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The Steppic flora of high Mounts Ahir, Öksüz and Binboğa (Kahramanmaraş - Kayseri, Turkey)

Abstract

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The vascular flora of Mts. Ahir, Öksüz and Binboğa in the provinces of Kahramanmaraş and Kayseri (C Anatolia, Turkey B6/C6) has been investigated. 928 specific and infraspecific taxa are listed. 249 (27 %) of them are endemic to Turkey. 372 taxa are Irano-Turanian, 103 Mediterranean, 14 Euro-Siberian elements, 439 multiregional or have not been assessed phytogeographically. 379 taxa are confined to Binboğa, 228 to Ahir, and 93 to Öksüz Dağı and the others for three.

Introduction

The research areas are located in Kahramanmaraş and Kayseri provinces (Fig. 1). They are within B6 and C6 squares according to the grid system used for Turkish flora. The reasons for choosing Ahir, Öksüz and Binboğa Mountains as research area are given as follows: Abundance of endemic plants in this region, its being at the intersection of Mediterranean and Irano-Turanian phytogeographic areas, being on the Anatolian Diagonal.

The flora and vegetation of Ahir, Öksüz and Binboğa mountains have not been studied before in detail. Davis and his colleagues collected plant specimens especially from Binboğa Mountain, Haussknecht collected from Berit and Ahir mountains, also Huber-Morath collected from Ahir and Binboğa Mountains (Davis 1965-1988; Davis & al. 2000).

Some flora and vegetation studies had been performed in the areas in vicinity to our research area.

These areas are as follows:

Engizek Mountain (Duman 1990), Berit Mountain (Yıldız 2001), Erciyes Mountain (Çetik 1981, 1985); Bolkar mountains (Gemici 1994).

The investigated areas are within Mediterranean and Irano-Turanian phytogeographic regions where Anatolia Diagonal bifurcates (Ekim 1986). The altitude of the flora of steppe formation of the research area is between 1300-2800 m on Öksüz and Ahir Mountains and it is between 1600-2950 m on Binboğa Mountain. Generally, the research area consists of brown soil and limeless brown soil (Köy İşleri 1973a, 1973b).

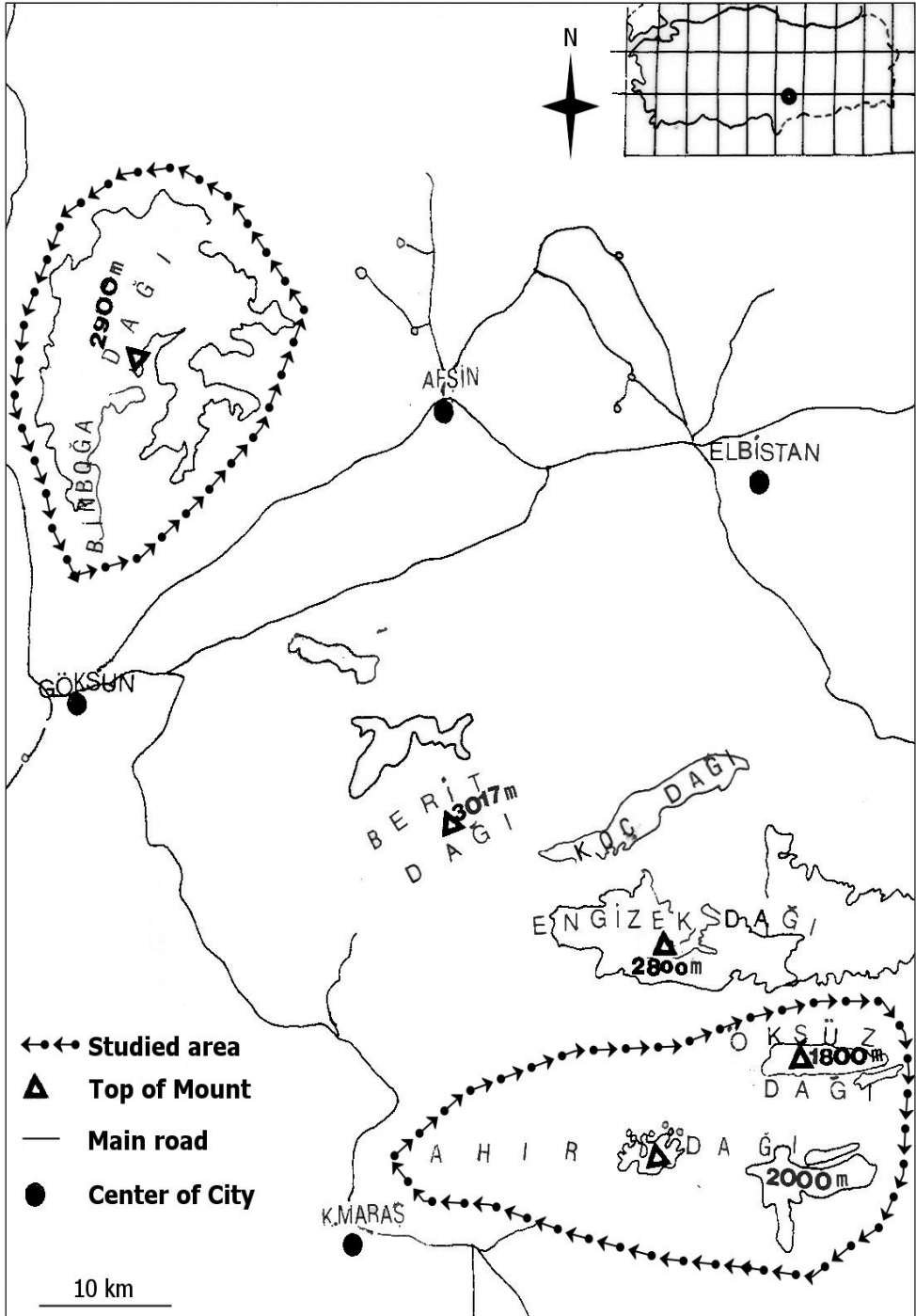


Fig. 1. Map of the study area.

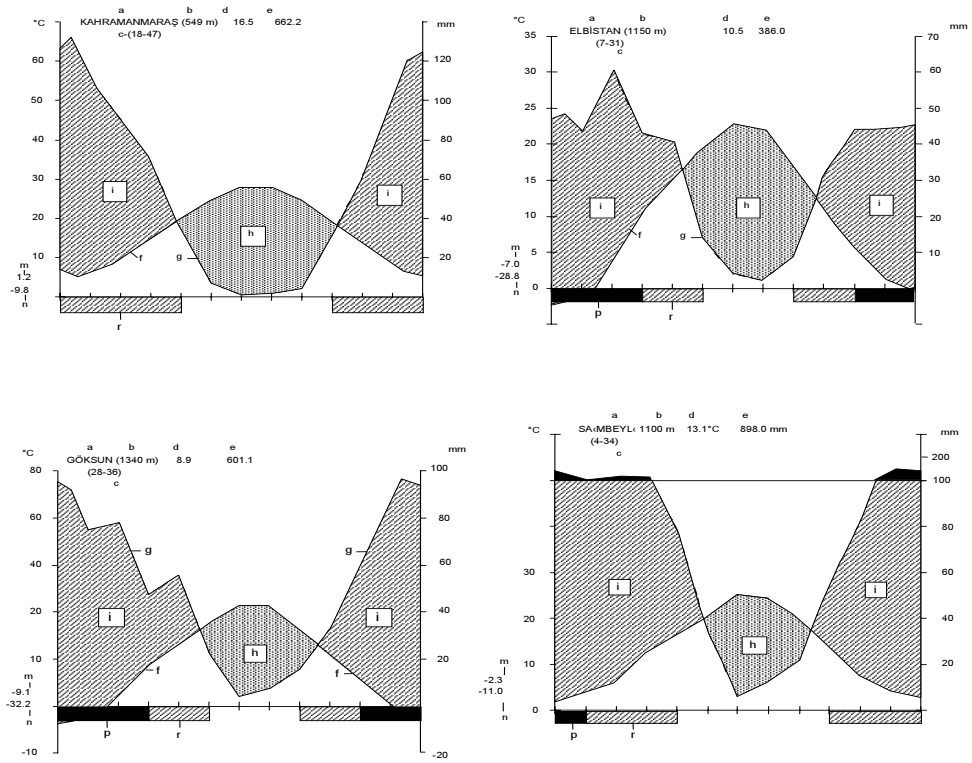


Fig. 2. Ombrothermic diagrams of the meteorological stations in the study area; **a**) name of meteorological station; **b**) altitude (m a.s.l.) ; **c**) duration of temperature and rain measurement; **d**) annual average of temperature (°C); **e**) annual average of rain (mm); **f**) temperature curve; **g**) rain curve ; **h**) arid period; **i**) rainy period; **m**) minimum average temperature of the coldest month (°C); **n**) absolute minimum temperature (°C); **p**) freezing months; **r**) probable freezing months.

In order to determine the climatic conditions of the research area, the data from the meteorological stations of Kahramanmaraş (349 m), Elbistan (1150 m), Göksun (1340 m) and Saimbeyli (1100 m) were situated on lower altitudes than our study areas (Fig. 2). However, the essential parts of the study areas start from 1500 m and rise up to 3000 m. Therefore, the climatic conditions of the research the area could not be exactly reflected. The macroclimate of research area is the Mediterranean climate. Kahramanmaraş gets low precipitation and is cold, Elbistan and Göksun are semiarid and are very cold and Saimbeyli gets low precipitation and is cold (Akman & Daget 1971). In the research area, the majority of the precipitation is during winter and the least precipitation is during summer. According to meteorological stations of Kahramanmaraş, Göksun and Saimbeyli, the precipitation regime is as Winter, Spring, Autumn and Summer, known as the first type of East Mediterranean precipitation Regime. The precipitation regime of Elbistan is as Spring, Winter, Autumn and Summer; known as the second type of East Mediterranean precipitation regime (Akman 1971, 1994).

Material and Methods

2013 plants specimens were collected between April and October in the research area in three different vegetation seasons between 1990 and 1993. The samples are dried according to herbarium methods and deposited in GAZI herbarium.

Mainly, Flora of Turkey (Davis 1965-1988, 1988) were used the identification. Furthermore, some main Flora Books such as: (Heywood & al. 1964-1981), (Boissier 1867-1888) and (Meikle 1977) were also used. In addition, some revision studies (Podlech 1975, 1988; Aytaç 1997; Maassoumi 1998) were used. The following details are given in the floristic list of this article.

Plant name, locality number, habitats, collectors' number, phytogeographic element, and optional floristic or taxonomical comments.

Situation of endemism and IUCN categories for endemics (Ekim & al. 2000) were given. If some taxa were collected from more than one locality, the same or different mountain, it was only given from one locality for each mountain. We did not mention life forms of plants and flowering times. Also these kind of informations are given in Davis (1965 ff.) and elsewhere.

IUCN categories are given according to (Ekim & al. 2000; Anonymous, 2001).

Authors names were checked from the book of Brummit & Powell (Brummitt & al.1992). We compared floristic findings obtained from our research area with the studies that had been done similarly in near areas such as " Berit Mountain, Engizek Mountain Koruayaz Mountain and Çimen Mountain, all of them in Kahramanmaraş province, since these areas include woodland and their altitudes vary between 600 - 2900 m. For these reasons the results of our investigation differ from the studies mentioned above.

Result and Discussion

Ahir, Öksüz and Binboğa Mountains take part on the transition zone of Mediterranean and Irano -Turanian phytogeographic regions (Ekim et Güner 1986).

2013 plant specimens were collected from the research area in three different vegetation seasons between 1990 and 1993. According to the results of this study, 928 taxa belonging to 310 genera belonging to 58 families were determined and five of them had been published as new taxa (Leblebici & al. 1993; Duman & al. 1995; Duman & al. 1998; Ekici & Aytaç 2001).

All the collected specimens are the members of *Angiospermae* and 797 of them belong to *Dicotyledonae* whereas 131 of them belong to *Monocotyledone*.

The distributions of the species of the study area in the phytogeographic regions are as follows:

Mediterranean 103 (% 11), Irano-Turanian 372 (% 38), Euro-siberian 14 (% 1.5), pluriregional 352 (% 38) and 87 (%9.3) are not attributed to a category. Why Ir.-Tur. elements rate high can be explained by the high altitude of the localities of the study areas. The rate of Irano-Turanian elements is 23.4 % on the Berit Mountain (Yildiz 2001) and 35.5% on the Engizek Mountain (Duman 1990) which are close to our research area. Since these two mountains rise up from 600 m to 3000 m, Irano-Turanian elements are observed to be the dominant types.

The number of endemic taxa in our area is 249 and the endemism rate is 26.8 %. So endemism rate is higher in our research area than the one in Engizek and Berit Mountains (Yildiz

iz 2001; Duman 1991). The high altitude of the research area and the existence of local endemics in high elevations are some of the reasons for the high endemism rate.

The distribution of taxa according to the mountains is as follows:

Binboğa: 379, Ahir: 228, Öksüz: 93, Ahir & Binboğa: 106, Öksüz & Binboğa: 42 and Ahir, Öksüz & Binboğa 35. The Mount Binboğa is higher and wider than Ahir and Öksüz Mountains. Except from east foot part of Binboğa, the area is completely covered with step-pic vegetation. But thickly wooded vegetations are common in the Ahir and Öksüz Mountains.

The type localities of some species have been known in the research area and most of them are collected during this study. These species are listed according to the order present in the Flora of Turkey:

Ranunculus anguis-cati P. H. Davis, *Arenaria antitaurica* McNeill, *Minuartia dianthifolia* subsp. *cataonica* McNeill, *M. rimarum* var. *multiflora* McNeill, *Silene caryophylloides* var. *binbogaense* Vural & Duman, *Polygonum ekimianum* Leblebici, Duman & Aytaç, *Astragalus akmanii* Aytaç & Duman, *A. leporinus* var. *hirsutus* (Post.) Chamb., *A. elbistanicus* Hub.-Mor. & Chamb., *A. dumanii* Ekici & Aytaç, *Onobrychis marashensis* Duman & Vural var. *marashensis* var. *alpina* Duman & Vural, *Bunium brachyactis* (Post) Wolff, *Ferulago blancheana* Post, *Helichrysum goulandrionum* Georgiadou, *Doronicum haussknechtii* Cavill., *Cirsium leuconorum* Boiss. & Hausskn., *Campanula telephioides* Boiss. & Hausskn., *Asyneuma ekimianum* Kit Tan & Yild iz, *Heliotropium haussknechtii* Bunge *Paracaryum lithospermifolium* subsp. *cariense. erectum* R. R. Mill, *P. polycarpum* (Rech. fil.) R. R. Mill, *Onosma mutabile* Boiss., *Verbascum subnivale* Boiss. & Hausskn., *V. ballsianum* Murb., *Sideritis caeserea*. Duman, Aytaç & Baser and *Allium glumaceum* Boiss. & Hausskn.

The number of genera in ten major families in this study are as follows:

<i>Compositae</i> :	45	<i>Boraginaceae</i> :	17
<i>Cruciferae</i> :	29	<i>Labiatae</i> :	16
<i>Umbelliferae</i> :	23	<i>Caryophyllaceae</i> :	14
<i>Gramineae</i> :	21	<i>Liliaceae</i> :	13
<i>Leguminosae</i> :	19	<i>Ranunculaceae</i> :	9

Compositae is the largest family considering the number of genera and it is also the richest family in Berit and Engizek Mountains (Yild iz 2001, Duman 1991).

Considering the number of species, subspecies and varieties, the ten major families in this area as follows:

<i>Compositae</i>	129	<i>Gramineae</i>	61
<i>Leguminosae</i>	115	<i>Liliaceae</i>	52
<i>Caryophyllaceae</i>	84	<i>Umbelliferae</i>	46
<i>Cruciferae</i>	77	<i>Scrophulariaceae</i>	46
<i>Labiatae</i>	64	<i>Boraginaceae</i>	41

Considering the number of species, the *Compositae* family is at the first place both in the Flora of Turkey and the Berit Mountain (Yild iz 2001, Duman 1991). However, *Leguminosae* family, considering the number of its species, is in the first place throughout Engizek Mountain (Duman 1991). *Leguminosae* and *Compositae* are the richest families in the Flora of Turkey (Davis 1965-1988). The order of these two families sometimes can take each others place in different floristic studies; this situation can be explained by the diversity of vegetation types, soil construction, climate conditions and topography of the area.

Woodland, meadowland, steppe and rocky vegetation types which rise from 700 to 3000 m are studied in Berit and Engizek Mountains (Yildiz 2001, Duman 1991). As a result, *Trifolium*, *Vicia* and *Euphorbia* which are widespread in the forest spaces and forest beneath, come first in Engizek and Berit Mountains. Since the altitude is between 1300 and 3000 m in our research area, it is represented by steppic formations. Because of these, neither species found in forest clearings nor the ones growing under forests can be seen.

Considering the number of the species, the major ten genera in the research area as follows:

<i>Astragalus</i>	58	<i>Allium</i>	15
<i>Silene</i>	22	<i>Centaurea</i>	13
<i>Alyssum</i>	18	<i>Dianthus</i>	13
<i>Minuartia</i>	15	<i>Verbascum</i>	12
<i>Veronica</i>	15	<i>Sedum</i>	12

The genus *Astragalus* L. is the richest in the Flora of Turkey and it is also in the first place in Berit and Engizek Mountains (Yildiz 2001, Duman 1991). These genera include most of its species in the steppes, because they display a clear adaptation to high steppe formation with their life forms and they can endure to the negative ecological factors such as overgrazing. The genus *Silene* is second in the floristic study of Berit and Engizek Mountains. However, the rates of other genera are different from the compared floristic study areas, due to the high altitude and the representation of steppic and rocky vegetation types in research area.

