



The Flora of Kayışdağı (İstanbul/Turkey) and floristic comparison with neighboring floras

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Abstract

This study is concerned with the flora of Kayışdağı and Yeditepe University 26 Ağustos Campus, which are located in district of Ataşehir, İstanbul. According to our field studies and literature screening, a total number of 476 taxa which consist of 262 genera from 73 families grow in the area. The highest number of taxa belongs to the family Asteraceae (65; 13.7%). It is followed by the families Fabaceae (63; 13.2%) and Poaceae (46; 9.7%). Besides, *Trifolium* L. (19; 4.0%) is the genus with the highest number of taxa which is followed by *Ranunculus* L. (11; 2.3%), *Vicia* L. (8; 1.7%) and *Lathyrus* L. (8; 1.7%). The phytogeographical regions of 175 (36.76%) taxa in the research field could be identified. The distribution of these taxa in the phytogeographical regions are as follows; Mediterranean element (105; 22.06%), Euro-Siberian element (67; 14.07%), Irano-Turanian element (3; 0.63%). 11 numbers (%2.31) of endemic and 3 numbers of rare taxa were identified in the research field. Moreover, the threat categories of these plants according to IUCN were added to the floristic list. The results of our research are compared with the studied neighboring areas in means of phytogeographic element rates and endemism. Also taxa similarity is compared by Jaccard similarity index.

Key words: Flora, Kayışdağı, Ataşehir, İstanbul, Threat category

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Kayışdağı (İstanbul/Türkiye)'nin florası ve çevre floralara ile karşılaştırılması

Özet

Bu çalışma, İstanbul ili Ataşehir ilçe sınırlarında bulunan Kayış dağı ve Yeditepe Üniversitesi 26 Ağustos Yerleşim Alanı'nın florası ile ilgilidir. Yapılan arazi çalışmaları ve literatür taramaları sonucunda alanda, 73 familyadan 262 cins ve bu cinslere ait toplam 476 taksonun yetiştiği belirlenmiştir. En fazla takson içeren familya Asteraceae (65; %13.7)'dir. Bunu Fabaceae (63; %13.2) ve Poaceae (46; %9.7) izlemektedir. Ayrıca en fazla taksona sahip cins *Trifolium* L. (19; %4.0) olup, bunu *Ranunculus* L. (11; %2.3), *Vicia* L. (8; %1.7) ve *Lathyrus* L. (8; %1.7) izlemektedir. Araştırma alanındaki 175 (%36.76) taksonun fitocoğrafik bölgesi belirlenebilmiştir. Bu taksonların fitocoğrafik bölgeler içindeki dağılımı şu şekildedir: Akdeniz elementi (105; % 22.06), Avrupa-Sibirya elementi (67; %14.07), İran-Turan elementi (3; %0.63). Araştırma alanında 11 adet endemik (%2.31) ve 3 adet nadir takson tespit edilmiş olup bu bitkilerin IUCN'e göre tehlike kategorileri floristik listeye eklenmiştir. Çalışmanın sonuçları inceleme alanının yakın çevresinde yapılmış olan çalışmalarla fitocoğrafik bölge elementleri ve endemizm yönünden karşılaştırılmıştır. Ayrıca Jaccard benzerlik indeksi kullanılarak alanlar takson benzerlikleri yönünden karşılaştırılmıştır.

