7, I-15

Papaveraceae
Fumaria bastardii Boreau – L
F. gaillardotii Boiss. – L
F. officinalis L. subsp. *officinalis* – L, I-8
Glaucium flavum Crantz – L, I-6
Papaver purpureomarginatum Kadereit – L, I-7
P. rhoeas L. – L
P. somniferum L. subsp. *somniferum* – L

Plantaginaceae
Plantago afra L. – L, I-4, I-6, I-7
P. cretica L. – L, I-4, I-7, I-8, I-9
P. lagopus L. – L, I-4, I-8, I-9, I-10
P. lanceolata L. – L
P. weldenii Rchb. subsp. *weldenii* – L, I-2, I-9, I-10

Platanaceae
Platanus orientalis L. – L

Plumbaginaceae
Armeria cariensis Boiss. – I-5, I-16
Goniolimon collinum (Griseb.) Boiss. – I-14
Limonium angustifolium (Tausch.) Turrill. – L
L. gmelinii (Willd.) Kuntze – L, I-2
L. graecum (Poir.) Rech. f. subsp. *graecum* – L, I-2, I-6, I-7, I-8, I-9, I-10, I-15
L. narbonense Mill. – I-1, I-2, I-5, I-8, I-9, I-13, I-14, I-15
L. ocymifolium (Poir.) Kuntze – I-2, I-3, I-13, I-14, I-15, I-16
L. sieberi (Boiss.) Kuntze – L, I-2
L. sinuatum (L.) Mill. subsp. *sinuatum* – L

Polygalaceae
Polygala venulosa Sm. – I-16
P. monspeliaca L. – L, I-6, I-7

Polygonaceae
Polygonum maritimum L. – L
Rumex bucephalophorus L. subsp. *aegaeus* Rech. f. – L, I-7
R. tuberosus L. subsp. *creticus* Rech. f. – L

Primulaceae
Anagallis arvensis L. – L, I-2, I-3, I-6, I-7, I-8, I-9, I-10, I-16, I-17
*Asterolinon linum-stellatum (*L.) Duby – L, I-8, I-13, I-16
Cyclamen hederifolium Aiton – L

Ranunculaceae
Adonis microcarpa DC. – L
Anemone coronaria L. – L
A. pavonina Lam. – L
Clematis cirrhosa L. – L, I-8, I-11
Delphinium peregrinum L. – L, I-8, I-9, I-10
D. staphisagria L. – L
Nigella arvensis L. subsp. *glauca* (Boiss.) A. Terracc. – L
Ranunculus muricatus L. – L
R. paludosus Poiret – L

Resedaceae
Reseda lutea L. subsp. *lutea* – L

Rhamnaceae
Rhamnus lycioides L. subsp. *oleoides* (L.) Jahand. & Maire – L

Rosaceae
Aphanes arvensis L. – L
Pyrus communis L. – L
Sanguisorba minor Scop. subsp. *magnolii* (Spach.) Briq. – L
Sarcopoterium spinosum (L.) Spach. – L, I-2, I-6, I-9, I-17

Rubiaceae
Crucianella latifolia L. – L, I-16, I-17
Galium aparine L. – L, I-2, I-9
G. brevifolium Sm. subsp. *insulare* Ehrend. & Schönb.-Tem. – L
G. canum Req. ex DC. subsp. *canum* – L
G. graecum L. subsp. *graecum* – L
G. murale (L.) All. – L, I-2
G. recurvum Req. ex DC. – I-8, I-9, I-16
G. setaceum Lam. – L
Rubia tenuifolia D'Urv. subsp. *brachypoda* (Boiss.) Ehrend. & Schönb.-Tem. – I-3
subsp. *tenuifolia* – I-2, I-14
Sherardia arvensis L. – L
Valantia hispida L. – L, I-2, I-4, I-6, I-7, I-8, I-9, I-11
V. muralis L. – L, I-2, I-3, I-4, I-11, I-14, I-15, I-16, I-17

Rutaceae
Ruta chalepensis L. subsp. *chalepensis* – L, I-3, I-6, I-7, I-16

Salicaceae
Populus alba L. – L
Salix alba L. – L

Santalaceae
Osyris alba L. – L

Scrophulariaceae
Bellardia trixago (L.) All. – L
Cymbalaria longipes (Boiss. & Heldr.) A. Chev. – L
Kickxia elatine (L.) Dumort. subsp. *crinita* (Mabille) Greuter – L, I-7, I-10
Linaria pelisseriana (L.) Mill. – L
Misopates orontium (L.) Raf. – L, I-4, I-7
Scrophularia heterophylla Willd. – L, I-4, I-7
S. lucida L. – I-16
Verbascum mucronatum Lam. – L
Veronica cymbalaria Bodard. – L, I-7

Solanaceae
Solanum nigrum L. subsp. *nigrum* – I-16
Hyoscyamus albus L. – L
Mandragora officinarum L. – L, I-4, I-7, I-8, I-9, I-10, I-17