197 taxa from the research area were published as new records for B6 and C6 squares (Aytaç & Duman 1995).

Polygonum ekimianum (23), *Astragalus akmanii*, *Silene caryophylloides* subsp. *binbogaense* (Duman & al 1995), *Sideritis caeserea* (Duman & al. 1998), from the research area were published as new taxa during this study. Moreover, a new species named as *Astragalus dumanii* gathered from Berit and Binboğa Mountains, was also published as a new taxon (Ekici & Aytaç 2001) which were collected in the same study.

The threat categories of endemic species have been revised according to the Red Data Book of Turkey (Ekim & al. 2000). The abbreviations are used as CR: Critically endangered, EN: Endangered, VU: Vulnerable, LR: Lower risk, NT: Near threatened. As a result, 4 species are put in CR category; these are *Polygonum ekimianum*, *Astragalus akmanii*, *Anthemis adonidifolia* Boiss. and *Verbascum subserratum* Hub.-Mor. *Astragalus akmanii* and *Polygonum ekimianum*, from Ahir mountain, were published and only known type locality is under the risk of overgrazing. *Anthemis adonidifolia*, around Pozantı province, is known only from type gathering and *Verbascum subserratum* is known from Pınarbaşı province near this area, but it is very rare in this locality. Five species are put in EN category. These are *Graellsia davisiana* Poulter, *Silene balansae* Boiss. *S. caryophylloides* subsp. *binbogaense*, *Rosularia sempervivum* (M. Bieb.) A. Berger and *Echinops vaginans* Boiss. & Hausskn. The Binboğa Mountain is type location of *Graellsia davisiana*, and *S. caryophylloides* subsp. *binbogaense*, which do not grow anywhere else. Also *Silene balansae* were collected from Binboğa Mountain except from type localities. *Echinops vaginans* known in Adıyaman and Maraş (Ahir Mountain) provinces, is also under the threat of urbanization in Ahir Mountain. 15 taxa are put in VU, 222 taxa are put in LR and NT category.

Tab. 1. Localities numbered and sorted per mountain area.

Ahur Dağı	
C6 Kahramanmaraş: Ahır Dağı; around Habur hill, 1800-2000 m, steppe, 2. v. 1991	1
C6 Kahramanmaraş: Ahır Dağı; around Karagöl district, 1500-1600 m, steppe, 2. v. 1991	2
C6 Kahramanmaraş: Ahır Dağı; around Küçükgöl, 1400-1700 m, steppe, 4. viii. 1991	3
C6 Kahramanmaraş: Ahır Dağı; Akdere district, 1300-1600 m, cliff, 3. v. 1991	4
C6 Kahramanmaraş: Ahır Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 21. v. 1992	5
C6 Kahramanmaraş: Ahır Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 3. v. 1991	6
C6 Kahramanmaraş: Ahır Dağı; Ulucak hill, Bakacak ridge, 1200-1500 m, steppe, 21. v. 1992	7
C6 Kahramanmaraş: Ahır Dağı; around Mikan hill, 2150 m, steppe, 4. v. 1991	8
C6 Kahramanmaraş: Ahır Dağı; around Küçükgöl, 1400-1700 m, steppe, 19. x. 1990	9
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 9. vii. 1991	10
C6 Kahramanmaraş: Ahır Dağı; around İncebel hill, 1400-1600 m, rocky place, 26. vi. 1992	11
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 10. vii. 1991	12
C6 Kahramanmaraş: Ahır Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000m, steppe, 29. vi. 1992	13
C6 Kahramanmaraş: Ahır Dağı; Akdere district, 1300-1600 m, cliff, 4. v. 1991	14
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 21. v. 1992	15
Ahur Dağı; around Kızılyatak, 1800-2000 m, steppe, 10. vii. 1991	16
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 19. vii. 1991	17
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 8. vii. 1991	18
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 23. iv. 1992	19
C6 Kahramanmaraş: Ahır Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 6. v. 1991	20
Ahur Dağı; around Karagöl district, 1500-1600 m, steppe, 21. v. 1992	21
Ahur Dağı; Ulucak hill, Bakacak ridge, 1200-1500 m, steppe, 22. v. 1992	22
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 6. vii. 1991	23
C6 Kahramanmaraş: Ahır Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe 2. v. 1992	24
C6 Kahramanmaraş: Ahır Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 28. vi. 1992	25
C6 Kahramanmaraş: Ahır Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 24. vi. 1992	26
Ahur Dağı; around Kakmakaya, 1700-1800 m, steppe, 11. vii. 1991	27
C6 Kahramanmaraş: Ahır Dağı; east of Akdere district, 1800 m, steppe, 22. v. 1992	28
C6 Kahramanmaraş: Ahır Dağı; around Çağman hill, 1800-2000 m, cliff, 3. v. 1991	29
C6 Kahramanmaraş: Ahır Dağı; Akdere district, 1300-1600 m, cliff, 3. v. 1992	30
Ahur Dağı; Tekeyatağı vine-yard, 1350-1500 m, steppe, 2. viii. 1991	31
C6 Kahramanmaraş: Ahır Dağı; south of Karagöl, 1750-1850 m, steppe, 31. vii. 1991	32
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 4. viii. 1991	33
C6 Kahramanmaraş: Ahır Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 25. vi. 1992	34
C6 Kahramanmaraş: Ahır Dağı; around İncebel hill, 1400-1600 m, rocky place, 26. vi. 1992	35
C6 Kahramanmaraş: Ahır Dağı; around Karagöl district, 1500-1600 m, steppe, 19. x. 1990	36
C6 Kahramanmaraş: Ahır Dağı; Karayatak hill, 1800 m, steppe, 1. viii. 1991	37
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 27. vi. 1992	38
Ahur Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 24. v. 1992	39
C6 Kahramanmaraş: Ahır Dağı; around Küçükgöl, 1400-1700 m, steppe, 26. vi. 1992	40
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 22. v. 1992	41
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 7. vii. 1991	42
C6 Kahramanmaraş: Ahır Dağı; around Habur hill, 1800-2000 m, steppe, 31. vii. 1991	43
C6 Kahramanmaraş: Ahır Dağı; Çallıbalma district, 1700-1800 m, steppe, 12. vii. 1991	44
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 21. v. 1991	45
C6 Kahramanmaraş: Ahır Dağı; around Mikan hill, 2150 m, steppe, 6. v. 1991	46
C6 Kahramanmaraş: Ahır Dağı; Sulutarla ridge, 1200-1300 m, steppe, 22. iv. 1992	47

Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 25. vi. 1992	48
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1200-1500 m, steppe, 25. vi. 1992	49
C6 Kahramanmaraş: Ahur Dağı; around Karagöl district, 1500-1600 m, cliff, 21.v.1992	50
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 26. vi. 1992	51
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1200-1500 m, Steppe, 2. v. 1992	52
C6 Kahramanmaraş: Ahur Dağı; Keklik stream, 1600-1700 m, cliff. steppe, 1. viii. 1991	53
C6 Kahramanmaraş: Ahur Dağı; south of Karagöl, 1750-1850 m, steppe, 4. viii. 1991	54
C6 Kahramanmaraş: Ahur Dağı; south of Karagöl, 1750-1850 m, steppe, 31. vii. 1991	55
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 24. v. 1992	56
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1200-1500 m, <i>Quercus</i> sp. shrubs, 21. vii. 1992	57
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 27. vi. 1992	58
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 21. v. 1991	59
C6 Kahramanmaraş: Ahur Dağı; east of Akdere district, 1800 m, steppe, 9. vii. 1991	60
C6 Kahramanmaraş: Ahur Dağı; around Karagöl district, 1500-1600 m, cliff, 22. v. 1992	61
C6 Kahramanmaraş: Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 11. vii. 1991	62
C6 Kahramanmaraş: Ahur Dağı; Akdere district, 1300-1600 m, cliff, 13. ix. 1991	63
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 25. vi. 1991	64
C6 Kahramanmaraş: Ahur Dağı; around Küçükikgöl, 1400-1700 m, steppe, 25. vi. 1992	65
C6 Kahramanmaraş: Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 25. vii. 1992	66
C6 Kahramanmaraş: Ahur Dağı; around İncebel hill, 1400-1600 m, rocky place, 2. viii. 1991	67
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 13. ix. 1991	68
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 25. v. 1992	69
Ahur Dağı; south of Karagöl, 1750-1850 m, steppe, 2. viii. 1991	70
C6 Kahramanmaraş: Ahur Dağı; south of Karagöl, 1750-1850 m, steppe, 13. ix. 1991	71
C6 Kahramanmaraş: Ahur Dağı; east of Akdere district, 1800 m, steppe, 3. v. 1991	72
Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 9. vii. 1992	73
C6 Kahramanmaraş: Ahur Dağı; east of Akdere district, 1800 m, steppe, 13. ix. 1993	74
C6 Kahramanmaraş: Ahur Dağı; Akdere district, 1300-1600 m, cliff, 9.vii. 1991	75
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1200-1500 m, steppe, 21. v. 1991	76
Ahur Dağı; around Karagöl district, 1500-1600 m, steppe, 22. v. 1992	77
C6 Kahramanmaraş: Ahur Dağı; around Küçükikgöl, 1400-1700 m, steppe, 22. v. 1992	78
C6 Kahramanmaraş: Ahur Dağı; Akdere district, 1300-1600 m, cliff, 3.v.1991	79
C6 Kahramanmaraş: Ahur Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 20. vii. 1992	80
C6 Kahramanmaraş: Ahur Dağı; south of Karagöl, 1750-1850 m, steppe, 5. viii. 1991	81
Ahur Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 13. ix. 1991	82
C6 Kahramanmaraş: Ahur Dağı; around İncebel hill, 1400-1600 m, rocky place, 27. vi. 1992	83
C6 Kahramanmaraş: Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 5. vii. 1991	84
C6 Kahramanmaraş: Ahur Dağı; around Çağman hill, 1800-2000 m, cliff, 15.vi.1991	85
C6 Kahramanmaraş: Ahur Dağı; Eğrigöl district, 1800-2000 m, steppe, 10. vii. 1991	86
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1200-1500 m, steppe, 22. iv. 1992	87
C6 Kahramanmaraş: Ahur Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 21. vii. 1992	88
C6 Kahramanmaraş: Ahur Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 19. vii. 1992	89
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 5. vii. 1991	90
C6 Kahramanmaraş: Ahur Dağı; Kızıl Tepe district, 2000 m, steppe, 4. v. 1991	91
C6 Kahramanmaraş: Ahur Dağı; Kızıl Tepe district, 2000 m, rocky place, 4. v. 1991	92
C6 Kahramanmaraş: Ahur Dağı; around İncebel hill, 1400-1600 m, rocky place, 22. iv. 1992	93
C6 Kahramanmaraş: Ahur Dağı; Yedikuyular yaylaları, Bağlama district, 1800-2000 m, steppe, 21. iv. 1992	94
C6 Kahramanmaraş: Ahur Dağı; Çallıbalma district, 1700-1800 m, steppe, 22. iv. 1992	95
C6 Kahramanmaraş: Ahur Dağı; Ulucak hill, Bakacak ridge, 1500-2000 m, steppe, 6.vi.1992	96

C6 Kahramanmaraş: Ahır Dağı; AKdere district, 1300-1600 m, cIII, 7. v. 1991	97
Binboğa Dağı	
B6 Kayseri: Yalak, Binboğa Dağı; Yalak district, 1800-2500 m, steppe, 4. viii. 1991	98
Göksun, Binboğa Dağı; Sıcak summer pasture, 2600-2900 m, steppe, 21. vii. 1992	99
Göksun, Binboğa Dağı, Doğanonak village, Kargöze ridges, 1450-1900 m, steppe, 21. iv. 1992	100
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References

- Aedo, C. 1996: Revision of *Geranium* Subgenus *Erodioidea* (*Geraniaceae*). — Syst. Bot. Monogr. **49**: 1-104.
- Akman, Y. & Daget, P. 1971: Quelques Aspects Synoptiques des Climats de la Turquie. Bull. Soc. Long. Geogr — **5(3)**: 270-300.
- 1994: Biyoiklim. — Palme yayınları, Ankara.
- Anonymous (IUCN) 2001: IUCN red List Categories: v. 3.1. — Gland, Switzerland; Cambridge.
- Aytaç, Z. & Duman, H. 1995: New Floristic Records for the Grid Squares B6 and C6. — Turkish J. Bot. **19**: 615-621.
- 1997: The Revision of the Section *Dasyphyllium* Bunge of the Genus *Astragalus* L. of Turkey. — Turkish J. Bot., **21(1)**: 31-59.
- Boissier, E. 1867-1888: Flora Orientalis, **1-5**. — Genova.
- Brummitt, R. K. & Powell, C. E. 1992: Authors of Plant Names. — Kew.
- Çetik, R. 1981: Erciyes Dağı'nın (Kayseri) Vejetasyonu. — S. Ü. Fen-Fak. Derg. **B2**: 23-37.
- 1985: The Vegetation of Central Anatolia (Turkey) I. — Konya.
- Davis, P. H. 1965-1985: Flora of Turkey and the East Aegean Islands, **1-9**. — Edinburgh.
- Mill, R. R. & Tan, K. 1988: Flora of Turkey and the East Aegean Islands, **10**. — Edinburgh.
- Duman, H. 1991: "Flora of Engizek Mountain (Kahramanmaraş) I. — J. Biol. Fac. Arts Gazi Univ. **2**: 3-55.
- , Aytaç, Z. & Vural, M. 1995: Two New Taxa from South Anatolia. — Tr. J. Bot. **19**: 477-479.
- , — & Başer, H. C. 1998: Two New Species and A New Hybrid from Anatolia. — Tr. J. Bot. **22**: 51-55.
- Ekici, M. & Aytaç, Z. 2001: A new species of *Astragalus* L. (Sect. *Hololeuca* Bunge) (*Leguminosae*) from Anatolia-Turkey. — Ann. Bot. Fennici **38(3)**: 171-174.
- Ekim, T. & Güner, A. 1986: The Anatolian Diagonal: fact or fiction? — Proc. Roy. Soc. Edinburgh, **B89**: 69-77.

- , Koyuncu, M., Vural, M., Duman, H., Aytaç, Z. & Adıgüzel, N. 2000: Türkiye Bitkileri Kırmızı Bitki kitabı, — Ankara.
- Gemici, Y. 1994: Bolkar Dağları'nın (Orta Toroslar) Flora ve Vegetasyonu Üzerine Genel Bilgiler — Tr. J. Bot. **18**: 81-89.
- Güner, A., Özhatay, N., Ekim, T. & Başer, K. H. C. 2000: Flora of Turkey and the East Aegean Islands, **11**. — Edinburgh.
- Lassen, P. 1989: A new delimitation of the genera *Coronilla*, *Hippocrepis*, and *Securigera* (*Fabaceae*). — Willdenowia **19**: 49-62.]
- Leblebici, E., Duman, H. & Aytaç, Z. 1993: *Polygonum ekimianum* (*Polygonaceae*), a new species from Anatolia. — Willdenowia **23**:163-165.
- Maassoumi, A. A. 1998: *Astragalus* in the Old World. Check-List. — Tehran.
- Meikle, R. 1977: Flora of Cyprus. — Kew.
- Podlech, D. 1975: Zur Taxonomic Und Nomenklatur Der Tragacanthoiden *Astragali* . — Mitt. Bot. Staatssamml. **12**:153-166.
- 1988: Revision von *Astragalus* L. Sect. *Caprini* DC. (*Leguminosae*), Mitt. Bot. Staatssamml. **25**: 1-924.— München.
- Köy İşleri B. T. G. M. 1973a: Kahramanmaraş İli Toprak Kaynağı Envanter Raporu, — Ankara.
- Köy İşleri B. T. G. M. 1973b: Ceyhan Havzası Toprakları, 285, — Ankara.
- Yıldız, B. 2001: Floristical Characteristics of Berit Dağı (Kahramanmaraş), — Tr. J. Bot. **25(2)**: 63-103.

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Floristic catalogue

SPERMATOPHYTA

ANGIOSPERMAE

DICOTYLEDONES

APOCYNACEAE

Vinca herbacea Waldst. & Kit.

212, A. (3640) & D.; 048, A. (4821) & D. cosmop.

ARISTOLOCHIACEAE

Aristolochia maurorum L.

059, A. (4598) & D.; 205, A. (3601) & D.; 190, A. (3724) & D. Ir.-Tur. ele.

ASCLEPIADACEAE

Vincetoxicum canescens (Willd.) Decne. subsp. *canescens*

199, A. (3919) & D. Ir.- Tur. ele.

BERBERIDACEAE

Berberis crataegina DC.

105, A. (4388) & D. Ir.- Tur. ele.

BORAGINACEAE

Alkanna cappadocica Boiss. & Balansa

139, A. (5038a) & D. End. LR. Ir.-Tur. ele.

A. megacarpa DC.

139, A. (5038b) & D. End. LR. Ir.-Tur. ele.

A. orientalis (L.) Boiss. var. *orientalis*

102, A. (3738) & D. Ir.- Tur. ele.

Anchusa aucheri DC.

47, A. (4501) & D. cosmop.

A. strigosa Labill.

67, A. (4258) & D. cosmop.

Arnebia densiflora (Nordm.) Ledeb.

115, A. (5164) & D. Ir.-Tur. ele.

Asperugo procumbens L.

005, A. (4560) & D. Eurosib.. ele.

Brunnera orientalis (Schenk) Johnston

190, A. (3727) & D. Ir.-Tur. ele.

Buglossoides arvensis (L.) Johnston

006, A. (3537) & D.; 102, A. (3660) & D. cosmop.

B. incrassata (Guss.) Johnston

52, A. (4647) & D.; 104, A. (4689) & D. Medit. ele.