Anahtar kelimeler: Flora, Kayışdağı, Ataşehir, İstanbul, Tehlike Kategorisi

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1. Giriş

Kayışdağı and Yeditepe University 26 Ağustos Campus are located in the district of Kadıköy, in the Asian part of İstanbul (Figure 1). The research area is located in the transitional region between Mediterranean and Euro-Siberian phytogeographical regions. It is also situated in the square of A2 according to the grid-system which is applied in the Flora of Turkey (Davis, 1965). It has an estimated altitude of 200-400 m. Despite the antropogenic based deterioration, the Maquis formation still exists around the hills that encircle the University campus and Kayışdağı. The dominant taxa of this formation are; *Cistus creticus* L., *C. salviifolius* L., *Arbutus unedo* L., *Erica arborea* L., *E. manipuliiflora* Salisb., *Calicotome villosa* (Poiret) Link, *Spartium junceum* L., *Quercus coccifera* L., *Q. infectoria* Olivier subsp. *boissieri* (Reuter) O. Schwarz, *Quercus infectoria* Olivier subsp. *infectoria*, *Lavandula stoechas* L. subsp. *stoechas*, *Phillyrea latifolia* L., *Paliurus spina-christi* Miller and *Sarcopoterium spinosum* (L.) Spac. There are annual, biennial as well as perennial plants in the Maquis formation or in the open fields of the area which is formed due to deterioration. The plants in the plain areas and the northern slopes compose almost a meadow-formation. The most dominant ones among these plants, along with the changes in the vegetation periods, are; *Briza maxima* L., *Aegilops geniculata* Roth, *Muscari neglectum* Guss., *Asphodelus aestivus* Brot., *Iris s uaveolens* Boiss.& Reuter., *Verbascum bugulifolium* Lam., *Sanguisorba minor* Scop. subsp. *muricata* (Spach) Briq., *Ranunculus ficaria* L. subsp. *ficariiformis* Rouy & Fouc., *Papaver rhoeas* L., *Salvia verbenaca* L., *Hypericum calycinum* L., *H. cerastoides* (Spach) Robson, *Trifolium uniflorum* L., *Lotus ornithopodioides* L., *Sedum pallidum* Bieb. var. *pallidum*, *Silene gallica* L., *Dianthus pinifolius* Sibth. & Sm. and *Bellis perennis* L.



Figure 1. Geographical map of the study area (www.googlemaps.com)

Meteorological data is obtained from the meteorological station (Ataşehir- 10 years) to determine the climate in the region (MİGM, 2009). The average annual temperature is 14.9 °C and the average annual precipitation is 538.1 mm in Ataşehir. The distribution of precipitation according to seasons is AWSS (autumm, winter, spring, summer) and the precipitation regime is “East Mediterranean Rain Regime Type 1” in Ataşehir (Akman, 1990). The ombro-thermic climate diagrammes (Figure 2) were drawn using Gausseın’s method (Cireli et al., 1973). According to Emberger’s Mediterranean bioclimate layers classification, Ataşehir is “upper semi-arid and very cold”.

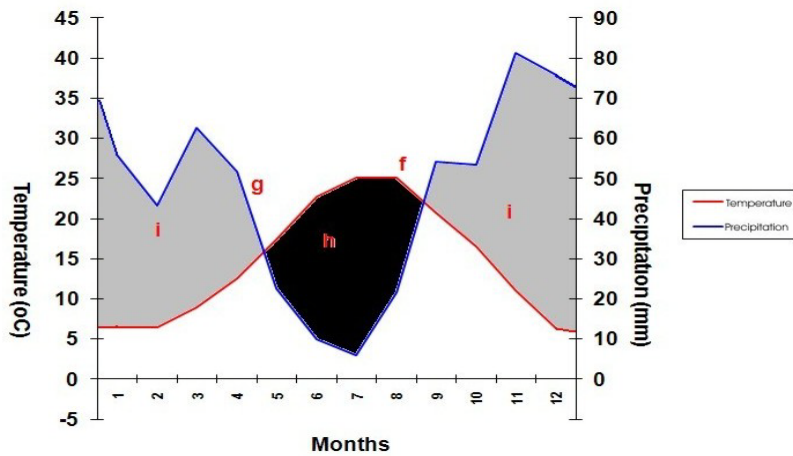


Figure 2. Ombro-thermic climate diagram of Ataşehir

a) meteorological station b) altitude c) observation (years) d) average annual temperature (°C) e) average annual precipitation (mm) f) temperature g) precipitation h) dry season i) precipitation season