Tamaricaceae
Tamarix hampeana Boiss. & Heldr. – L

Theligonaceae
Theligonum cynocrambe L. – I-7, I-8, I-9

Thymeleaceae
Daphne gnidioides Jaub. & Spach. – L, I-6, I-7
Thymelaea tartonraira (L.) All. subsp. *argentea* (Sm.) Holmboe – L

Umbelliferae
Bifora testiculata (L.) Spreng. ex Schult. – I-7
Bupleurum gracile d'Urv. – L, I-7, I-16
Crithmum maritimum L. – I-2, I-3, I-11, I-14
Daucus guttatus Sm. – I-7
D. involucratus Sm. – I-6, I-7
D. littoralis Sm. – L
Eryngium glomeratum Lam. – L
E. maritimum L. – L, I-8, I-9, I-14
Ferula communis L. subsp. *glauca* (L.) Rouy & Camus – L, I-2, I-3, I-5, I-10, I-11, I-13, I-14, I-15
Hellenocarum multiflorum (Sm.) H. Wolff – I-14
Hippomarathum cristatum (DC.) Boiss. – I-7, I-8
Lagoecia cuminoides L. – L
L. cumminoides L. – I-6, I-7, I-8, I-9, I-16
Orlaya daucoides (L.) Greuter – L, I-4, I-6
Scaligeria napiformis (Spreng.) Grande - L, I-10
Scandix australis L. subsp. *australis* - L
S. pecten-veneris L. – L.
Smyrnium perfoliatum L. subsp. *rotundifolium* (Mill.) Hartvig – L
Thapsia garganica L. – L
Tordylium apulum L. – L, I-7
T. hirtocarpum P. Candargy – L, I-4, I-6, I-7, I-10, I-16
Torilis arvensis (Huds.) Link subsp. *purpurea* (Ten.) Hayek – I-7
T. leptophylla (L.) Rchb. f. – I-7
T. nodosa (L.) Gaertn. – L, I-2, I-7, I-8, I-9

Urticaceae
Parietaria cretica L. – L, I-2, I-4, I-5, I-6, I-7, I-8, I-9, I-10, I-13, I-14, I-15, I-16
P. judaica L. – L
Urtica membranacea Poir. – L
U. pilulifera L. – L
U. urens L. – I-7, I-17

Valerianaceae
Centranthus calcitrapae (L.) Dufr. subsp. *calcitrapae* – L, I-6, I-7, I-16, I-17
Valerianella coronata (L.) DC. – L
V. dentata (L.) Poll. – I-7
V. echinata (L.) DC. – I-7
V. muricata (Steven ex M. Bieb.) Baxter – L, I-7, I-16, I-17
V. obtusiloba Boiss. – I-7
V. vesicaria (L.) Moench – L

Verbenaceae
Vitex agnus-castus L. – L

Spermatophyta-Angiospermae-Monocotyledonae

Alliaceae
Allium ampeloprasum L. – I-2, I-3
A. commutatum Guss. – I-1, I-3, I-5, I-6, I-11, I-12, I-13, I-14, I-15
A. dodekanesii Karavokyrou & Tzanoud. – I-7, I-9
A. flavum L. – L, I-7, I-9
A. hirtovaginatum Kunth – I-1, I-3, I-5, I-13, I-15
A. neapolitanum Cirillo – L
A. nigrum L. – L
A. roseum L. – L
A. staticiforme Sm. – L, I-7, I-8, I-9
A. subhirsutum L. – L, I-6, I-7, I-8, I-9, I-10, I-17

Amaryllidaceae
Narcissus serotinus L. – I-9
N. tazetta L. subsp. *tazetta* – I-2, I-10
Sternbergia lutea (L.) Ker Gawl. ex Spreng. – I-2, I-7, I-9

Araceae
Arisarum vulgare Targ.Tozz. – L, I-1, I-5, I-6, I-7, I-15, I-17
Arum dioscoridis Sm. – L, I-7, I-10, I-16, I-17
Dracunculus vulgaris Schott – L

Asparagaceae
Asparagus cf. *tenuifolius* Lam. – I-3, I-5, I-13, I-15
A. aphyllus L. subsp. *orientalis* (Baker) P.H. Davis – L, I-2, I-3, I-6, I-7, I-8, I-9, I-10, I-11, I-13, I-14

Asphodelaceae
Asphodeline lutea (L.) Rchb. – I-8, I-9
Asphodelus fistulosus L. – L, I-2, I-8, I-9
A. ramosus L. subsp. *ramosus* – L, I-3, I-4, I-10, I-11, I-16

Colchicaceae
Colchicum balansae Planch. – L
C. cupanii Guss. – I-2
C. variegatum L. – L, I-6, I-16, I-17

Cyperaceae
Carex flacca Schreber subsp. *serrulata* (Biv.) Greuter – L
Cyperus rotundus L. – L
Schoenus nigricans L. – L
Scirpoides holoschoenus (L.) Soják – L

Dioscoreaceae
Tamus communis L. – L, I-4

Gramineae
Aegilops biuncialis Vis. subsp. *biuncialis* – L
A. caudata L. subsp. *caudata* – L