Heliotropium Haussknechtii Bunge

31, A. (4265) & D. Locus classicus. End. LR. Medit. ele.

Lappula barbata (M Bieb.) Gurke

123, A. (5045) & D. Ir.-Tur. ele.

Myosotis alpestris F. W. Schmidt subsp. *alpestris*

102, A. (3744) & D.; 61, A. (4663) & D. cosmop.

M. refracta Boiss. subsp. *refracta*

14, A. (3539) & D.; 102, A. (3669) & D. Medit. ele.

M. stricta Link ex Roem. & Schultes

201, A. (3621) & D.; 61, A. (4658) & D. Eurosib. ele.

M. sylvatica subsp. *rivularis* Vestergren

180, A. (4714) & D. Eurosib. ele.

Nonea pulla subsp. *scabrisquamata* Baytop

99, A. (5460) & D. Ir.-Tur. ele.

N. stenosolen Boiss. & Balansa

1, A. (3511) & D.; 102, A. (3649) & D. End. LR. Ir.-Tur. ele

Omphalodes luciliae subsp. *cilicica* (Brand) Bornm.

102, A. (5496) & D. End. LR. Medit. ele.

Onosma alborosea Fisch. & C.A. Mey.

- 102, A. (3645) & D. Ir.-Tur. ele.
O. aucheriana DC.
 106, A. (4574) & D. Medit. ele.
O. caerulescens Boiss.
 72, A. (3554) & D.; 216, A. (4594) & D. Ir.-Tur. ele.
O. mollis DC.
 34, A. (4805) & D. Ir.-Tur. ele.
O. mutabilis Boiss.
 5, A. (4562) & D. End. LR.
O. nana DC.
 104, A. (4699) & D. End. LR. Medit. ele.
O. sericea Willd.
 198, A. (3950) & D.; 34, A. (4813) & D. Ir.-Tur. ele.
O. taurica Willd. var. *taurica*
 26, A. (4739) & D.; 139, A. (5043) & D. cosmop.
O. trachytricha Boiss.
 199, A. (3876) & D.; 39, A. (4754) & D. Ir.-Tur. ele.
Paracaryum cristatum (Schreb.) Boiss. subsp. *cristatum*
 7, A. (4603) & D.; 141, A. (5268) & D. End. LR. Ir.-Tur. ele.
P. hirsutum (DC.) Boiss.
 41, A. (4670) & D. Ir.-Tur. ele.
P. lithospermifolium subsp. *cariense* var. *erectum* R. R. Mill
 35, A. (4857) & D. Typus classicus. End. LR. Ir.-Tur. ele.
P. polycarpum (Rech. fil.) R. R. Mill
 12, A. (4183) & D. Typus classicus. End. LR. Medit. ele.
P. regulosum (DC.) Boiss.
 201, A. (3581) & D. cosmop.
P. reuteri Boiss. & Hausskn.
 102, A. (5507) & D. Typus classicus. End. LR. Medit. ele.
Rindera caespitosa (DC.) Bunge
 173, A. (5221) & D. End. LR. Ir.-Tur. ele.
R. lanata (Lam.) Bunge var. *lanata*
 124, A. (5090) & D. cosmop.
R. lanata var. *canescens* (DC.) Kusn.
 204, A. (3638) & D. Ir.-Tur. ele.
Rochelia cancellata Boiss. & Balansa
 76, A. (4595) & D. Ir. Tur. ele.
R. disperma (L. fil.) C. Koch var. *disperma*
 6, A. (3538) & D.; 127, A. (3639) & D. cosmop.
Solananthus stamineus (Desf.) Wettst.
 183, A. (5483) & D. cosmop.
Symphytum brachycalyx Boiss.
 52, A. (4651) & D. Medit. ele.

CAMPANULACEAE

- Asyneuma amplexicaule* (Willd.) Hand.-Mazz. subsp. *amplexicaule* var. *amplexicaule*
198, A. (3993) & D.; 185, A. (5492) & D. cosmop.
- A. ekimianum* Kit Tan & Yıldız subsp. *ekimianum*
110, A. (4307) & D. End. LR.
- A. eximium* Rech. fil.
143, A. (5512) & D. End. LR. Medit. ele.
- A. limonifolium* (L.) Janch. subsp. *limonifolium*
121, A. (5522) & D. cosmop.
- A. linifolium* (Boiss. & Heldr.) Bornm. subsp. *linifolium*
143, A. (5311) & D. End. LR. Medit. ele.
- A. lobelioides* (Willd.) Hand.-Mazz.
186, A. (5400) & D. Ir.-Tur. ele.
- A. rigidum* (Willd.) Grossh. subsp. *rigidum*
010, A. (4135) & D. Ir.-Tur. ele.
- A. virgatum* (Labill.) Bornm. subsp. *virgatum*
198, A. (3943) & D. cosmop.
- A. virgatum* subsp. *cichoriiforme* (Boiss.) Damboldt
75, A. (4105) & D. End. LR. Medit. ele.
- Campanula glomerata* subsp. *hispida* (Witasek) Hayek
26, A. (4766) & D. cosmop.
- C. involucrata* DC
106, A. (4576) & D. Ir.-Tur. ele.
- C. saxonorum* Gand.
199, A. (3914) & D. End. LR. Ir.-Tur. ele.
- C. telephioides* Boiss. & Hausskn.
012, A. (4169) & D. End. LR. Medit. ele.
- C. strigillosa* Boiss.
109, A. (4315) & D.; 182, A. (4449) & D. End. LR. Medit. ele.
- C. stricta* L. var. *stricta*
119, A. (4965) & D. Ir.-Tur. ele.
- C. stricta* var. *libanotica* (DC.) Boiss.
198, A. (4014) & D.; 101, A. (5282a) & D. Medit. ele.
- C. stricta* var. *alidagensis* Damboldt
198, A. (3952) & D. End. LR. Ir.-Tur. ele.
- C. strigosa* Banks & Sol.
7, A. (4610) & D. Medit. ele.
- Legousia falcata* (Ten.) Fritsch
040, A. (4868) & D.; 115, A. (5141a) & D. Medit. ele.
- L. speculum-veneris* (L.) Chaix
115, A. (5141b) & D. Medit. ele.
- Michauxia tchihatchewii* Fisch. & C.A. Mey.
175, A. (5334) & D. End. LR. Medit. ele.

CAPRIFOLIACEAE

Lonicera nummulariifolia Jaub. & Spach

199, A. (3924) & D.; 035, A. (4856) & D. ; 105, A. (4386) & D. cosmop.

Sambucus ebulus L.

098, A. (4350) & D. Eurosib. ele.

CARYOPHYLLACEAE

Arenaria acerosa Boiss.

198, A. (4001) & D.; 027, A. (4195) & D.; 133, A. (4946) & D. End. LR (lc).

A. acutisepala Hausskn. ex. Williams

039, A. (4751) & D. End. LR. Ir.-Tur. ele.

A. antitaurica McNeill

110, A. (4304) & D. End. LR. Typus classicus.

A. drypidea Boiss.

199, A. (3881) & D.; 134, A. (4302) & D. End. LR. Ir.-Tur.ele.

A. ledebouriana Fenzl var. *ledebouriana*

134, A. (2475) & D. End. LR.

A. ledebouriana var. *parviflora* Boiss.

199, A. (3899) & D.; 123, A. (5098) & D. End. LR. Ir.-Tur. ele.

A. leptoclados (Rchb.) Guss.

133, A. (4941) & D. cosmop.

A. serpyllifolia L.

26, A. (4782) & D. cosmop.

Bufonia calyculata Boiss. & Balansa

198, A. (4000) & D.; 31, A. (4270) & D.; 98, A. (4311) & D. End. LR.

B. tenuifolia L.

32, A. (4224) & D.; 98, A. (4330) & D. cosmop.

Cerastium cerastioides (L.) Britt.

121, A. (5546) & D.

C. dichotomum L. subsp. *dichotomum*

15, A. (4634) & D. cosmop.

C. dichotomum subsp. *inflatum* (Link) Cullen

29, A. (3542) & D. cosmop.

C. fragillimum Boiss.

30, A. (3563 b) & D.; 205, A. (3622) & D. cosmop.

C. gracile Dufur.

19, A. (4522) & D. cosmop.

C. gnaphalodes Fenzl

111, A. (4444) & D. End. LR.

C. purpurascens Adams

115, A. (5104) & D. cosmop.

C. saccardoanum Diratz.

116, A. (4561) & D. End. LR. Ir.-Tur. ele.

Dianthus anatolicus Boiss.

199, A. (3900) & D.; 140, A. (5391) & D. End. LR.

- D. balansae* Boiss.
98, A. (4278) & D. End. LR.
- D. brevicaulis* Fenzl subsp. *brevicaulis*
141, A. (5278) & D. End. LR.
- D. crinitus* var. *crossopetalus* Boiss.
115, A. (5149) & D. cosmop.
- D. floribundus* Boiss.
010, A. (4101) & D. Ir.-Tur. ele.
- D. libanotis* Labrie
199, A. (3916) & D. Ir.-Tur. ele.
- D. masmenaes* Boiss. var. *masmenaes*
012, A. (4167) & D. End. LR. Ir.-Tur. ele.
- D. micranthus* Boiss. & Heldr.
123, A. (5028) & D. cosmop.
- D. orientalis* Adams
206, A. (4047) & D.; 68, A. (4328) & D. cosmop.
- D. polycladus* Boiss.
010, A. (4099) & D. Medit. ele.
- D. strictus* var. *gracilior* (Boiss.) Reeve
32, A. (4218) & D. cosmop.
- D. zonatus* Fenzl var. *zonatus*
105, A. (4399) & D. cosmop.
- Gypsophila aucheri* Boiss.
142, A. (5494) & D. End. VU. Ir.-Tur. ele.
- G. elegans* Bieb.
143, A. (5313) & D. Ir.-Tur. ele.
- G. festucifolia* Hub.-Mor.
110, A. (4294) & D. End. VU. Ir.-Tur. ele.
- G. libanotica* Boiss.
118, A. (4406) & D. Medit. ele.
- G. pallida* Stapf
197, A. (4045) & D. Ir.-Tur. ele.
- G. sphaerocephala* Fenzl ex Tchihat. subsp. *sphaerocephala*
98, A. (4337) & D. cosmop.
- Holosteum umbellatum* L. var. *umbellatum*
102, A. (3668) & D. cosmop.
- Holosteum umbellatum* var. *glutinosum* (Bieb.) Gay
004, A. (3563 a) & D. cosmop.
- Minuartia anatolica* var. *lanuginosa* McNeill
160, A. (4342) & D. End. LR. Ir.-Tur. ele.
- Minuartia anatolica* var. *polymorpha* McNeill
137, A. (5365) & D. cosmop.
- M. corymbulosa* (Boiss. & Balansa) McNeill var. *corymbulosa*
118, A. (4381) & D. End. LR. Ir.-Tur. ele.
- M. dianthifolia* subsp. *cataonica* McNeill

- 123, A. (5089) & D. Locus classicus. End. LR. Ir.-Tur. ele.
- M. erythrosepala* (Boiss.) Hand.-Mazz. var. *erythrosepala*
138, A. (5430) & D. cosmop.
- M. erythrosepala* var. *cappadocica* (Boiss.) McNeill
115, A. (5143) & D. End. LR. Ir.-Tur. ele.
- M. hamata* (Hauskn.) Mattf.
204, A. (3623) & D.; 35, A. (4852) & D. cosmop.
- M. hirsuta* subsp. *falcata* (Gris.) Mattf.
012, A. (4178) & D. cosmop.
- M. hybrida* (Vill.) Schischk. subsp. *hybrida*
197, A. (4920) & D. cosmop.
- M. juniperina* (L.) Maire & Petitm.
109, A. (3674) & D.; 28, A. (4677) & D. cosmop.
- M. meyeri* (Boiss.) Bornm.
136, A. (5016) & D. Ir.-Tur. ele.
- M. recurva* subsp. *oreina* (Mattf.) McNeill
16, A. (4151) & D. cosmop.
- M. rimarum* (Boiss. & Balansa) Mattf. var. *rimarum*
119, A. (4998) & D. End. LR. Ir.-Tur. ele.
- M. rimarum* var. *multiflora* McNeill
99, A. (5431) & D. End. VU. Ir.-Tur. ele. Type loc.
- Moehringia trinerva* (L.) Clairv.
004, A. (3560) & D. cosmop.
- Petrorhagia cretica* (L.) Ball & Heywood
123, A. (5055) & D. cosmop.
- Phryna ortegioides* (Fisch. & Mey.) Pax & Hoffm.
105, A. (4380) & D. End. LR. Ir.-Tur. ele.
- Saponaria prostrata* Willd. subsp. *prostrata*
115, A. (5184) & D. End. LR. Ir.-Tur. ele.
- Silene akmaniana* Ekim & Çelik
106, A. (4572) & D. End. LR. Ir.-Tur. ele. Second distribution after type localities.
- S. armena* Boiss. var. *armena*
101, A. (5305) & D. End. LR.
- S. arguta* Fenzl
206, A. (3615) & D.; 147, A. (5388) & D. Ir.-Tur. ele.
- S. ampullata* Boiss.
202, A. (3634) & D. Ir.-Tur. ele.
- S. balansae* Boiss.
131, A. (4568) & D. End. EN, Ir.-Tur. ele.
- S. bupleuroides* L.
12, A. (4164) & D. cosmop.
- S. capitellata* Boiss.
208, A. (3583) & D. End. LR. Ir.-Tur. ele.
- S. caramanica* Boiss. & Heldr.

- 144, A. (5332) & D. End. LR.
S. caryophylloides subsp. *stentoria* (Fenzl) Coode & Cullen
 98, A. (4308) & D. End. Ir.-Tur. ele. LR.
S. caryophylloides subsp. *masmenaea* (Boiss.) Coode & Cullen
 149, A. (3211) & D. End. LR.
S. caryophylloides subsp. *binbogaensis* Vural & H. Duman
 150, A. (4567) & D. End. EN.
S. chlorifolia Sm.
 200, A. (3902) & D.; 101, A. (5296) & D. Ir.-Tur. ele.
S. dichotoma Ehrh. subsp. *dichotoma*
 5, A. (4609) & D. cosmop.
S. laxa Boiss. & Kotschy
 34, A. (4844) & D. Ir.-Tur. ele.
S. marschallii C. A. Mey.
 198, A. (4054) & D.; 12, A. (4171) & D.; 123, A. (5052) & D. Ir.-Tur. ele.
S. montbretiana Boiss.
 199, A. (4029) & D. Ir.-Tur. ele.
S. nuncupanda Coode & Cullen
 5, A. (4577) & D.; 99, A. (5419) & D. End. LR (lc).
S. odontopetala Fenzl
 148, A. (4401) & D. cosmop.
S. spergulifolia (Desf.) Bieb.
 5, A. (4575) & D.; 123, A. (5042) & D. Ir.-Tur. ele.
S. stenobotrys Boiss. & Hausskn.
 200, A. (3910) & D.; 145, A. (5242) & D. Ir.-Tur. ele.
S. subconica Friv.
 115, A. (5216) & D. cosmop.
S. supina subsp. *pruinosa* (Boiss.) Chowdh.
 35, A. (4864) & D.; 146, A. (5087) & D. cosmop.
Telephium imperati subsp. *orientale* (Boiss.) Nyman
 207, A. (4040) & D.; 139, A. (5048) & D. cosmop.
T. oligospermum Steud. ex Boiss.
 199, A. (3985) & D. Ir.-Tur. ele.
Velezia rigida L.
 123, A. (5012) & D. cosmop.

CHENOPODIACEAE

- Beta trigyna* Waldst. & Kit.
 153, A. (5364) & D. cosmop.
Chenopodium foliosum (Moench) Aschers.
 12, A. (4181) & D.; 111, A. (4439) & D. cosmop.
Noaea mucronata (Forssk.) Aschers & Schweinf. subsp. *mucronata*
 36, A. (3412) & D. cosmop.
Salsola canescens (Moq.) Boiss.
 37, A. (4252) & D. Ir.-Tur. ele.

CISTACEAE

Fumana procumbens (Dun.) Gren. & Godr.

115, A. (5182) & D. cosmop.

Helianthemum canum (L.) Baumg.

131, A. (4578) & D. cosmop. This species represented with four groups (a, b, c & d) in Flora of Turkey. This takson is belong to Group a

H. ledifolium var. *microcarpum* Willk.

24, A. (4648) & D. cosmop.

H. nummularium (L.) Mill. subsp. *nummularium*

115, A. (5188) & D. cosmop.

H. nummularium subsp. *tomentosum* (Scop.) Schinz & Thell.

7, A. (4589) & D. cosmop.

COMPOSITAE

Achillea biebersteinii Afan.

123, A. (5021) & D. Ir.-Tur. ele.

A. cucullata (Hauskn.) Bornm.

143, A. (5310a) & D. End. LR. Ir.-Tur. ele.

A. falcata L.

7, A. (4584) & D.; 101, A. (5265) & D. Ir.-Tur. ele.

A. gonioccephala Boiss. & Balansa

102, A. (4343) & D.; 123, A. (5075) & D. End. VU. Ir.-Tur. ele.

A. kotschyi Boiss. subsp. *kotschyi*

4, A. (4166) & D.; 112, A. (5378) & D.; 202 A. (4988) & D. comp.

Anthemis adonidifolia Boiss.

115, A. (5198) & D. End. CR. Second gathering after type.

A. armeniaca Freyn & Sint.

7, A. (4646) & D. End. LR. Ir.-Tur. ele.

A. cretica subsp. *pontica* (Willd.) Grierson

199, A. (3933) & D.; 58, A. (4757) & D.; 115, A. (5209) & D. cosmop.