The results of field studies which was carried out between 1950 and 1960 were reported and 196 taxa were identified in and around Kayışdağı by Asuman Baytop (A. Baytop, 1962). At that time, the research area was not a residential area and eventually there was a less deteriorated maquis formation compared to the present time. The present study was performed during 2006- 2007 and 396 taxa (11 of them are endemic), which are natural or naturalized, were determined in Kayışdağı and the area that encircles the campus. It is possible to conclude that, with the addition of 80 taxa which was collected by A. Baytop but not in this study, there are 476 taxa growing in the region.

2. Materyal ve yöntem

17 field excursions were carried out in different vegetation periods (March-November) in 2006-2007. A total number of 586 plant specimens were collected and their voucher specimens were prepared. The voucher specimens were identified according to the Flora of Turkey and the East Aegean Islands (Davis, 1965-85; Davis et al., 1988) and Flora of Europaea (Heywood and Tutin, 1964-1980). After identification, the voucher specimens are deposited in the Yeditepe University, Faculty of Pharmacy Herbarium, and Hacettepe University, Faculty of Education Herbarium.

The plants which were collected in the area are classified according to their phylogenetic groups to which they belong (eg. Pteridophyta, Gymnospermae, Angiospermae, Monocotyledonae, Dicotylodoneae). The arrangements in these groups were carried out alphabetically in the order of family, genus, species. Since the research area is relatively small, only the collection dates and the name of the collectors were nominated, instead of altitude and habitat information. In order to evaluate the endemism condition and the geographical distribution of taxa, these data were indicated. The cultivated plants found in the area, particularly in the Campus area, are given in the floristic list with the prefix “**”. The endangered taxa according to the criteria of IUCN are given as a separate list with the threat category to which they belong. There is no new record for the A2 square according to Donner (1985; 1987 1990) and other papers (Yıldırım, 1996, 1997a, 1997b, 1999a, 1999b, 2000a, 2000b, 2001a, 2001b, 2002a, 2002b, 2003a, 2003b, 2004a, 2004b, 2005a, 2005b, 2006a, 2006b, 2007a, 2007b, 2008a, 2008b).

Abbreviations

The abbreviations used in the text and the floristic list are as follows: CR: critically endangered; DD: data deficient; EN: endangered; Euro-Sib.: Euro-Siberian; Eux.: Euxine; Hyr.-Eux.: Hyrcano-Euxine; Ir.-Tur.: Irano-Turanian; IUCN: International Union for the Conservation of Nature and Natural Resources; NT: near threatened, LC: least concern; m: meter; Medit.: Mediterranean; VU: vulnerable.

3. Bulgular

Between 2006-2007, 586 plant specimens were collected from the research area. As a result of the identification of the plant specimens 73 families, 262 genera and 476 taxa (species, subspecies and variety) were determined from the area. This number includes the species which could not be collected by ourselves but collected by other researchers. Three taxa were from the Pteridophyta division, and 473 taxa belong to the Spermatophyta division. 2 taxa were Gymnospermae and 471 taxa were Angiospermae. Of the Angiosperms, 389 taxa were Dicotylodoneae, and 82 taxa were Monocotyledonae. 11 (2.31%) of the 476 taxa are endemic. The endemism rate of the area is low (13.2%) and

below the average of Turkey (34%) (Ekim, 2005; Behçet et al., 2009, Yıldıztuğay and Küçüközü, 2010). The taxa could be listed according to phytogeographical regions as follows: Medit. 105 (22.06%), Euro.-Sib. 67 (14.07%), Ir.-Tur. 3 (0.63%), multiregional and phytogeographically unknown 301 (63.24%) (Table 1). The number of the Mediterranean elements is higher than Euro-Sib and Ir.-Tur. elements because the study area is located in the Mediterranean region. This can be explained as Kayışdağı and its environment is mostly affected by Mediterranean climate. Comparison of the phytogeographical elements are given in Table 2.