A. littoralis (Gouan) Parl. – L
Aira elegantissima Schur subsp. *elegantissima* – L
Andropogon distachyos L. – L, I-6, I-17
Arundo donax L. – L
Avellinia michelii (Savi) Parl. – L, I-8, I-9
Avena barbata Pott ex Link subsp. *barbata* – L, I-6, I-7, I-9, I-10, I-17
A. sterilis L. subsp. *sterilis* – L, I-2
Brachypodium pinnatum (L.) P. Beauv. – I-2, I-9
B. retusum (Pers.) P. Beauv. – L, I-2, I-4, I-7, I-16, I-17
Briza maxima L. – L, I-7, I-16
Bromus fasciculatus C. Presl – L, I-7, I-8, I-9, I-14
B. intermedius Guss. – L, I-6, I-7, I-8, I-9, I-10, I-16
B. madritensis L. subsp. *madritensis* – L, I-4, I-6, I-7, I-16, I-17
B. rubens L. – I-9
B. scoparius L. – L, I-9
B. sterilis L. – L
B. tectorum L. – I-8
Catapodium marinum (L.) C.E. Hubb. – L, I-6, I-7, I-8, I-9, I-11, I-13, I-16
C. rigidum (L.) C.E. Hubb. ex Dony – L, I-8, I-13, I-14
Corynephorus articulatus (Desf.) P. Beauv. – L
Cynosurus echinatus L. – L, I-14
Dactylis glomerata L. subsp. *hackelii* (Asch. & Graebn.) Cif. & Giacom. – L, I-7, I-8, I-9, I-11, I-12
D. glomerata L. subsp. *hispanica* (Roth) Nyman – I-2, I-3, I-4, I-6, I-7, I-8, I-9, I-11, I-12, I-14, I-15
Echinaria capitata (L.) Desf. – L, I-2, I-10, I-16, I-17
Elymus farctus subsp. *rechingeri* (Runemark) Melderis – I-11
E. repens (L.) Gould. – L
Elytrigia sartorii (Boiss. & Heldr.) H. Scholz – I-3, I-12, I-13, I-14, I-15
E. juncea (L.) Nevski subsp. *juncea* – L, I-9
Hordeum bulbosum L. – L
H. leporinum Link. – L, I-8
Hyparrhenia hirta (L.) Stapf – L
Lagurus ovatus L. subsp. *ovatus* – L, I-8
Lamarckia aurea (L.) Moench – L
Lolium rigidum Gaudin subsp. *rigidum* – L, I-7
L. temulentum L. – L
Melica minuta L. – L, I-2, I-6, I-7, I-8, I-9, I-14, I-16, I-17
Parapholis incurva (L.) C.E. Hubb. – L, I-2, I-3, I-6, I-7, I-8, I-9, I-11, I-16
P. marginata Runemark – I-2, I-3, I-5, I-10, I-14, I-15
Phalaris aquatica L. – I-15
P. canariensis L. – I-8, I-9
Piptatherum coerulescens (Desf.) P. Beauv. – L, I-2, I-11
P. miliaceum (L.) Coss. subsp. *miliaceum* – L, I-6, I-7
Poa bulbosa L. – L
Rostraria cristata (L.) Tzvelev – L, I-6, I-7, I-8, I-9, I-16, I-17
Stipa bromoides (L.) Doerfl. – L
S. capensis Thunb. – I-10
Trachynia distachya (L.) Link – L
Vulpia ciliata Dumort. – I-16

Hyacinthaceae
Charybdis maritima (L.) Speta – L, I-6, I-7, I-8, I-11, I-17
Muscari commutatum Guss. – L, I-7, I-9
M. comosum (L.) Mill. – L, I-7, I-8, I-9, I-10
M. macrocarpum Sweet – L, I-10
M. neglectum Guss. ex Ten. – I-8
M. weissii Freyn – L, I-7, I-8, I-11
Ornithogalum armeniacum Baker – I-8, I-9
O. collinum Guss. – I-9
O. fimbriatum Willd. subsp. *fimbriatum* – L
O. narbonense L. – I-16
Prospero autumnale (L.) Salisb. subsp. *autumnale* – L, I-7, I-8

Iridaceae
Crocus sp. – I-9, I-11, I-17
C. tournefortii Gay – L
Gladiolus illyricus Koch – L, I-10, I-17
G. italicus Mill. – L, I-9
Hermodactylus tuberosus (L.) Mill. – I-16
Moraea sisyrinchium (L.) Ker Gawl. – L, I-10, I-14, I-17
Romulea tempskyana Freyn – L

Juncaceae
Juncus articulatus L. – L
J. heldreichianus T. Marsson ex Parl. subsp. *heldreichianus* – L

Liliaceae
Gagea graeca (L.) A. Terracc. – L, I-3, I-10, I-16, I-17

Orchidaceae
Anacamptis pyramidalis (L.) L.C.M. Rich. – L, I-3, I-4, I-6, I-10, I-11, I-16, I-17
Ophrys lutea Cav. – L
O. tenthredinifera Willd. – L
Orchis picta Loisel. – L
O. sancta L. – I-2, I-10
O. sancta L. – L
Serapias vomeracea (Burm.) Briq. – L

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