A. hyalina DC.

38, A. (4879) & D. cosmop.

A. kotschyana Boiss. var. *kotschyana*

24, A. (4546) & D. cosmop.

A. tinctoria L. var. *tinctoria*

38, A. (4888) & D. cosmop.

Bellis perennis L.

190, A. (3718) & D. cosmop.

Carduus nutans L. *sensu lato*.

141, A. (5260) & D. cosmop.

Carlina oligocephala Boiss. & Kotschy subsp. *oligocephala*

31, A. (4262) & D.; 178, A. (4428) & D. cosmop.

Centaurea aggregata DC subsp. *aggregata*

207, A. (4059) & D. cosmop.

C. carduiiformis DC. subsp. *carduiiformis* var. *carduiiformis*

- 110, A. (4284) & D. cosmop.
- C. cheirolopha* (Fenzl) Wagenitz
38, A. (4893) & D. Medit. ele.
- C. depressa* M Bieb.
27, A. (4189) & D. cosmop.
- C. drabifolia* subsp. *cappadocica* (DC.) Wagenitz
98, A. (4281) & D. End. LR.
- C. drabifolia* subsp. *detonsa* (Bornm.) Wagenitz
123, A. (5064) & D. End. LR.
- C. lanigera* DC.
163, A. (4702) & D. End. LR. Ir.-Tur. ele.
- C. mucronifera* DC.
34, A. (4798) & D.; 109, 1. vii. 1992, A. (5117) & D. End. LR. Ir.-Tur. ele.
- C. polypodiifolia* Boiss. var. *polypodiifolia*
102, A. (5343) & D. cosmop.
- C. saligna* (Koch) Wagenitz
10, A. (4139) & D. End. LR. Ir.-Tur. ele.
- C. triumfettii* All.
69, A. (4744) & D. cosmop. Group B.
- C. urvillei* subsp. *armata* Wagenitz
98, A. (4325) & D.; 35, A. (4869) & D. Medit. ele.
- C. virgata* Lam.
98, A. (4365) & D. cosmop.
- Cirsium lappaceum* subsp. *anatolicum* Petr.
67, A. (4257) & D.; 111, A. (4425) & D. Ir.-Tur. ele.
- C. leuconeurum* Boiss. & Hausskn
32, A. (4229) & D.; 111, A. (4429) & D. locus classicus. End. LR (lc).
- C. pubigerum* var. *spinatum* Petr.
111, A. (4426) & D. cosmop.
- C. rhizocephalum* subsp. *sinuatum* (Boiss.) P. H. Davis & Parris
176, A. (3426) & D. cosmop.
- Chardinia orientalis* (L.) Kuntze
71, A. (4460) & D. Ir.-Tur. ele.
- Cicerbita mulgedioides* (Schultz Bip. ex Vis. & Pančić) Beauverd
105, A. (4414) & D.; 15, A. (4579) & D. cosmop.
- Cichorium intybus* L.
102, 5. viii. 1988, A. (2504) & D. cosmop.
- Chondrilla juncea* L. var. *juncea*
53, A. (4242) & D. cosmop.
- Chrysophthalmum montanum* (DC.) Boiss.
204, A. (3906) & D. 98, A. (4338) & D. Ir.-Tur. ele.
- Cousinia cataonica* Boiss. & Hausskn.
105, A. (4420) & D. End. LR. Ir.-Tur. ele.
- C. eriocephala* Boiss. & Hausskn.
98, A. (4292) & D. Type gathering. End. LR. Ir.-Tur. ele.

- C. foliosa* Boiss. & Balansa
199, A. (3984) & D.; 18, A. (4093) & D.; 105, A. (4421) & D. End. LR. Ir-Tur. ele.
- Crepis alpina* L.
49, A. (4841) & D. cosmop.
- C. armena* DC.
119, A. (5003) & D.; 101, A. (5299) & D. End. LR. Ir-Tur. ele.
- C. dioritica* Schott & Ky. ex Boiss.
183, A. (5473) & D. End. LR. Ir-Tur. ele.
- C. foetida* subsp. *rheadifolia* (M Bieb.) Čelak
12, A. (4175) & D.; 200, A. (3904) & D.; 102, A. (4371) & D. cosmop.
- C. foetida* subsp. *commutata* (Spreng.) Babč.
7, A. (4600) & D. cosmop.
- C. sancta* (L.) Babč.
102, A. (3680) & D.; 10, A. (4118) & D. cosmop.
- C. willdenowii* Czern.
101, A. (5284) & D.; 184, A. (5509) & D. Ir-Tur. ele.
- Crupina crupinastrum* (Moris) Vis.
123, A. (5083) & D. Medit. ele.
- Echinops orientalis* Trautv.
32, A. (4230) & D. Ir-Tur. ele.
- E. pungens* Trautv. var. *pungens*
118, A. (4391) & D. Ir-Tur. ele.
- E. ritro* L.
32, A. (4231) & D. cosmop.
- E. vaginatus* Boiss. & Hausskn.
31 A. (4268) & D. Second gathering after type. End. EN. Ir-Tur. ele.
- Gundelia tournefortii* var. *armata* Freyn & Sint.
35, A. (4859) & D. cosmop.
- Hieracium pannosum* Boiss.
102, A. (4283) & D. Medit. ele.
- Inula acaulis* Schott & Kotschy var. *acaulis*
31, A. (4262) & D. 102, A. (4428) & D. cosmop.
- I. britannica* L.
199, A. (4018) & D.; 98, A. (4360) & D. Eurosib.
- I. montbretiana* DC.
110, A. (4316) & D. Ir-Tur. ele.
- Jurinea consanguinea* DC.
109, A. (4282) & D. cosmop.
- J. ramulosa* Boiss. & Hausskn.
198, A. (4031) & D.; 68, A. 4454) & D. Ir-Tur. ele.
- Jurinella moschus* (Hablitz) Bobrov subsp. *moschus*
59, A. (4560) & D. Ir-Tur. ele.
- Lactuca saligna* L.
74, A. (4459) & D. Medit. ele.

- Lapsana communis* subsp. *alpina* (Boiss. & Balansa) Sell
118, A. (4415) & D. Eurosib.
- Lapsana communis* subsp. *intermedia* (MBieb.) Hayek
34, A. (4840) & D. cosmop.
- Leontodon asperrimus* (Willd.) Ball
10, A. (4121) & D.; 123, A. (5030) & D. Ir.-Tur. ele.
- L. crispus* subsp. *asper* var. *setulosus* (Hal.) Kupicha
10, A. (4113) & D.; 123, A. (5071) & D. cosmop.
- Logfia arvensis* (L.) Holub
18, A. (4079) & D.; 123, A. (5095) & D. cosmop.
- Onopordum carduchorum* Bornm. & Beauverd
38, A. (4893) & D. Ir.-Tur. ele.
- O. polycephalum* Boiss.
105, A. (4390) & D. End. LR. Ir.-Tur. ele.
- Picnomon acarna* (L.) Cass.
32, A. (4213) & D. Medit. ele.
- Picris pauciflora* Willd.
101, A. (5306) & D. Medit. ele.
- P. strigosa* M Bieb. subsp. *strigosa*
31, A. (4274) & D.; 107, A. (46423) & D. Ir.-Tur. ele.
- Pilosella* × *fallax* (Willd.) Arv.-Touv.
199, A. (3941) & D.; 15, A. (4172a) & D.; 115, A. (5193) & D. cosmop.
- P. hoppeana* subsp. *isaurica* Hub.-Mor.
143, A. (5316) & D. End. LR. Ir.-Tur. ele.
- P. verruculata* (Link) Soják
15, A. (4172b) & D.; 101, A. (5250) & D. cosmop.
- Ptilostemon afer* subsp. *eburneus* Greuter
53, A. (4237) & D.; 109, A. (4419) & D. End. LR (lc).
- Rhagadiolus angulosus* (Jaub. & Spach) Kupicha
38, A. (4882) & D.; 123, A. (5058) & D. Ir.-Tur. ele.
- R. stellatus* (L.) Gaertn. var. *stellatus*
7, A. (4642) & D. Medit. ele.
- Scariola viminea* (L.) F. W. Schmidt
53, A. (4247) & D. cosmop.
- Scorzonera acantholimon* Hand.-Mazz.
160, A. (4857) & D. Ir.-Tur. ele.
- S. boissieri* Lipsch.
102, A. (4322) & D.; 182, A. (4451) & D. End. VU. Second collection after type gathering.
- S. cana* var. *jacquiniana* (W. Koch.) Chamb.
179, A. (4973) & D. cosmop.
- S. cana* var. *alpina* (Boiss.) Chamb.
113, A. (3745) & D.; 58, A. (4152) & D. Cosmop.
- S. cana* var. *radicosa* (Boiss.) Chamb.
7, A. (4586) & D.; 141, A. (5304) & D. cosmop.

- S. eriophora* DC.
160, A. (5340) & D. End. LR (lc).
- S. kotschyi* Boiss.
7, A. (4615) & D. Ir.-Tur. ele.
- S. latifolia* (Fisch. & C.A. Mey.) DC.
200, A. (3893) & D. Ir.-Tur. ele.
- S. mollis* M Bieb. subsp. *mollis*
205, A. (3598) & D. Medit. ele.
- S. mollis* subsp. *szowitzii* (DC.) Chamb.
5, A. (4644) & D. Ir.-Tur. ele.
- S. phaeopappa* (Boiss.) Boiss.
72, A. (3564) & D.; 180, A. (4717) & D. Ir.-Tur. ele.
- S. sericea* DC.
143, A. (5317) & D.; 151, A. (5475) & D. End. LR.
- S. tomentosa* L.
98, A. (4349) & D. End. LR. Ir.-Tur. ele.
- Senecio cilicicus* Boiss.
102, A. (4875) & D. End. LR. Ir.-Tur. ele.
- S. doriiformis* subsp. *orientalis* (Fenzl) Matthews
140, A. (5384) & D. Ir.-Tur. ele.
- S. eriospermus* DC. var. *eriospermus*
141, A. (5251) & D. Ir.-Tur. ele.
- S. jurineifolius* Boiss. & Balansa
111, A. (4435) & D.; 101, A. (5298) & D. End. LR. Medit. ele.
- Serratula oligocephala* DC.
198, A. (4030) & D. End. LR. Ir.-Tur. ele.
- Siebera nana* (DC.) Bornm.
216, A. (4036) & D.; 71, A. (4264) & D. Ir.-Tur. ele.
- S. pungens* (Lam.) J. Gay
32, A. (4220) & D. Ir.-Tur. ele.
- Tanacetum argenteum* (Lam.) Willd. subsp. *argenteum*
110, A. (4289) & D. End. LR. Ir.-Tur. ele.
- T. armenum* (DC.) Sch. Bip.
102, A. (3665) & D. cosmop.
- T. cadmeum* subsp. *orientale* Grierson
27, A. (4185) & D.; 123, A. (5039) & D. End. LR. Ir.-Tur. ele.
- T. densum* subsp. *amani* Heywood
98, A. (4335) & D. End. LR.
- T. densum* subsp. *eginense* Heywood
199, A. (4027) & D.; 10, A. (4103) & D. End. LR.
- T. kotschyi* (Boiss.) Grierson
191, A. (5534) & D. Ir.-Tur. ele.
- T. nitens* (Boiss. & Noë) Grierson
199, A. (4007) & D.; 15, A. (4567) & D. 141, A. (5249) & D. End. LR.
- Taraxacum microcephaloides* Soest

- 36, A. (3408) & D. cosmop.
T. revertens G. E. Haglund
 5, A. (4556) & D. End. LR. Ir.-Tur. ele.
T. scaturiginosum G. E. Haglund
 122, A. (4904) & D. cosmop.
T. syriacum Boiss.
 36, A. (3409) & D.; 118, A. (4403) & D. Ir.-Tur. ele.
Tragapogon buphthalmoides (DC.) Boiss. var. *buphthalmoides*
 199, A. (3962) & D.; 73, A. (4140) & D.; 179, A. (5336) & D. Ir.-Tur. ele.
T. longirostris var. *abbreviatus* Boiss.
 15, A. (4641) & D.; 123, A. (5020) & D. cosmop.
T. pterodes Panč.
 123, A. (5066) & D. cosmop.
Tripleurospermum callosum (Boiss. & Heldr.) E. Hossain
 44, A. (4202) & D. End. LR.
T. kotschyi (Boiss.) E. Hossain
 176, A. (3429) & D. End. LR.
T. oreades (Boiss.) Rech. var. *oreades*
 31, A. (4553) & D. cosmop.
T. oreades var. *tchihatchewii* (Boiss.) E. Hossain
 6, A. (3530) & D.; 206, A. (3613) & D.; 109, A. (3679) & D. cosmop.
Xeranthemum annuum L.
 98, A. (4369) & D. cosmop.
X. longipapposum Fisch. & C.A. Mey.
 175, A. (5337) & D. cosmop.

CONVOLVULACEAE

- Convolvulus assyricus* Griseb.
 139, A. (5084) & D. End. LR. Ir.-Tur. ele.
C. arvensis L.
 49, A. (4823) & D. cosmop.
C. betonicifolias subsp. *pedicularis* (Boiss.) Parris
 123, A. (5062) & D. Ir.-Tur. ele.
C. dorycnium subsp. *oxysepalus* (Boiss.) Rech. fil.
 44, A. (4210) & D. Medit. ele.

CRASSULACEAE

- Rosularia aizoon* (Fenzl) Berger
 101, A. (5272) & D. Ir.-Tur. ele.
R. sempervivum subsp. *glaucophylla* Egli
 173, A. (5232) & D. Typus classicus.; 200, A. (3922) & D. End. EN.
R. sempervivum subsp. *libanotica* (Labill.) Egli
 49, A. (4797) & D. E. Medit. ele.
Sedum aetnense Tineo
 99, A. (5418) & D. cosmop.

- S. album* L.
115, A. (5121) & D. cosmop.
- S. amplexicaule* DC. subsp. *amplexicaule*
173, A. (5220) & D. Medit. ele.
- S. hispanicum* L. var. *hispanicum*
174, A. (4929) & D. cosmop.
- S. hispanicum* var. *semiglabrum* Fröd.
26, A. (4764) & D.155, A. (5022) & D. cosmop.
- S. laconicum* Boiss. & Heldr.
102, A. (4709) & D. Medit. ele.
- S. magellense* Ten.
99, A. (5461) & D. Medit. ele.
- S. pallidum* Bieb. var. *pallidum*
7, A. (4614) & D. cosmop.
- S. rubens* L.
26, A. (4765) & D. cosmop.
- S. sempervivoides* Bieb.
102, A. (5165) & D. cosmop.
- S. subulatum* (C. Mey.) Boiss.
99, A. (3930) & D.; 136, A. (5096) & D. cosmop.
- S. tenellum* Bieb.
99, A. (5418) & D. cosmop.
- S. ursi* 't Hart
34, A. (4796) & D.; 199, A. (3958) & D. End. LR (lc).
- Sempervivum brevipilum* MuIrhead
98, A. (4295) & D.; 66, A. (5553) & D. End. LR.
- Umbilicus erectus* DC.
118, A. (4402) & D. cosmop.

CRUCIFERAE

- Aethionema arabicum* (L.) DC.
109, A. (3714) & D. cosmop.
- A. armenum* Boiss.
115, A. (5208) & D. Ir.-Tur. ele.
- A. capitatum* Boiss. & Balansa
114, A. (5074) & D. End. LR.
- A. coridifolium* DC.
117, A. (4299) & D. cosmop.
- A. eunomioides* (Boiss.) Bornm.
110, A. (4300) & D. End. LR. Medit. ele.
- A. grandiflorum* Boiss. & Hohen.
201, A. (3438) & D.; 116, A. (5347) & D. Ir.-Tur. ele.
- A. iberideum* (Boiss.) Boiss.
1, A. (3500) & D. 205, A. (3603) & D; 102, A. (3670) & D. cosmop.
- A. oppositifolium* (Pers.) Hedge

- 112, A. (3416) & D. cosmop.
A. schistosum Boiss. & Kotschy
 113, A. (3772) & D. End. LR.
A. speciosum Boiss. & Huet subsp. *speciosum*
 111, A. (4438) & D. Ir.-Tur. ele.
A. stylosum DC.
 205, A. (3628) & D. cosmop.
Alyssum aizoides Boiss.
 121, A. (5543) & D. End. LR (lc).
A. condensatum Boiss. & Hausskn. subsp. *condensatum*
 10, A. (4132 & D.; 122, A. (4905) & D. cosmop.
A. condensatum subsp. *flexibile* (Nyár.) Dudley
 115, A. (5150) & D. cosmop.
A. constellatum Boiss.
 17, A. (4163) & D. cosmop.
A. desertorum Stapf. var. *desertorum*
 102, A. (3653) & D. cosmop.
A. filiforme Nyár.
 199, A. (3997) & D.; 18, A. (4081) D.; 104, A. (4703) & D. End. LR. Ir.-Tur. ele.
A. haussknechtii Boiss.
 119, A. (4994) & D. End. LR.
A. linifolium Steph. ex Willd. var. *linifolium*
 104, A. (4691) & D. cosmop.
A. minutum D.F.K.schltdl. ex DC.
 199, A. (4722) & D. cosmop.
A. minus (L.) Rothm. var. *minus*
 4, A. (3545) & D. cosmop.
A. mouradicum Boiss. & Balansa
 120 A. (5465) & D. cosmop.
A. murale Waldst. & Kit. subsp. *murale* var. *murale*
 199, A. (3931) & D.; 123, A. (5029) & D. cosmop.
A. pateri Nyár. subsp. *pateri*
 18, A. (4081a) & D. End. Ir.-Tur. ele. LR (lc).
A. peltarioides subsp. *virgatiforme* (Nyár.) Dudley
 198, A. (4042) & D. End. LR (lc).
A. praecox Boiss. & Balansa var. *praecox*
 119, A. (4971) & D. End. LR (lc).
A. strictum Willd.
 206, A. (3604) & D.; 15, A. (4624) & D. Ir.-Tur. ele.
A. strigosum subsp. *cedrorum* (Schott & Kotschy) Dudley
 102, A. (3662) & D. cosmop.
A. szowitsianum Fisch. & C.A. Mey.
 4, A. (3562) & D.; 199, A. (3979) & D. cosmop.
A. xanhocarpum Boiss.
 102, A. (3703) & D.; 199, A. (3978) & D.; 16, A. (4147) & D. cosmop.