Table 1. Distribution of the phytogeographic elements, endemic and non-endemic species.

Phytogeographic regions	Endemics		Non endemics		Total	
	Number	%	Number	%	Number	%
Mediterranean	3	0.63	102	21.42	105	22.06
Euro-Siberian	3	0.63	64	13.44	67	14.07
Irano-Turanian	2	0.42	1	0.21	3	0.63
Multiregional or unknown	3	0.63	298	62.61	301	63.24
Total	11	2.31	465	97.69	476	100

According to the number of taxa, the largest families in the area are *Asteraceae* (65), *Fabaceae* (63), *Poaceae* (46), *Lamiaceae* (23) and *Brassicaceae* (22). The comparison of the largest families with neighboring areas is given in Table 3. Three largest families in Flora of Turkey are *Asteraceae*, *Fabaceae* and *Lamiaceae* (Erik and Tarıkahya, 2004). While *Asteraceae* is in the second place in the studies number 3 and 5, it is the first family in all other studies. The family *Poaceae* which constitutes the fourth largest family in the Flora of Turkey, took the third place in our study. Its number of taxa is much closer to that of *Lamiaceae*. For this reason, it was larger than *Lamiaceae* in the studies 1, 2, 5, 6, whereas it is the same with *Lamiaceae* in studies 3 and 4. In all studies, the order of large families is more or less the same. Same geographical, geomorphological, microclimatical and edaphic factors can be stated as a reason.

Table 2. Comparison of the phytogeographical elements (abbreviations are below the table)

Studies	Mediterranean		Euro-Siberian		Irano-Turanian		Pluriregional or unknown		
	Number	%	Number	%	Number	%	Number	%	
Φ	476	105	22.2	67	14.1	3	0.6	301	63.2
1	477	62	13.0	34	7.13	3	0.62	378	79.2
2	416	108	25.9	56	13.4	3	0.7	249	60.0
3	305	81	26.5	74	24.2	9	2.9	141	46.4
4	293	30	9.8	85	29.0	3	1.0	175	60.0
5	440	84	19.0	76	17.2	7	0.9	343	77.9
6	411	89	21.7	48	11.7	3	0.7	271	65.9
7	444	93	20.9	86	19.4	2	0.5	263	59.2

Φ Kayış Dağı

1 Urban flora and ecological characteristics of the Kartal District (Istanbul): A contribution to urban ecology in Turkey (Altay et al., 2010)

2 Ballıkayalar Vadisi (Gebze-Kocaeli)'nin Florası (Akaydin et al., 2006)

3 Işık Dağı (Ganos-Tekirdağ) nın Florası (Eliçin, 1983)

4 Beşkayalar Vadisi (Gölcük-Kocaeli)'nin Florası (Akaydin et al., 2006)

5 Şile ve Civarının (Istanbul) Flora ve Vejetasyonu (pers.com.)

6 Çekmece Nükleer Araştırma Enstitüsü (Istanbul) ve Çevresinin Florası (pers. com.)

7 Çatalca (Istanbul)' nın Güney Kesiminin Florası (Genç & Özen, 2008)

Table 3. Comparison of largest families in Kayış Dağı and neighbouring areas (abbreviations are below the Table 1).

	Φ	1	2	3	4	5	6	7
Asteraceae	65	50	61	25	41	45	56	60
Fabaceae	63	44	40	32	14	59	54	49
Poaceae	46	34	26	12	12	46	30	20
amiaceae	23	25	20	12	12	33	23	25
Brassicaceae	22	15	11	10	8	13	17	14