- Anchonium elichrysofolium* (DC.) Boiss. subsp. *elichrysofolium*
129, A. (5281) & D. cosmop.
- Arabis caucasicum* subsp. *brevifolia* (DC.) Cullen
102, A. (3664) & D.; 20, A. (3525) & D.; 205, A. (3637) & D. Medit. ele.
- A. montbretiana* Boiss.
4, A. (3553) & D.; 205, A. (3600) & D. Ir.-Tur. ele.
- A. nova* Vill.
102, A. (3647) & D. cosmop.
- Aubrieta canescens* subsp. *macrostyla* Cullen & Hub.-Mor.
102, A. (3682) & D. Locus classicus..
- Aurinaria rupestris* subsp. *cylocarpa* (Boiss.) Cullen & Dudley
115, A. (5114) & D. End. LR(nt).
- Barbarea minor* Koch var. *minor*
6, A. (3526) & D.; 124, A. (3762) & D. cosmop.
- B. plantaginea* DC.
126, A. (3737b) & D. cosmop.
- B. trichopoda* Hauusk. ex Bornm.
124, A. (3737a) & D. End. LR.
- Camelina rumelica* Vel.
102, A. (3681) & D. cosmop.
- Capsella bursa-pastoris* (L.) Medik.
102, A. (3708) & D. cosmop.
- Chorisporea tenella* (Pall.) DC.
104, A. (4688) & D. cosmop.
- Coluteocarpus vesicaria* (L.) Holmboe subsp. *vesicaria*
13, A. (5002) & D. Ir.-Tur. ele.
- Crambe orientalis* L. var. *orientalis*
106, A. (4591) & D. Ir.-Tur. ele.
- Conringia perfoliata* (C. A. Mey.) Busch
102, A. (3656) & D. cosmop.
- Clypeola jonthlaspi* Boiss.
102, A. (3663) & D. cosmop.
- Draba bruniifolia* Stev. subsp. *bruniifolia*
102, A. (3698) & D. 124, A. (3745) & D. cosmop.
- Draba bruniifolia* subsp. *olympica* (Sibth. & DC.) Coode & Cullen
100, A. (4487) & D. cosmop.
- Drabopsis verna*. Koch
1, A. (3505) & D.; 205, A. (3633) & D.; 127, A. (3639) & D. Ir.-Tur. ele.
- Erophila minima* Mey.
19, A. (4520) & D. cosmop.
- E. verna* (L.) Chevall. subsp. *verna*
125, A. (4489) & D. cosmop.
- Erysimum crassipes* Fisch. & C.A. Mey.
16, A. (4148) & D.; 123, A. (5036) & D. cosmop.
- E. diffusum* Ehrh.

- 205, A. (3639) & D.; 10, A. (4112) & D. Eurosib.
E. goniocaulon Boiss.
 12, A. (4162) & D.
E. hamosum Blanche ex Post
 130, A. (4956) & D. Ir.-Tur. ele.
E. kotschyannum Gay
 102, A. (3687) & D. End. LR.
E. smyrnaeum Boiss. & Balansa
 200, A. (3875) & D. ; 23, A. (4089) & D. cosmop.
Erysimum goniocaulon Boiss.
 12, A. (4162) & D.
E. thyrsoideum Boiss. subsp. *thyrsoideum*
 102, A. (3687) & D. End. LR.
Fibigia eriocarpa (DC.) Boiss.
 5, A. (4568) & D. cosmop.
F. macrocarpa (Boiss.) Boiss.
 199, A. (3928) & D.; 118, A. (4384) & D. cosmop.
Graellsia davisiana Poulter
 98, A. (4305) & D. End. EN. Locus classicus. This species not collected another location. It's known only type area.
Heldreichia bupleurifolia Boiss.
 198, A. (4035) & D. cosmop.
Hesperis bicuspidata (Willd.) Poiret.
 128, A. (3728) & D.; 21, A. (4662) & D. cosmop.
H. kotschyi Boiss.
 104, A. (4704) & D. End. LR Ir.-Tur. ele.
H. matronalis subsp. *cilicica* (Siehe Bornm.) Cullen
 76, A. (4653) & D. End. LR.
H. pendula DC.
 206, A. (3579) & D.; 100, A. (4500) & D.; 22, A. (4637) & D. cosmop.
Isatis aucheri Boiss.
 6, A. (3534) & D.; 102, A. (3690) & D. End. LR. Ir.-Tur. ele.
I. candolleana Boiss.
 7, A. (4592) & D. End. LR. Ir.-Tur. ele.
I. cappadocica subsp. *subradiata* var. *gudrunensis* (Boiss.) P. H. Davis
 200, A. (3894) & D. Ir.-Tur. ele.
I. cappadocica subsp. *macrocarpa* (Jaub. & Spach) P. H. Davis
 200, A. (3895) & D. Ir.-Tur. ele.
Iberis sempervirens L.
 14, A. (3559) & D. 102, A. (3685) & D.
I. taurica DC.
 108, A. (5359) & D. cosmop.
Peltaria angustifolia DC.
 5, A. (4597) & D. cosmop.
Ricotia aucheri (Boiss.) Burtt

202, A. (3584) & D. Ir.-Tur. ele.

Thlaspi cataonicum Reut.

6, A. (3542) & D. End. LR.

T. densiflorum Boiss. & Kotschy

1, A. (3498) & D. cosmop.

T. perfoliatum L.

1, A. (3501) & D; 100, A. (4490) & D. cosmop.

CUCURBITACEAE

B. multiflora Boiss. & Heldr.

5, A. (4635) & D. Ir.-Tur.ele.

CUSCUTACEAE

Cuscuta kurdica Engelm.

199, A. (3989) & D. Ir.-Tur. ele.

C. palaestina subsp. *balansae* (Yuncker) Plitmann

110, A. (4288) & D. cosmop.

C. planiflora Ten.

199, A. (3960) & D. cosmop

DIPSACACEAE

Cephalaria procera Fisch. & Lall.

89, A. (5327) & D. Ir.-Tur. ele.

C. speciosa Boiss. & Kotschy

98, A. (4348) & D. ;36, A. (4455) & D. End. Ir.-Tur. ele. LR (lc).

C. stellipilis Boiss.

198, A. (4034) & D.; 10, A. (4098) & D ; 110, A. (4377) & D. Ir.-Tur. ele.

Pterocephalus pinardii Boiss.

98, A. (4362) & D. End. LR. Medit. ele.

Scabiosa argentea L.

102, A. (4273) & D. cosmop.

EUPHORBIACEAE

Andrachne telephioides L.

4, A. (3556) & D.; 207, A. (4032) & D. cosmop.

Euphorbia cardiophylla Boiss. & Heldr.

100, A. (4483) & D. End. LR (lc).

E. denticulata Lam.

89, A. (5323) & D. 218, A. (3715) & D. Ir.-Tur. ele.

E. erythron Boiss. & Heldr.

115, A. (5161) & D. End. LR(nt). Ir.-Tur. ele.

E. herniariifolia Willd.

102, A. (3685) & D.; 88, A. (5433) & D. cosmop.

E. macroclada Boiss.

31, A. (4269) & D. Ir.-Tur. ele.

E. petrophila C. A. Mey. var. *petrophila*

199, A. (4012) & D. Eurosib.

E. szovitsii var. *kharputensis* Aznav. Ex M. S. Khan

200, A. (3917) & D.; 12, A. (4176) & D. Ir.-Tur. ele.

GENTIANACEAE

Swertia. longifolia Boiss.

188 A & D. obs. Eurosib. ele.

GERANIACEAE

Erodium micropetalum Boiss. & Hausskn.ex Boiss.

157, A. (5416) & D. End. LR. Type loc.

Geranium libanoticum Schenk

206, A. (3582) & D. cosmop.

G. lucidum L.

40, A. (4866) & D. cosmop.

G. cinereum Cavanilles

156, A. (4924) & D. cosmop.

G. subacutum (Boiss.) Aedo

98, A. (4306) & D.156, A. (4924) & D. End. LR. Ir.-Tur. ele

G. tuberosum L. subsp. *tuberosum*

6, A. (3535) & D. cosmop.

Pelargonium endlicherianum Fenzl

118, A. (4393) & D. cosmop.

GLOBULARIACEAE

Globularia trichosantha Fisch. & C A. Mey.

102, A. (3642) & D.; 41, A. (4669) & D. Ir.- Tur. ele.

HYPERICACEAE

Hypericum confertum subsp. *stenobotrys* (Boiss.) Holmboe

154, A. (5210) & D. cosmop.

H. elongatum subsp. *microcalycinum* (Boiss. & Heldr.) Boiss.

35, A. (5113) & D. Ir.-Tur. ele.

H. lyidium Boiss.

35, A. (4865) & D. Ir.-Tur. ele.

H. olivieri (Spach) Boiss.

5, A. (4563) & D. Ir.-Tur. ele.

H. scabrum L.

5, A. (4649) & D.; 199, A. (3938) & D. Ir.-Tur. ele.

H. spectabile Jaub. & Spach

38, A. (4881) & D. End. VU, Ir.-Tur. ele.

H. uniglandulosum Hausskn. & Bornm.

133, A. (4943) & D. End. LR. Ir.-Tur. ele.

ILLECEBRACEAE

Hernaria incana Lam.

209, A. (5213) & D. cosmop.

H. micrantha A. K. Jackson & Turril

27, A. (4187) & D. Medit. ele.

Paronychia cataonica Chaudhri

115, A. (5133) & D. End. VU.

P. condensata Chaudhri

98, A. (4357) & D. End. LR. Ir.Tur. ele.

P. dudleyi Chaudhri

115, A. (5197 a) & D. End. LR. Ir.-Tur. ele.

Scleranthus. uncinatus Schur

99, A. (4188) & D.; 151, A. (5486) & D. cosmop.

LABIATAE

Acinos rotundifolius Pers.

123, A. (5092) & D. cosmop.

Ajuga chamaepitys subsp. *chia* (Schreb.) Arcang. var. *chia*

115, A. (5180) & D. cosmop.

Ajuga chamaepitys subsp. *laevigata* (Banks. & Sol.) P. H. Davis

5, A. (4581) & D. Ir.-Tur. ele.

Ajuga chamaepitys subsp. *euphratica* P. H. Davis

80, A. (5405) & D. End. LR. Ir.-Tur. ele.

A. salicifolia (L.) Schreb.

193, A. (5338) & D. Ir.-Tur. ele.

Eremostachys laciniata (L.) Bunge

49, A. (4830) & D. Ir.-Tur. ele.

Lallemantia peltata (L.) Fisch. & C.A. Mey.

7, A. (4585) & D.; 106, A. (4592) & D. Ir.-Tur. ele.

Lamium aleppicum Boiss. & Hausskn.

1, A. (3512) & D.; 206, A. (3597) & D.; 102, A. (3648) & D. Ir.-Tur. ele.

L. garganicum subsp. *reniforme* (Montbret & Aucher ex Benth.) R. R. Mill

102, A. (3657) & D. cosmop.

L. macrodon Boiss. & Huet

115, A. (5168) & D. Ir.-Tur. ele.

L. tomentosum Willd. var. *tomentosum*

177, 28. vi. 1992, A. (4935) & D. Ir.-Tur. ele.

Marrubium astracanicum Jacq. subsp. *astracanicum*

10, A. (4129) & D.

M. globosum Montbret & Aucher subsp. *globosum*

18, A. (4090) & D. End. LR. Ir.-Tur. ele.

M. parviflorum Fisch. & Mey. subsp. *parviflorum*

98, A. (4363) & D. Ir.-Tur. ele.

Micromeria, cremnophila subsp. *anatolica* P. H. Davis

177, A. (3417) & D. End. LR. Ir.-Tur. ele.

Nepeta italica L.

83, A. (4863) & D.; 207, A. (4043) & D.; 160, A. (4364) & D. cosmop.

N. nuda subsp. *albiflora* (Boiss.) Gams

199, A. (3964) & D.; 34, A. (4809) & D. cosmop.

N. sorgerae Hedge & Lamond

36, A. (3407) & D. End. LR. Ir.-Tur. ele.

N. trichocalyx Greuter & Burdet

101, A. (5291) & D. End. LR. Ir.-Tur. ele.

Phlomis capitata Boiss.

199, A. (3968) & D.; 18, A. (4091) & D.; 118, A. (4412) & D. End. NT. Ir.-Tur. ele.

P. kotschyana Hub.-Mor.

49, A. (4837) & D. Medit. ele.

P. linearis Boiss. & Balansa

105, A. (4411) & D. ; 199, A. (3972) & D. End NT. Ir.-Tur. ele.

P. pungens var. *hispida* Hub.-Mor.

175, A. (5341) & D. Cosmop.

P. rigida Labill.

67, A. (4256) & D. Ir.-Tur. ele.

Salvia blepharochlaena Hedge & Hub.-Mor.

115, A. (5176) & D. End. LR. Ir.-Tur. ele.

S. bracteata Banks & Sol.

131, A. (4593) & D. Ir.-Tur. ele.

S. caespitosa Montbre Bentham

115, A. (5118) & D. End. LR. Ir.-Tur. ele.

S. candidissima Vahl subsp. *candidissima*

105, A. (4392) & D. Ir.-Tur. ele.

S. candidissima subsp. *occidentalis* Hedge

115, A. (5181) & D. Ir.-Tur. ele.

S. hypargeia Fisch. & C.A. Mey.

123, A. (5063) & D.; 115, A. (5174) & D. End. LR. Ir.-Tur. ele.

S. microstegia Boiss. & Balansa

199, A. (3956) & D.; 59, A. (4571) & D.; 160, A. (5266) & D. Ir.-Tur. ele.

S. multicaulis Vahl

213, A. (3599) & D.; 115, A. (5174) & D. Ir.-Tur. ele.

S. pilifera Montbret & Aucher ex Bentham

7, A. (4617) & D. End. LR. Ir.-Tur. ele.

Scutellaria megalaspis Rech. fil.

81, A. (4397) & D. Ir.-Tur. ele.

S. orientalis subsp. *pinnatifida* J.R.Edm.

98, A. (4366) & D.; 199, A. (3996) & D. cosmop.

S. salviifolia Benth.

7, A. (4628) & D.; 177, A. (5135) & D. End. NT.

Sideritis caeserea H. Duman, Aytaç. & Başer

177, A. (5307) & D. End. EN. Ir.-Tur. ele. Locus classicus.

S. libanotica subsp. *kurdica* (Bornm.) Hub.-Mor.

- 177, 19. vii. 1992, A. (5307) & D. Ir.-Tur. ele.
- S. montana* subsp. *remota* (d'Urv.) P. W. Balansa ex Heywood
115, A. (5191) & D. Medit. ele.
- S. syriaca* subsp. *nusairiensis* (Post) Hub.-Mor.
199, A. (3929) & D.; 82, A. (4456) & D. Medit. ele.
- Stachys annua* subsp. *annua* var. *lycaonica* Bhattacharjee
200, A. (3892) & D. Ir.-Tur. ele.
- S. balansae* Boiss. & Kotschy subsp. *Balansae*
173, A. (5228) & D. cosmop.
- S. citrina* subsp. *chamaesideritis* (Boiss. & Balansa) Bhattacharjee
177, A. (5524) & D. End. LR. Medit. ele.
- S. cretica* subsp. *mersinaea* (Boiss.) Rech. f.il.
73, A. (4096) & D. End. LR (lc).Medit. ele.
- S. lavandulifolia* var. *glabrescens* Bhattacharjee & Hub.-Mor.
199, A. (3959) & D.; 123, A. (5061) & D. Ir.-Tur. ele.
- Teucrium chamaedrys* subsp. *tauricum* Rech. fil.
118, A. (4403) & D. End. LR. Medit. ele.
- T. multicaule* Montbret & Aucher ex Bentham
5, A. (4594) & D. Ir.-Tur. ele.
- T. orientale* var. *puberulens* Ekim
143, A. (5330) & D. Ir.-Tur. ele.
- T. orientale* var. *glabrescens* Hausskn. Ex Bornm.
143, A. (5328) & D. Ir.-Tur. ele.
- T. orientale* subsp. *sypirensis* (C. Koch) Rech. fil.
200, A. (3911) & D.; 18, A. (4084) & D. Ir.-Tur. ele.
- T. polium* L.
7, A. (4251) D.; 199, A. (4324) D. Medit. Ele.
- Thymus cappadocicus* Boiss. var. *cappadocicus*
98, A. (4277) & D. End. LR.
- T. cherlerioides* Vis. var. *cherlerioides*
115, A. (5155) & D. Medit. ele.
- T. kotschyanus* Boiss. & Hohen. var. *kotschyanus*
199, A. (3937) & D.; 18, A. (4070) & D. Ir.-Tur. ele.
- T. kotschyanus* var. *glabrescens* Boiss.
35, A. (4848) & D.; 98, A. (4296) & D. Ir.-Tur. ele.
- T. kotschyanus* var. *eriophorus* (Ronniger) Jalas
84, A. (3940) & D.; 199, A. (4004) & D. Ir.-Tur. ele.
- T. leucostomus* Hausskn. & Velen. var. *leucostomus*
141, A. (5258) & D. End. LR. Ir.-Tur. ele.
- T. leucotrichus* Hal. var. *leucotrichus*
98, A. (4372) & D.; 34, A. (4793) & D. Medit. ele.
- T. migricus* Klokov & Desj.-Shost.
199, A. (3940) & D.; 18, A. (4075) & D. Ir.-Tur. ele.
- T. sipyleus* Boiss. subsp. *sipyleus* var. *sipyleus*
199, A. (3982) & D. End. LR (lc).

- T. sipyleus* subsp. *rosulans* (Borbás) Jalas
123, A. (5088) & D. cosmop.
- Ziziphora capitata* L.
85, A & D. obs. Ir.-Tur. ele.
- Z. clinopodioides* Lam.
10, A. (4097) & D.; 177, A. (4216) & D. cosmop.
- Z. tenuior* L.
115, A. (5196) & D. Ir.-Tur. ele.

LEGUMINOSAE

- Astragalus akmanii* Aytaç & H. Duman.
43, A. (4219) & D. End. CR.
- A. andrachnifolius* Fenzl
213, A. (3629) & D.; 56, A. (4784) & D.
- A. angustifolius* Lam. subsp. *angustifolius* var. *angustifolius*
34, A. (4786) & D. cosmop.
- A. asciocalyx* Bunge
122, A. (4899) & D. Ir.-Tur. ele.
- A. barbeyanus* Post
11, A. (4858) & D. Ir.-Tur. ele.
- A. brachystachys* DC.
76, A. (4572) & D. Ir.-Tur. ele.
- A. brachycalyx* Fisch.
164, A. (5489) & D. Ir.-Tur. ele.
- A. brachypterus* Fisch.
214, A. (3913) & D. Ir.-Tur. ele.
- A. cephalotes* Banks & Sol.
214, A. (4060) & D.; 204, A. (4892) & D.
- A. condensatus* Ledeb.
162, A. (5080) & D. Ir.-Tur. ele.
- A. cymbibracteatus* Hub.-Mor. & Chamberlain
118, A. (4417) & D. End. LR. Ir.-Tur. ele.
- A. campylosema* Boiss. subsp. *campylosema*
46, A. (3587) & D. End. LR Ir.-Tur. ele.
- A. caraganae* Fisch & C.A. Mey.
192, A. (3890) & D. Ir.-Tur. ele.
- A. christianus* L.
199, A. (3988) & D.; 45, A. (4621) & D.; 161, A. (4599) & D. cosmop.
- A. cretaceus* Boiss. & Kotschy
42, A. (4100) & D. Ir.-Tur. ele.
- A. cymbostegius* Bunge
18, A. (4092) & D. End. LR.
- A. densifolius* Lam. subsp. *densifolius*
202, A. (3618) & D.; 109, A. (3651) & D. Ir.-Tur. ele.
- A. depressus* L. var. *depressus*

- 102, A. (3684) & D. cosmop.
- A. dipodurus* Bunge
207, A. (4066) & D. Ir.-Tur. ele.
- A. dumanii* M. Ekici & Aytaç
116, A. (5357) & D. End. VU.
- A. elbistanicus* Hub.-Mor. & Chamberlain
212, A. (2081) & D. End. LR. Ir.-Tur. ele.
- A. elongatus* Willd. subsp. *elongatus*
34, A. (4838) & D.; 106, A. (4590) & D. Ir.-Tur. ele.
- A. elongatus* subsp. *nucleiferus* (Boiss.) Chamberlain.
52, A. (4650) & D. Ir.-Tur. ele.
- A. emarginatus* Lab.
41, A. (4673) & D. Ir.-Tur. ele.
- A. fraxinifolius* DC.
199, A. (3986) & D. Ir.-Tur. ele.
- A. globosus* Vahl
115, A. (5109) & D. Ir.-Tur. ele.
- A. gummifer* Lab.
199, A. (4021) & D. Ir.-Tur. ele.
- A. haussknechtii* Bunge
99, A. (5427) & D. End. LR. Ir. -Tur. ele.
- A. hirsutus* Vahl
163, A. (4697) & D. End. LR.
- A. kurdicus* Boiss.
199, A. (4017) & D.; 16, A. (4156) & D. Ir.-Tur. ele.
- A. lamarkii* Boiss.
54, A. (4332) & D.; 200, A. (3907) & D.; 115, A. (5214) & D. End. LR. Ir.-Tur. ele.
- A. leporinus* var. *hirsutus* (Post) Chamb.
47, A. 4496 & D. End. LR.
- A. lineatus* Lam. var. *lineatus*
4, A. (3565) & D.; 104, A. (4682) & D.
- A. lineatus* var. *longides* (Freyn) Matthews
115, A. (5111) & D.; 50, A. (4665) & D. Ir.-Tur. ele.
- A. lycius* Boiss.
102, A. (3683) & D. cosmop.
- A. macrourus* Fisch. & C.A. Mey.
202, A. (3580) & D. Ir.-Tur. ele.
- A. macrocephalus* subsp. *finitimus* (Bunge) Chamberlain
207, A. (4064) & D.; 64, A. (4831) & D.; 101, A. (5269) & D. Ir.-Tur. ele.
- A. macroroides* Hub.-Mor.
199, A. (4002) & D. End. VU. Ir.-Tur. ele.
- A. melanocephalus* Boiss.
49, A. (4782) & D.; 140, A. (5376) & D.
- A. microcephalus* Willd.
16, A. (4157) & D. Ir.-Tur. ele.

- A. microceperus* Willd.
165, A. (5514) & D. End. LR. Ir.-Tur. ele.
- A. mushianus* Kotschy & Boiss.
32, A. (4229) & D.; 199, A. (4018) & D. End. LR. Ir.-Tur. ele.
- A. nanus* DC.
158, A. (5490) & D.
- A. ovinus* Boiss.
46, A. (3578) & D.; 199, A. (4016) & D.
- A. pelliger* Fenzl
99, A. (5447) & D. End. LR.
- A. pennatus* Boiss. subsp. *pennatus*
165, A. (5513) & D. End. LR. Ir.-Tur. ele.
- A. pinetorum* Boiss.
122, A. (4903) & D. End. LR. Ir.-Tur. ele.
- A. plumosus* Willd.
130, A. (4917) & D. Ir.-Tur. ele.
- A. pycnocephalus* Fisch.
53, A. (4241) & D. Ir.-Tur. ele.
- A. schottianus* Boiss.
110, A. (4351) & D. End. LR.
- A. sigmoideus* Bunge
102, A. (3692) & D. End. LR.
- A. siliquosus* Boiss.
192, A. (3895) & D. Ir.-Tur. ele.
- A. sparsipilis* Hub.-Mor. & Chamb.
171, A. (4205) & D. End. LR. Ir.-Tur. ele.
- A. spruneri* Boiss.
102, A. (3677) & D. cosmop.
- A. suberosus* Banks & Sol. subsp. *suberosus*
104, A. (4683) & D. cosmop.
- A. tauricolus* Boiss.
38, A. (4874) & D.; 159, A. (5397) & D. End. LR. Ir.-Tur. ele.
- A. xylobasis* var. *angustus* (Freyn & Sint.) Freyn & Bornm.
199, A. (4005) & D.; 51, A. (4873) & D.; 162, A. (5093) & D. End. LR. Ir.-Tur. ele.
- A. vaginans* DC.
49, A. (4822) & D. End. LR.
- Anthyllis vulneraria* subsp. *boissieri* (Sag.) Bornm.
98, A. (4286) & D. cosmop.
- Anthyllis vulneraria* subsp. *variegata* (Boiss.) Cullen
123, A. (5072) & D. End. LR. Medit. ele.
- Cicer pinnatifidum* Jaub. & Spach
119, A. (4997) & D. cosmop.
- Colutea cilicica* Boiss. & Balansa
202, A. (3640) & D. cosmop.
- Ebenus longipes* Boiss. & Balansa

- 115, A. (5131) & D. End. LR. Ir.-Tur. ele. Peduncle 20-40 cm long; calyx shorter or as long as corolla.
- E. laguroides* Boiss. var. *laguroides*
115, A. (5134) & D. End. LR. Ir.-Tur. ele.
- Genista albida* Willd.
202, A. (3627) & D.; 115, A. (5119) & D. cosmop.
- G. involucrata* Spach
7, A. (4583) & D. End. LR. Ir.-Tur. ele.
- Hedysarum erythroleucum* Boiss.
56, A. (5422) & D. End. LR. Ir.-Tur. ele.
- H. kotschyi* Boiss.
199, A. (3937) & D. Ir.-Tur. ele.
- H. pogonocarpum* Boiss.
60, A. (4102) & D. End. LR.
- Hippocrepis emerus* subsp. *emeroides* (Boiss. & Spruner) Lassen
59, A. (4620) & D. cosmop.
- Lathyrus brachypterus* Čel. var. *brachypterus*
57, A. (5441) & D. End. LR. Ir.-Tur. ele.
- L. incospicuus* L.
202, A. (3592) & D. cosmop.
- L. variabilis* (Boiss. & Kylin) Maly
7, A. (4599) & D. Medit. ele.
- L. vinealis* Boiss. & Noë
166, A. (4605) & D. Ir.-Tur. ele.
- Lens orientalis* (Boiss.) Hand.-Mazz.
213, A. (3590) & D.; 34, A. (4645) & D. cosmop.
- Lotus corniculatus* L. var. *corniculatus*
44, A. (4203) & D. cosmop.
- L. aegaeus* (Gris.) Boiss.
207, A. (4044) & D. Ir.-Tur. ele.
- Medicago falcata* L.
199, A. (4022) & D. cosmop.
- M. radiata* L.
34, A. (4832) & D. Ir.-Tur. ele.
- M. rigidula* (L.) All. var. *rigidula*
102, (5019), A. (5019) & D. cosmop.
- M. rigidula* var. *agrestis* Burnat
5, A. (4623) & D. cosmop.
- M. ×varia* Martyn
17, A. (4174) & D. cosmop.
- Onobrychis armena* Boiss. & Huet
139, A. (5024) & D. End. LR.
- O. cornuta* (L.) Des.
99, A. (5455) & D. Ir.-Tur. ele. (With white flowered, its albino form).
- O. fallax* Freyn & Sint.

- 199, A. (3992) & D. End. LR. Ir.-Tur. ele.
- O. galegifolia* Boiss.
34, A. (4828) & D. Ir.-Tur. ele.
- O. marashensis* H. Duman & Vural var. *marashensis*
62, A. (4182) & D. End. LR. Ir.-Tur. ele. Second collection after type collection.
- O. marashensis* var. *alpina* H. Duman & Vural
63, A. (4463) & D. End. LR. Ir.-Tur. ele. second gathering after type collection
- O. montana* subsp. *cadmea* (Boiss.) P. W. Ball
110, A. (4382) & D. cosmop.
- O. pisidica* Boiss.
199, A. (3981) & D. End. LR. Ir.-Tur. ele.
- O. sulphurea* var. *pallida* (Boiss. & Kylin) Hedge
199, A. (3965) & D.; 5, A. (4636) & D. End. LR. Medit. ele. (Leaflets 20 mm long).
- O. sulphurea* var. *vanensis* Hedge
61, A. (4672) & D. End. LR(nt). Ir.-Tur. ele.
- Ononis adenotricha* Boiss. var. *adenotricha*
168, A. (4970) & D. cosmop.
- Pisum sativum* subsp. *elatius* var. *pumilio* Meikle
167, A. (4497) & D. Medit. ele.
- Securigera grandiflora* Lassen
7, A. (4579) & D. End. LR. Medit. ele.
- S. libanotica* (Boiss.) Lassen
200, A. (3886) & D. Medit. ele.
- Trifolium angustifolium* L. var. *angustifolium*
58, A. (4872) & D. cosmop.
- T. pauciflorum* d Urv.
5, A. (4584) & D. Medit. ele.
- T. physodes* var. *psilocalyx* Boiss.
5, A. (4569) & D. Medit. ele.
- T. tumens* Bieb.
32, A. (4227) & D. cosmop.
- Trigonella brachycarpa* (Fisch.) Moris
18, A. (4087) & D.; 123, A. (5015) & D. Ir.-Tur. ele.
- T. fischeriana* Ser.
115, A. (5203) & D. Ir.-Tur. ele.
- T. kotschyi* Fenzl
5, A. (4578) & D. End. LR. Ir.-Tur. ele.
- T. monantha* C A Mey. subsp. *monantha*
34, A. (4827) & D.; 102, A. (5027) & D. Ir.-Tur. ele.
- T. rostrata* (Boiss. & Balansa) Boiss.
115, A. (5205) & D. End. LR. Ir.-Tur. ele.
- T. strangulata* Boiss.
5, A. (4619) & D. Ir.-Tur. ele.
- T. tenuis* Fisch.
115, A. (5201) & D. Ir.-Tur. ele.

- Vicia alpestris* subsp. *hypoleuca* (Boiss.) P. H. Davis
119, A. (5001) & D. End. LR. Ir.-Tur. ele.
- V. tenuifolia* subsp. *elegans* (Guss.) Nyman
161, A. (4598) & D. cosmop.
- V. ervilia* (L.) Willd.
5, A. (4574) & D. cosmop.
- V. hybrida* L.
5, A. (4571) & D. Medit. ele.
- V. narbonensis* L. var. *narbonensis*
47, A. (4495) & D. cosmop.
- V. noeana* Reuter ex Boiss. var. *noeana*
200, A. (3889) & D. Ir.-Tur. ele.

LINACEAE

- Linum mucronatum* Bertol. subsp. *mucronatum*
5, A. (4630) & D. cosmop.
- L. nodiflorum* L.
5, A. (4618) & D. Medit. ele.
- L. obtusatum* (Boiss.) Stapf
211, A. (4718) & D.; 101, A. (5294) & D. End. LR. Ir.-Tur. ele.
- L. pubescens* Banks & Sol. subsp. *pubescens*
7, A. (4616) & D. Medit. ele.
- L. tenuifolium* L.
155, A. (4978) & D. cosmop.

MALVACEAE

- Alcea apterocarpa* (Fenzl) Boiss.
198, A. (4041) & D. End. LR. Ir.-Tur. ele.
- A. pallida* Waldst. & Kit.
199, A. (4025) & D. cosmop.

MORINACEAE

- Morina persica* L. var. *persica*
102, A. (4800) & D. Ir.-Tur. ele.

OLEACEAE

- Jasminum fruticans* L.
98, A. (4326) & D. Medit. ele.

ONAGRACEAE

- Epilobium anatolicum* Hausskn. subsp. *anatolicum*
172, A. (5531) & D. cosmop.
- E. roseum* subsp. *consimile* (Hausskn.) P. H. Raven
200, A. (3890) & D. cosmop.

*OROBANCHACEAE**Orobanche aegyptiaca* Pers.

173, A. (5229) & D. cosmop.

O. alba Stephan

38, A. (4891) & D. cosmop.

O. arenaria Borkh.

159, A. (5390) & D. cosmop.

O. cernua Loefl.

136, A. (5040) & D. cosmop.

O. heldreichii (Reuter) G.Beck

35, A. (4854) & D. Ir.-Tur. ele.

O. kurdica Boiss. & Hausskn.

49, A. (4820) & D. Ir.-Tur. ele.

O. lutea Baumg.

115, A. (5154) & D. cosmop.

*PLANTAGINACEAE**Plantago atrata* Hope

183, A. (5477) & D. cosmop.

P. maritima L.

111, A. (4430) & D. cosmop.

*PLUMBAGINACEAE**Acantholimon acerosum* (Willd.) Boiss. var. *acerosum*

98, A. (4352) & D. Ir.-Tur. ele.

Acantholimon acerosum var. *brachystachyum* Boiss.

37, A. (4254) & D. End. LR. Ir.-Tur. ele.

A. caesareum Boiss. & Balansa

194, A. (5421) & D. End. LR. Ir.-Tur. ele.

A. calvertii Boiss.

102, A. (5501) & D. End. LR. Ir.-Tur. ele.

A. kotschyi (Jaub. & Spach) Boiss. subsp. *kotschyi*

86, A. (4158) & D.; 123, A. (5100) & D. End. LR. Ir.-Tur. ele.

A. kotschyi subsp. *laxispicatum* Bokhari

32, A. (4212) & D. End. VU. Ir.-Tur. ele.

Plumbago europaea L.

118, A. (4410) & D.; 68, A. (4466) & D. Eurosib.

*PRIMULACEAE**Androsace maxima* L.

1, A. (3506) & D. cosmop.

A. villosa L.

160, A. (4914) & D. Eurosib. ele.

Primula vulgaris Huds. subsp. *vulgaris*

187, A. (3759) & D. Eurosib. ele.

P. auriculata Lam.

189, A. (3755) & D. Ir.-Tur. ele.

RAFFLESIACEAE

Pilostyles haussknechtii Boiss.ex Somm.-Laub.

199, A. (3961) & D. Ir.-Tur. ele.

PAPAVERACEAE

Corydalis rutifolia subsp. *erdelii* (Zucc.) Cullen & P. H. Davis

102, A. (3711) & D.; 93, A. (4516) & D. Cosmop.

C. solida (L.) Sw. subsp. *solida*

4, A. (3550) & D. cosmop.

Fumaria asepala Boiss.

12, A. (4177) & D.; 199, A. (4015) & D. Ir.-Tur. ele.

Glaucium acutidentatum Hausskn. & Bornm.

161, A. (4621) & D. End. LR. Ir.-Tur. ele.

Roemeria hybrida (L.) DC subsp. *hybrida*

199, A. (4020) & D. cosmop.

Papaver fugax Poir. var. *fugax*

107, A. (4594) & D. cosmop.