According to the number of the taxa, the largest genera in the Flora of Turkey were reported as *Astragalus*, *Verbascum*, *Centaurea*, *Allium* and *Silene*. However, in this study they are *Trifolium* (19), *Ranunculus* (11), *Vicia* (8), *Lathyrus* (8), *Centaurea* (7) (Table 4). The genus *Trifolium* is the largest genera in the research area and most of neighbouring areas. The members of this genus grow in different habitat as meadow steppe, forest, etc. Therefore, it has been reported as the largest taxa in all studies except study 6. Although the genus *Verbascum* is the second largest genus in the Flora of Turkey, it is not one of the 5 largest genera in none of the researches that we compared. Taking into consideration that, *Verbascum* species are mostly scattered in southwestern Anatolia, our data are not surprising. Researches that have been conducted in northwestern Anatolia shows similar results for the genus *Verbascum*.

Table 4. Comparison of the largest genera in Kayış Dağı and neighbouring areas (abbreviations are below the Table 1).

	Φ	1	2	3	4	5	6	7
<i>Trifolium</i>	19	14	10	6	5	21	12	11
<i>Ranunculus</i>	11	7	5	4	4	10	7	6
<i>Vicia</i>	8	3	3	3	-	4	8	6
<i>Lathyrus</i>	8	2	3	5	2	7	4	6
<i>Centaurea</i>	7	4	5	4	2	4	4	3

Table 5. The results of areas compared according to Jaccard Similarity Index

	Kayış Dağı	Beşkayalar	Ballıkayalar	Şile	Çekmece	Işık Dağı	Çatalca	Kartal
Kayış Dağı	1	0,12108	0,23864	0,25175	0,29803	0,13303	0,23375	0,29047
Beşkayalar	0,12108	1	0,16066	0,16032	0,11218	0,10409	0,14646	0,13136
Ballıkayalar	0,23864	0,16066	1	0,2031	0,22892	0,13651	0,2091	0,22508
Şile	0,25175	0,16032	0,2031	1	0,23021	0,15109	0,25974	0,32381
Çekmece	0,29803	0,11218	0,22892	0,23021	1	0,13961	0,27634	0,31954
Işık Dağı	0,13303	0,10409	0,13651	0,15109	0,13961	1	0,16456	0,1445
Çatalca	0,23375	0,14646	0,2091	0,25974	0,27634	0,16456	1	0,28638
Kartal	0,29047	0,13136	0,22508	0,32381	0,31954	0,1445	0,28638	1

Table 5 and Figure 3 represents the comparison of related taxa of our research data and close regions with the Set Analysis System according to Jaccard similarity index. Analyses were performed with the PAST programme ver.1.99 (Hammer et al., 2001). When the index results and dendrogram were examined, it can easily be deduced that the taxa of the research area show close similarity with the flora of Çekmece Institute of Nuclear Research and surrounding areas. The existing of studies in İstanbul together in the dendrogram could be explained with both geographical closeness and the influence of urbanization. Among the 3 studies outside İstanbul, the flora of the Valley of Beşkayalar is in the influence of Euro-Siberia and includes a natural area. The flora of Ballıkayalar and Işıkdağı are geographically far from İstanbul and relatively protected from urbanization. For that reason the results of analysis may be considered meaningful.

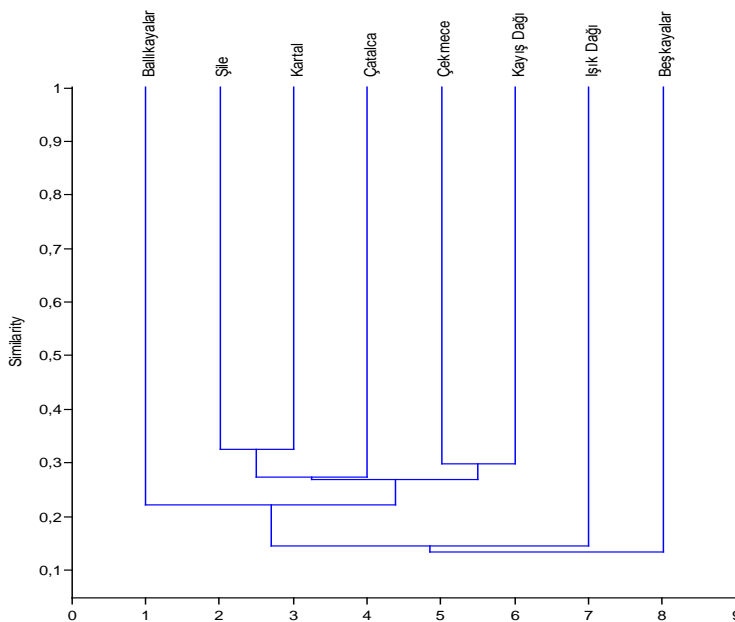


Figure 3. Cluster analysis of the taxa similarities between Kayışdağı and compared studies according to Jaccard similarity index.

Finally, when the floristic list is examined, it is observed that some plant species which are collected by Baytop could not be collected during our expeditions or *vice versa*. The species that were reported by Baytop but not by us, are ruderal plants like the members of Chenopodiaceae and Polygonaceae. This situation can be explained with the

influence of urbanization in the area. Beside the species which we could not collect, but Baytop could, can be explained with the longer period of study compared to our relatively short period.