Papaver fugax var. *platydiscus* Cullen

10, A. (4126) & D. End. LR. Ir.-Tur. ele.

P. persicum Lindl. subsp. *persicum*

9, A. (3405) & D. Ir.-Tur. ele.

PARNASSIACEAE

Parnassia palustris L.

111, A. (4433) & D. cosmop.

POLYGALACEAE

Polygala pruinosa Boiss. subsp. *pruinosa*

115, A. (5139) & D. cosmop.

POLYGONACEAE

Atraphaxis billardieri Jaub. & Spach var. *billardieri*

198, A. (4058) & D. Ir.-Tur. ele.

Oxyria digyna (L.) Hill

152, A. (5542) & D. cosmop.

Polygonum arenastrum Bor.

36, A. (3410) & D. cosmop.

P. aviculare L.

199, A. (3927 b) & D. cosmop.

P. bistorta L. subsp. *bistorta*

99, A. (5452) & D. Eurosib..ele.

P. ekimianum Leblebici, H. Duman. & Aytaç.

- 36, A. (3411) & D. End. CR
P. patulum M Bieb. subsp. *patulum*
 200, A. (3926) & D. cosmop.
P. pulchellum Lois.
 10, A. (4125) & D. cosmop.
P. setosum Jacq.
 12, A. (4170) & D. Ir.-Tur. ele.
Rheum ribes L.
 210, A & D. Ir.-Tur. ele.
Rumex scutatus L.
 34, A. (4808) & D. cosmop.
R. angustifolius Campd. subsp. *angustifolius*
 106, A. (4583) & D. cosmop

RANUNCULACEAE

- Anemone blanda* Schott & Kotschy
 1, A. (3515) & D.; 205, A. (3612) & D.; 100, A. (4494) & D. cosmop.
Aquilegia olympica Boiss.
 157, A. (5414) & D. cosmop.
Ceratocephala falcata (L.) Pers.
 4, A. (3549) & D. cosmop.
C. testiculatus (Crantz) Roth
 1, A. (3507) & D.; 102, A. (3671) & D. cosmop.
Delphinium cilicicum P. H. Davis & Kit Tan
 3, A. (4370) & D. End. LR. Medit. ele.
D. kurdicum Boiss. & Hohen.
 198, A. (4055) & D.; 99, A. (5446) & D. Ir.-Tur. ele.
Eranthis hyemalis (L.) Salisb.
 2, A. (3513) & D. cosmop.
Helleborus vesicarius Aucher
 1, A. (3497) & D. End. LR. Medit. ele.
Nigella arvensis L. var. *glauca* Boiss.
 98, A. (4370) & D. cosmop.
N. unguicularis (Lam.) Spenn.
 3, A. (4370) & D. cosmop.
Ranunculus arvensis L.
 7, A. (4631) & D. cosmop.
R. cuneatus Boiss.
 5, A. (4554) & D.; 205, A. (3616) & D. cosmop.
R. demissus var. *major* Boiss.
 101, A. (5277) & D. End. LR.
R. fenlzii Boiss.
 4, A. (3567) & D. End. NT. Ir.-Tur. ele.
R. kochii Ledeb.
 8, A. (3575) & D. Ir.-Tur. ele.

- R. macrorhynchus* subsp. *trigonocarpus* (Boiss.) P. H. P. H. Davis
205, A. (3610) & D. Ir.-Tur. ele
- R. myosuroides* Boiss. & Kotschy
6, A. (3516) & D.; 205, A. (3636) & D. Ir.-Tur. ele.
- R. pinardii* (Stev.) Boiss.
4, A. (3544) & D.; 205, A. (3608) & D. Ir.-Tur. ele.
- R. sprunerianus* Boiss.
4, A. (3551) & D. 102, A. (3673) & D. Medit. ele.
- R. unguis-cati* P. H. P. H. Davis
1, A. (3499) & D. Type loc.; 205, A. (3617) & D. ; 102, A. (3673) & D. End. LR.
- Thalictrum isopyroides* C. A. Mey.
104, A. (4700) & D. Ir.-Tur. ele.
- T. simplex* L.
160, A. (4331) & D. cosmop.

RHAMNACEAE

- Rhamnus petiolaris* Boiss.
105, A. (4387) & D. End. LR (1c).

ROSACEAE

- Alchemilla heterophylla* Rothm.
121, A. (5530) & D. cosmop.
- A. pseudocartalinica* Juz.
157, A. (5412) & D. cosmop.
- Amelanchier rotundifolia* subsp. *integrifolia* (Boiss. & Hohen.) Browicz
111, A. (4443) & D. cosmop.
- Cerasus brachypetala* var. *bornmuelleri* (C K Schneid.) Browicz
213, A. (3630) & D. Ir.-Tur. ele.
- C. mahaleb* var. *alpina* Browicz
98, A. (4323) & D. cosmop.
- Cotoneaster nummularia* Fisch. & Mey.
65, A. (4792) & D. cosmop.
- Crateagus szovitsii* Pojark.
34, A. (4817) & D. Ir.-Tur. ele.
- Orthurus heterocarpus* (Boiss.) Juz.
161, A. (4570) & D. cosmop.
- Potentilla polyschista* Boiss.
170, A. (3696) & D. Ir.-Tur. ele.
- P. recta* L.
198, A. (4051) & D.; 64, A. (4835) & D.; 171, A. (5183) & D. cosmop. This takson is represented by three groups (A, B, C) in Turkish flora, it is belong to group B.
- P. reptans* L.
124, A. (3772) & D. cosmop.
- P. speciosa* Willd. var. *speciosa*
98, A. (4336) & D. cosmop.

Rosa pulverulanta Bieb.

26, A. (4760) & D. cosmop.

Sanguisorba minor subsp. *balearica* (Nyman) Muñoz Garm. & C. Navarro

200, A. (3903) & D. cosmop.

RUBIACEAE

Asperula arvensis L.

202, A. (3620) & D. Medit. ele.

A. involucrata Wahlenb.

200, A. (3921) & D.; 34, A. (4814) & D. Eurosib. ele.

A. stricta subsp. *latibracteata* (Boiss.) Ehrend.

110, A. (4317) & D.; 38, A. (4877) & D. End. Ir.-Tur. ele. LR.

A. stricta subsp. *grandiflora* Schönb.-Tem.

110, A. (4318) & D. End. LR. Medit. ele.

A. orientalis Boiss. & Hohen.

7, A. (4576) & D. Ir.-Tur. ele.

Crucianella kurdistanica Malin.

200, A. (3877) & D. Ir.-Tur. ele.

C. macrostachya Boiss.

112, A. (3942) & D. cosmop.

Cruciata taurica (Willd.) Ehrend.

202, A. (3632) & D.; 109, A. (3704) & D.; 5, A. (4582) & D. Ir.-Tur. ele.

Galium antitauricum Ehrend.

99, A. (5429) & D. End. LR. Ir.-Tur. ele.

G. cornigerum Boiss. & Hausskn.

151, A. (5463) & D. End. LR. Ir.-Tur. ele.

G. floribundum Sm. subsp. *floribundum*

27, A. (4192) & D. cosmop.

G. incanum subsp. *elatus* (Boiss.) Ehrend.

151, A. (5463) & D. Ir.-Tur. ele.

G. incanum subsp. *pseudoconigerum* Ehrend.

5, A. (4587) & D.; 109, A. (3644) & D. End. LR. Ir.-Tur. ele.

G. mite Boiss. & Hohen.

200, A. (3887) & D. 173, A. (5223) & D. Ir.-Tur. ele.

G. nigricans Boiss.

115, A. (5126) & D. Ir.-Tur. ele.

G. setaceum Lam.

7, A. (4588) & D. cosmop.

G. tenuissimum Bieb. subsp. *tenuissimum*

123, A. (5033) & D. cosmop.

G. verticillatum Danthoine

186, A. (5017) & D. cosmop.

G. verum L. subsp. *verum*

27, A. (4194) & D. Eurosib. ele.

Rubai tenuifolia subsp. *donietti* (Griseb.) Ehrend.

5, A. (4593) & D. Medit. ele.

Sherardia arvensis L.

97, ob. Cosmop.

RUTACEAE

Haplophyllum myrtifolium Boiss.

136, A. (5091) & D. End. LR. Ir.-Tur. ele.

SANTALACEAE

Osyris alba L.

87, obs. Medit. ele.

Thesium cilicicum Bornm.

104, A. (4701) & D. End. LR. Medit. ele.

T. tauricum Boiss. & Hausskn.

199, A. (3934) & D. End. LR. Ir.-Tur. ele

SCROPHULARIACEAE

Anarrhinum orientale Benth.

200, A. (3888) & D.; 34, A. (4815) & D. Ir.-Tur. ele.

Bungea trifida (Vahl) C. A. Mey.

207, 110. obs. Ir.-Tur. ele.

Linaria antilibanotica Rech. fil.

143, A. (5355) & D. Ir.-Tur. ele.

L. chalepensis (L.) Mill. subsp. *chalepensis*

49, A. (4836) & D. Medit. ele.

L. corifolia Desf.

160, A. (4329) & D. End. LR. Ir.-Tur. ele.

L. genistifolia (L.) Miller subsp. *genistifolia*

139, A. (5032) & D. Eurosib..

L. genistifolia subsp. *confertiflora* (Boiss.) P. H. Davis

102, A. (5142) & D. End. LR. Ir.-Tur. ele.

L. genistifolia subsp. *praealta* (Boiss.) P. H. Davis

49, A. (4836) & D. End. LR. Medit. ele.

L. kurdica subsp. *aucheri* (Boiss.) P. H. Davis

200, A. (3901) & D. Ir.-Tur. ele.

L. kurdica subsp. *pycnophylla* (Boiss. & Balansa). P. H. Davis

31, A. (4275) & D. Ir.-Tur. ele.

Odontites aucheri Boiss.

9d8, A. (4279) & D. Ir.-Tur. ele.

Pedicularis cadmea Boiss.

102, A. (3666) & D. End. LR. Medit. ele.

S. catarifolia Boiss. & Heldr.

101, A. (5285) & D. Ir.-Tur. ele.

P. comosa var. *sibthorpii* (Boiss.) Boiss.

115, A. (5115) & D. cosmop.

- Scrophularia libanotica* Boiss. subsp. *libanotica* var. *libanotica*
34, A. (4791) & D.; 140, A. (5380) & D. cosmop.
- S. lucida* L.
98, A. (4332) & D. Medit. ele.
- S. rimarum* Bornm.
143, A. (5322) & D. cosmop.
- S. scopolii* [Hoppe ex] Pers. var. *scopolii*
99, A. (5451) & D. cosmop.
- S. xanthoglossa* var. *decipiens* (Boiss. & Kotschy) Boiss.
50, A. (4625) & D. Ir.-Tur. ele.
- Verbascum asperuloides* Hub.-Mor.
111, A. (4424) & D. End. LR. Ir.-Tur. ele.
- V. ballsianum* Murb.
10, A. (4136) & D. End. VU. Ir.-Tur. ele. Locus classicus.
- V. cheiranthifolium* var. *asperulum* (Boiss.) Murb.
199, A. (3947) & D. ;101, A. (5255) & D. End. NT.
- V. cheiranthifolium* var. *cataonicum* (Hand.-Mazz.) Murb.
123, A. (5011) & D. cosmop.
- V. heterobarbatum* Hub.-Mor.
99, A. (5440) & D. End. LR. Ir.-Tur. ele.
- V. orientale* (L.) All.
7, A. (4612) & D. Medit. ele.
- V. songaricum* subsp. *subdecurrens* Hub.-Mor.
103, A. (5415) & D. End. LR. Ir.-Tur. ele.
- V. speciosum* Schrad.
99, A. (4602) & D. cosmop.
- V. subnivale* Boiss. & Hausskn.
199, A. (3990) & D.; 191, A. (4445) & D. Ir.-Tur. ele.
- V. subserratum* Hub.-Mor.
143, A. (5326) & D. End. CR. Ir.-Tur. ele. Second gathering after type collection.
- Veronica arvensis* L.
122, A. (4952) & D. cosmop.
- V. beccabunga* subsp. *abscondita* M. A. Fisch.
99, A. (5450) & D. Ir.-Tur. ele.
- V. biloba* Schreb.
26, A. (4779) & D. Ir.-Tur. ele.
- V. bozakmanii* M. A. Fischer
190, A. (3719) & D. Ir.-Tur. ele.
- V. bornmuelleri* Hausskn.
4, A. (3561) & D. Ir.-Tur. ele.
- V. cinerea* Boiss. & Balansa
7, A. (4564) & D. End. LR. Medit. ele.
- V. cymbalaria* Bodard
4, A. (3557) & D. Medit. ele.
- V. debilis* Freyn

- 77, A. (4657) & D. Medit. ele.
V. intercedens Bornm.
 202, A. (3596) & D. Ir.-Tur. ele.
V. macrostachya Vahl subsp. *macrostachya*
 202, A. (3624) & D. Medit. ele.
V. orientalis Mill. subsp. *orientalis*
 7, A. (4573) & D. Cosmop
V. reuterana Boiss.
 122, A. (4962) & D. Ir.-Tur. ele.
V. thymoides subsp. *pseudocinerea* M. A. Fischer
 26, A. (4767) & D. End. LR. Ir.-Tur. ele.
V. triloba (Opiz) Jos.Kern.
 4, A. (3546) & D. cosmop.
V. viscosa Boiss.
 202, A. (3606) & D. Ir.-Tur. ele.

SOLANACEAE

- Hyoscyamus niger* L.
 78, A. (4656) & D. cosmop.
Solanum nigrum L. subsp. *nigrum*
 199, A. (3891) & D. cosmop.

THYMELAEACEAE

- Daphne oleoides* Schreb. subsp. *oleoides*
 115, A. (5132) & D. cosmop.
Thymelaea passerina (L.) Cosson & Germ.
 105, A. (4373) & D. cosmop.

SAXIFRAGACEAE

- Saxifraga kotschyi* Boiss.
 109, A. (3706) & D. cosmop.
S. tridactylites L.
 109, A. (3661) & D. cosmop.

UMBELLIFERAE

- Anthriscus nemorosa* (M Bieb.) Spreng.
 154, A. (5231) & D. cosmop.
Astrodaucus orientalis (L.) Drude
 117, A. (4276) & D. Ir.-Tur. ele.
Bupleurum eginense (Wolff) Snogerup
 207, A. (4053) & D. End. LR.
B. falcatum subsp. *persicum* (Boiss.) Koso-Pol.
 33, A. (4280) & D.; 110, A. (4447) & D. cosmop.
B. gerardii All.
 34, A. (4804) & D.; 115, A. (5120) & D. cosmop.

- B. gracile* d Urv.
115, A. (5187) & D. Medit. ele.
- B. kurdicum* Boiss.
53, A. (4243) & D. Ir.-Tur. ele.
- B. lycanicum* Snogerup
7, A. (4567) & D. Medit. ele.
- Bunium. paucifolium* DC. var. *paucifolium*
106, A. (4600) & D. ; 38, A. (4880) & D. cosmop.
- B. brachyactis* (Post) Wolff
10, A. (4138) & D. Locus classicus. End. LR.
- B. pestalozzae* Boiss.
140, A. (5395) & D. cosmop
- Chaerophyllum macrospermum* (Spreng.) Fisch. & C.A. Mey.
105, A. (4378) & D. Ir.-Tur. ele.
- Eryngium billardieri* Delarbre
53, A. (4239) & D. Ir.-Tur. ele.
- E. campestre* var. *virens* Link
67, A. (4263) & D. cosmop.
- E. kotschyi* Boiss.
105, A. (4394) & D. End. LR. Medit. ele.
- E. polycephalum* Hausskn. ex Wolff
175, A. (5344) & D. End. LR. Ir.-Tur.
This species was named as *E. hedgeanum* Kit Tan & Yıldız, published in 1988, but in vol. 11, understood that these two species are same and reduced to synonym of *E. polycephalum*.
- Ferula elaeochytris* Korovin
106, A. (4603) & D. Medit. ele.
- F. hermonis* Boiss.
199, A. (4033) & D. cosmop.
- Ferulago blancheana* Post
200, A. (3925) & D.; 75, A. (4107) & D. Locus classicus. ; 98, A. (4297) & D. End. LR.
- Grammosciadium daucoides* DC.
199, A. (3963) & D.; 38, A. (4884) & D. Ir.- Tur. ele.
- Heptaptera anisoptera* (DC.) Tutin
26, A. (4778) & D. cosmop.
- Heracleum argaeum* Boiss. & Balansa
101, A. (5295) & D. End. LR.
- H. humile* Sm.
177, A. (5538) & D. Medit. ele.
- H. pastinaca* Fenzl
177, A. (5533) & D. End. LR. Medit. ele.
- Johrenia alpina* (Fenzl) Fenzl
53, A. (4245) & D. End. LR (lc). Medit. ele.
- J. aurea* Boiss. & Balansa

- 188, A. (4450) & D. Second collection after type gathering
J. dichotoma subsp. *sintenisii* Bornm.
 188, A. (4334) & D. End. LR.
Malabaila secacul Banks & Sol.
 118, A. (4383) & D.; 199, A. (4009) & D. cosmop. Group A
Peucedanum depauperatum Boiss. & Balansa
 200, A. (3884) & D. ; 126, A. (4436) & D. cosmop.
P. longifolium Waldst. & Kit.
 177, A. (3420) & D. cosmop.
Pimpinella anisetum Boiss. & Balansa
 115, A. (5152) & D. End. LR. Ir.-Tur. ele.
P. ferulacea (L.) Lindl.
 49, A. (4824) & D. cosmop.
P. melicarpoides Boiss. var. *melicarpoides*
 123, A. (5060) & D. End. LR. Ir.-Tur. ele.
Prangos pabularia Lindl.
 153, A. (5366) & D. Ir.-Tur. ele.
P. platychlaena Boiss. ex Tchihat.
 74, A. (4457) & D. End. LR. Ir.-Tur. ele.
P. tragium subsp. *lithophila* (Schischk.) Tutin
 10, A. (4124) & D. cosmop.
P. uechtritzi Boiss. & Hausskn.
 7, A. (4654) & D.; 177, A. (5374) & D. End. LR. Ir.-Tur. ele.
Scandix aucheri Boiss.
 102, A. (4678) & D. ; 199, A. (4024) & D. Ir.-Tur. ele.
S. macrorhyncha C. A. Mey.
 123, A. (5051) & D.
Smyrniopsis aucheri Boiss.
 173, A. (5324) & D. Ir.-Tur. ele.
Tordylium elegans (Boiss. & Balansa) Alava & Hub.-Mor.
 7, A. (4608) & D. End. LR. Medit. ele.
T. syriacum L.
 5, A. (4580) & D. Medit. ele.
Torilis leptophylla (L.) Rchb.
 7, A. (4570) & D.; 123, A. (5014) & D. cosmop.
Turgeniopsis foeniculacea (Fenzl) Boiss.
 34, A. (4643) & D. cosmop.
Turgenia latifolia (L.) Hoffm.
 210, A. (4006) & D. cosmop.
Zosima absinthifolia (Vent.) Link
 34, A. (4843) & D. cosmop.

URTICACEAE

- Parietaria lusitanica* L.
 199, A. (4088) & D. Medit. ele.

VALERIANACEAE

Centranthus longiflorus Stev. subsp. *longiflorus*

200, A. (3920) & D. cosmop.

Valeriana dioscoridis Sm.

109, A. (3701) & D. cosmop.

V. kotschyi Boiss.

177, A. (4607) & D. Ir.-Tur. ele.

V. officinalis L.

5, A. (4565) & D. cosmop.

V. sisymbriifolia Vahl

101, A. (5301) & D. Ir.-Tur. ele.

V. vesicaria (L.) Moench

102, A. (3646) & D. cosmop.

VERBENACEAE

Verbena supina L.

36, A. (3413) & D. There is a short comment in vol. vii (page 34), as "Not recently collected in Turkey", but this species were collected two times from Kahramanmaraş and Adıyaman provinces by us in this study. Cosmop.

VIOLACEAE

Viola kitaibeliana Roem. & Schult.

132, A. (4481) & D. cosmop.

V. modesta Fenzl

6, A. (3517) & D.; 102, A. (3667) & D. cosmop.

V. occulta Lehm.

113, A.(3751) & D. cosmop.

V. parvula Tineo

25, A. (4948) & D. cosmop.

MONOCOTYLEDONES

AMARYLLIDACEAE

Ixiolirion tataricum subsp. *montanum* (Labill.) Takht.

202, A. (3589) & D.; 59, A. (4575) & D. Ir.-Tur. ele.

Sternbergia clusiana (Ker -Gawler) Ker -Gawler ex Spreng.

177, A. (3414) & D. Ir.-Tur. ele.

ARACEAE

Arum dioscoridis var. *luschanii* R. R. Mill

219, A. (3588) & D. End. LR. Medit. ele.

A. elongatum Steven subsp. *elongatum*

72, A. (3558) & D. Ir.-Tur. ele.

Biarum carduchorum (Schott) Engl.

110, A. (4315) & D. Ir.-Tur. ele.

GRAMINEAE

Aegilops biuncialis Vis.

32, A. (4222) & D. cosmop.

A. columnaris Zhuk.

34, A. (4799) & D. Ir.-Tur. ele.

A. speltoides Tausch var. *speltoides*

10, A. (4134) & D. cosmop.

A. triuncialis L. subsp. *triuncialis*

26, A. (4775) & D.; 177, A. (5189) & D. cosmop.

A. umbellulata Zhuk. subsp. *umbellulata*

123, A. (5018) & D. Ir.-Tur. ele.

Alopecurus aucheri Boiss.

6, A. (3521) & D. Ir.-Tur. ele.

A. gerardii Vill. var. *gerardii*

12, A. (4168) & D. Medit. ele.

A. gerardii var. *cassius* (Boiss.) Dogan

102, A. (3676) & D. End. LR. Medit. ele.

A. lanatus Sm.

102, A. (3672) & D. End. LR. Medit. ele.

A. textilis (Boiss.) subsp. *textilis*

102, A. (3760) & D. Ir.-Tur. ele.

A. utriculatus subsp. *anthoxanthoides* (Boiss.) Doğan

97, A. (3552) & D. End. VU. Medit. ele.

A. vaginatus (Willd.) Boiss.

6, A. (3524) & D. cosmop.

Arrhenatherum palaestinum Boiss.

200, A. (3918) & D.; 35, A. (4847) & D. Medit. ele.

Briza humilis M Bieb.

198, A. (4061) & D.; 115, A. (5212) & D. cosmop.

B. minor L.

198, A. (4061) & D. cosmop.

Bromus cappadocicus Boiss. & Balansa subsp. *cappadocicus*

123, A. (5067) & D.; 115, A. (5167) & D. cosmop.

Bromus danthoniae Trin.

97, obs. Cosmop.

B. japonicus Thunb. subsp. *japonicus*

26, A. (4774) & D. cosmop.

B. intermedius Guss.

26, A. (4781) & D. cosmop.

B. scoparius L.

39, A. (4750) & D. cosmop.

B. sterilis L.

174, A. (4938) & D. cosmop.

B. squarrosus L.

- 199, A. (4013) & D.; 10, A. (4119) & D.; 115, A. (5204) & D. cosmop.
- B. tectorum* L.
26, A. (4780) & D. cosmop.
- B. tomentellus* Boiss.
200, A. (3885) & D.; 178, A. (5426) & D. Ir.-Tur. ele
- Dactylis glomerata* subsp. *hispanica* (Rothm.) Nyman
18, A. (4082) & D. cosmop.
- Elymus canicus* (L.) L.
98, A. (4291b) & D. cosmop.
- E. elongatus* (Host) Runemark subsp. *elongatus*
53, A. (4233) & D. cosmop.
- E. hispidus* (Opiz) Melderis subsp. *hispidus*
118, A. (4408) & D. cosmop.
- E. hispidus* subsp. *podperae* (Náb.) Melderis
10, A. (4111) & D.; 123, A. (5031) & D. Ir.-Tur. ele.
- E. hispidus* subsp. *barbulatus* (Schur) Melderis
199, A. (3948) & D.; 98, A. (4347) & D. cosmop.
- E. lazicus* subsp. *divaricatus* (Boiss. & Balansa) Melderis
98, A. (4368) & D. End. LR. Ir.-Tur. ele.
- E. panormitanus* (Parl.) Tzvelev
123, A. (5082) & D. Medit. ele.
- Eremopoa capillaris* R. R. Mill
18, A. (4071) & D.
- E. persica* (Trin.) Roshev.
133, A. (4961) & D. Ir.-Tur. ele.
- E. songarica* (Schrenk) Roshev.
141, A. (5267) & D. Ir.-Tur. ele.
- Festuca callieri* subsp. *zederbaueri* Markgr.- Dann.
199, A. (3976) & D. End. LR. Ir.-Tur. ele.
- F. pinifolia* var. *phrygia* (St.-Yves) Markgr.-Dann.
115, A. (5162) & D. End. LR (1c).
- Helictotrichon pubescens* (Hudson) Beser ex Schult. & Schult. fil subsp. *pubescens*
105, A. (4385) & D. Eurosib.. ele.
- Heteranthelium piliferum* (Sol.) Hochst.
35, A. (4850) & D. Ir.-Tur. ele.
- Hordeum bulbosum* L.
199, A. (3967) & D.; 200, A. (3879) & D. cosmop.
- H. geniculatum* All.
32, A. (4221) & D. Eurosib.. ele.
- Koeleria cristata* (L.) Pers.
199, A. (3969) & D. cosmop.
- Lolium persicum* Boiss. & Hohen. Ex Boiss.
200, A. (3880) & D. Ir.-Tur. ele.
- Melica penicillaris* Boiss. & Balansa
98, A. (4367) & D. Ir.-Tur. ele.

- M. persica* Kunth subsp. *persica*
200, A. (3898) & D.; 307, A. (4076) & D. cosmop.
- M. persica* subsp. *jacquemontii* (Decne ex Jacquem.) P.H. P. H. Davis
49, A. (4807) & D.; 123, A. (5026) & D. Ir.-Tur. ele.
- M. persica* subsp. *inaequiglumis* (Boiss.) Bor
200, A. (3883) & D.; 18, A. (4078) & D. cosmop.
- Phleum exaratum* Hochst ex Griseb. subsp. *exaratum*
115, A. (5199) & D. cosmop.
- Piptatherum holciforme* subsp. *holciforme* var. *glabrum* Freitag
50, A. (5369) & D. End. NT.
- Poa angustifolia* L.
18, A. (4068) & D. cosmop.
- P. annua* L.
151, A. (5476) & D. cosmop.
- P. bulbosa* L.
79, A. (3547) & D. cosmop.
- P. pratensis* L.
26, A. (4770) & D. 135, A. (5459) & D. cosmop.
- P. timoleontis* Heldr. ex Boiss.
115, A. (5158) & D. Medit. ele.
- Stipa arabica* Trin. & Rupr.
110, A. (4291a) & D. Ir.-Tur. ele.
- S. ehrenbergiana* Trin. & Rupr.
199, A. (3946) & D.; 34, A. (4803) & D.; 123, A. (5037) & D. Ir.-Tur. ele.
- S. holosericea* Trin.
34, A. (4801) & D.; 115, A. (5179) & D. Ir.-Tur. ele.
- Taeniatherum caput-medusae* subsp. *crinitum* (Schreb.) Melderis
18, A. (4077) & D. Ir.-Tur. ele.
- Trisetum rigidum* (M Bieb.) Roem. & Schult.
103, A. (5437) & D. Ir.-Tur. ele.

IRIDACEAE

- Crocus ancyrensis* (Herb.) Maw
87, A. (4511) & D. End. LR. Ir.-Tur. ele.
- C. biflorus* subsp. *isauricus* (Siehe ex Bowles) Matthew
132, A. (4478) & D.; 95, A. (4512) & D. End. LR. Medit. ele.
- C. biflorus* subsp. *tauri* (Maw) Matthew
87, A. (4509) & D. Ir.-Tur. ele.
- C. cancellatus* subsp. *damascenus* (Herb.) Matthew
36, A. (3403) & D.; 177, A. (3418) & D. Ir.-Tur. ele.
- C. chrysanthus* (Herb.) Herb.
102, A. (3753) & D. cosmop.
- C. danfordiae* Maw
132, A. (4484) & D. End. LR.
- C. kotschyanus* C. Koch subsp. *kotschyanus*

- 87, A. (4509) & D. cosmop.
C. kotschyanus subsp. *cappadocicus* Matthew
 111, A. (4432) & D. End. LR. Ir.-Tur. ele.
C. pallasii Goldb. subsp. *pallasii*
 102, A. (3419) & D. cosmop.
Iris kirkwoodii Chaudhary
 5, A. (4590) & D. Ir.-Tur. ele.
I. sari Schott ex Baker
 115, A. (5107) & D. End. LR. Ir.-Tur. ele.
I. stenophylla Hausskn. & Siehe ex Baker subsp. *stenophylla*
 94, A. (4477) & D. End. VU. Medit. ele.

JUNCAGINACEAE

- Triglochin palustris*
 195, A. (3428) & D. cosmop.

LILLACEAE

- Allium ampeloprasum* L.
 200, A. (3909) & D.; 75, A. (4106) & D. Medit. ele.
A. asclepiadeum Bornm.
 202, A. (3585) & D. Ir.-Tur. ele.
A. callidictyon C. A. Meyer
 90, A. (3971) & D.; 98, A. (4321) & D. Ir.-Tur. ele.
A. cappadocicum Boiss.
 174, A. (4977) & D. End. LR. Ir.-Tur. ele.
A. cardiostemon Fisch. & C.A. Mey.
 123, A. (5070) & D. Ir.-Tur. ele.
A. cupani Raf.
 102, obs. Medit. ele.
A. flavum subsp. *tauricum* (Beser ex Reichb.) Stearn var. *tauricum*
 10, A. (4116) & D.; 102, A. (5303) & D. Medit. ele.
A. frigidum Boiss. & Heldr.
 99, A. (5442) & D. Medit. ele.
A. glumaceum Boiss. & Hausskn.
 101, A. (5234) & D. End. LR. Ir.-Tur. ele. Locus classicus.
A. lycaonicum Siehe ex Hayek
 41, A. (4675) & D. cosmop.
A. paniculatum subsp. *fuscum* (Waldst. & Kit.) Arc.
 75, A. (4110) & D. Medit. ele.
A. scorodoprasum subsp. *rotundum* (L.) Stearn
 98, A. (4313) & D. Medit. ele.
A. sintenisii Freyn
 98, A. (4314) & D. End. LR. Ir.-Tur. ele. Second gathering after type localtion.
A. tauricola Boiss.
 98, A. (4339) & D.; 143, A. (5323) & D. End. LR. Ir.-Tur. ele.
A. trachycyoleum Wendelbo

- 199, A. (3939) & D.; 18, A. (4085) & D. Ir.-Tur. ele.
Asphodeline globifera J. Gaye ex Baker
 10, A. (4122b) & D.; 115, A. (5153) & D. Medit. ele.
A. rigidifolia (Boiss.) Baker
 35, A. (4851) & D. End. LR. Ir.-Tur. ele.
A. taurica (Pall.) Kunth
 102, A. (3658) & D. Medit. ele.
A. tenuior subsp. *tenuiflora* (C. Koch) E. Tuzlacı var. *tenuiflora*
 37, A. (4250) & D.; 98, A. (4356) & D. Ir.-Tur. ele.
Bellevalia gracilis Feinbrun
 41, A. (4674) & D.; 206, A. (3625) & D. End. LR. Ir.-Tur. ele.
B. longipes Post
 72, A. (3540) & D. Ir.-Tur. ele.
Colchicum falcifolium Stapf
 19, A. (4518) & D. Ir.-Tur. ele.
C. kotschyi Boiss.
 160. obs. Ir.-Tur. ele.
C. szovitsii Fisch. & C.A. Mey.
 160, A. (4730) & D. Ir.-Tur. ele.
C. triphyllum Kunze
 100, A. (4485) & D. 93, A. (4508) & D. Medit. ele.
Eremurus spectabilis M Bieb.
 115, A. (5116) & D. Ir.-Tur. ele.
Fritillaria aurea Schott
 102, A. (3702) & D. End. EN. Ir.-Tur. ele.
F. acmopetala Boiss. subsp. *acmopetala*
 160, A. (3754) & D. Medit. ele.
F. crassifolia Boiss. & Huet subsp. *crassifolia*
 79, A. (4519) & D. End. LR (lc).
F. pinardii Boiss.
 6, A. (3531) & D.; 190, A. (3736) & D. Ir.-Tur. ele.
Gagea fistulosa Ker Gawl.
 196, A. (3527) & D. cosmop.
Gagea gageoides (Zucc.) Vved.
 202, A. (3607) & D.; 104, A. (4710) & D. Ir.-Tur. ele.
G. luteoides Stapf
 93, A. (4513) & D.; 100, A. (4488) & D. cosmop.
G. peduncularis (J. & C. Presl) Pascher
 6, A. (3528) & D.; 102, A. (3707) & D. Medit. ele.
G. taurica Stev.
 1, A. (3504) & D.; 206, A. (3611) & D.; 100, A. (4480) & D.; 104, A. (4696) & D.
 Ir.-Tur. ele.
G. uliginosa Siehe & Pascher
 187, A. (3773) & D. Ir.-Tur. ele.
Hyacinthella acutiloba K. M. Perss. & Wendelbo
 102, A. (3675) & D.; 100, A. (4479) & D. End. LR. Ir.-Tur. ele.

Hyacinthus orientalis subsp. *chionophilus* Wendelbo

93, A. (4506) & D.; 206, A. (3586) & D.; 180, A. (4712) & D. End. LR. Ir.-Tur. ele.

Muscari armeniacum Leichtlin ex Baker

102, A. (3700) & D. cosmop.

M. comosum (L.) Mill.

7, A. (4652) & D. Medit. ele.

M. neglectum Guss.

92, A. (3570) & D.; 102, A. (3705) & D. cosmop

M. tenuiflorum Tausch

123, A. (5078) & D.; 102, A. (5746) & D. cosmop.

Ornithogalum alpigenum Stapf

205, A. (3609) & D. End. LR (nt. Medit. ele.

O. narbonense L.

91, A. (3571) & D. Medit. ele.

O. narbonense L. × *O. arcuatum* Stev.

115, A. (5151) & D. cosmop.

O. pyrenaicum L.

7, A. (4589) & D.; 115, A. (5185) & D. cosmop.

O. oligophyllum E. D. Clarke

1, A. (3502) & D.; 102, A. (3709) & D. cosmop.

O. orthophyllum Ten.

61, A. (4661) & D.; 104, A. (4681) & D. cosmop.

O. wiedemannii Boiss.

92, A. (3573) & D. cosmop.

Scilla bifolia L.

195, A. (3731) & D. Medit. ele.

Tulipa armena Boiss. var. *armena*

203, A. (3619) & D.; 29, A. (3532) & D. Ir.-Tur. ele.

Tulipa armena var. *lycica* (Baker) Marais

104, A. (4692) & D.; 47, A. (4498) & D. End. LR (lc).

ORCHIDACEAE

Orchis mascula (L.) L.

177, A. (4933) & D. Medit. ele.