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Kaynaklar

- Akaydın, G. Özmen, E., Özüdođru, B., 2006. Balıklayalar Vadisi (Gebze-Kocaeli)'nin florası. F.Ü. Fen ve Mühendislik Bilimleri Dergisi, 18/3: 279-289.
- Akaydın, G. Çalışkan, G., Yıldız, E.B., 2006. Beşkayalar Vadisi (Gölçük-Kocaeli)'nin florası. F.Ü. Fen ve Mühendislik Bilimleri Dergisi, 18/4:459-469.
- Akman, Y. 1990. İklim ve biyoiklim. Mühendislik serisi:103, Palme Yayın Dağıtım, Ankara.
- Altay, V., Özyiğit, İ.İ., Yarcı, C. 2010. Urban flora and ecological characteristics of the Kartal district (Istanbul): A contribution to urban ecology in Turkey. Scientific Research and Essay 5/2: 183-200.
- Baytop, A. 1962. Aydos ve kayışdağ havalisinin çiçekli bitkileri. Türk Biyoloji Dergisi, 12/3: 75-112.
- Behçet, L., Özgökçe, F., Ünal, M., Karabacak, O. 2009. The flora of Kırmızı Tuzla (Karaçoban, Erzurum/Turkey) and Bahçe Tuzlası (Malazgirt, Mus/Turkey) and their environment. Biological Diversity and Conservation. 2/3: 122-155.
- Cireli, B., Öztürk, M., Seçmen, Ö. 1973. Bitki ekolojisi uygulamaları. Ege Üniversitesi Fen Fakültesi Kitaplar Serisi No: 50, Ege Üniversitesi Matbaası, Bornova, İzmir.
- Davis, P. H. (eds.) 1965-1985. Flora of Turkey and the east aegian islands. 1-9, Edinburgh.
- Davis, P. H. (eds.) 1988. Flora of Turkey and The East Aegean Islands. 10, Edinburgh.
- Donner, J. 1985. Verbreitungskarten zu P. H. Davis "Flora of Turkey. 1-8" Linzer biol. Beitr. 17/1:1-20.
- Donner, J. 1987. Verbreitungskarten zu P. H. Davis "Flora of Turkey, 9" Linzer biol. Beitr. 19/1:3-16.
- Donner, J. 1990. Verbreitungskarten zu P. H. Davis "Flora of Turkey, 1-10" Linzer biol. Beitr. 22/2:381-515.
- Ekim, T., Koyuncu, M., Vural, M., Duman, H., Aytaç, Z., Adıgüzel, N. 2000. Türkiye Bitkileri Kırmızı Kitabı (Eğrelti ve Tohumlu Bitkiler). Türkiye Tabiatını Koruma Derneđi, Ankara.
- Ekim, T., 2005. Bitkiler, In (ed.) Kence A., Türkiye'nin biyolojik zenginlikleri. Türkiye Çevre Sorunları Vakfı Yayını, Ankara. 167-193.
- Eliçin, G. 1983. Işık Dağı (Ganos-Tekirdağ)'nın Florası. İstanbul Üniversitesi, Orman Fakültesi Yayınları, Yayın No: 334.
- Erik, S., Tarıkahya, B. 2004. Türkiye Florası Üzerine. Kebikeç, 17: 139-163.
- Genç, İ., Özen, F. 2007. Çatalca (İstanbul)'nın Güney Kesiminin Florası. Ot sistematik Botanik Dergisi, 14/1: 19-46.
- Güner, A., Özhatay, N., Ekim, T., Başer K. H. C. (eds.) 2000. Flora of Turkey and The East Aegean Islands. Edinburgh.
- Hammer, Ø., Harper, D.A.T., Ryan, P.D. 2001. PAST: Paleontological Statistics Software Package for Education and Data Analysis. Paleontologia Electronica 4/1: 9.
- Heywood, V. H., Tutin, G. T. 1964-1980. Flora Europea. VI.I-V Cambridge.
- IUCN. 2001. IUCN Red List Categories and Criteria: Version 3.1. IUCN species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK.
- T.C. Başbakanlık Devlet Meteoroloji İşleri Genel Müdürlüğü verileri. 2008.
- Yıldırım, Ş. 1988. Türkiye' nin batı yarısı ve kuzeyindeki *Isatis* L. (Cruciferae) cinsinin revizyonu. Doğa Türk Botanik Dergisi. 12/3:332-400.
- Yıldırım, Ş. 1996. Türkiye' deki eğreltilerin yayılışı. Ot Sistematik Botanik Dergisi. 3/1:93-104.
- Yıldırım, Ş. 1997 a. The chorology of the Turkish species of Acanthaceae, Aceraceae, Aizoaceae, Amaranthaceae and Anacardiaceae families. Ot Sistematik Botanik Dergisi. 4/1:125-130.
- Yıldırım, Ş. 1997 b. The chorology of the Turkish species of Apiaceae family. Ot Sistematik Botanik D. 4/2:105-128.
- Yıldırım, Ş. 1999 a. The chorology of the Turkish species of Asclepiadaceae and Aucubaceae families. Ot Sistematik Botanik Dergisi. 6/1:103-106.
- Yıldırım, Ş. 1999 b. The chorology of the Turkish species of Asteraceae family. Ot Sistematik Botanik Dergisi. 6/2: 75-123.
- Yıldırım, Ş. 2000 a. The chorology of the Turkish species of Balsaminaceae, Basallaceae, Begoniaceae, Berberidaceae, Betulaceae and Bignoniaceae families. Ot Sistematik Botanik Dergisi, 7/1:257-262.
- Yıldırım, Ş. 2000 b. The chorology of the Turkish species of Boraginaceae family. Ot Sistematik Botanik Dergisi. 7/2: 257-272.
- Yıldırım, Ş. 2001 a. The chorology of the Turkish species of Brassicaceae, Buddlejaceae and Buxaceae families. Ot Sistematik Botanik Dergisi. 8/1:141-171.

- Yıldırım, Ş. 2001b. The chorology of the Turkish species of Cactaceae, Callitrichaceae, Calycanthaceae and Campanulaceae families. *Ot Sistematiik Botanik Dergisi*. 8/2:157-171.
- Yıldırım, Ş. 2002 a. The chorology of the Turkish species of Cannabaceae, Capparaceae and Caprifoliaceae families. *Ot Sistematiik Botanik Dergisi*. 9/1:153-158.
- Yıldırım, Ş. 2002 b. The chorology of the Turkish species of Caryophyllaceae, Casuarinaceae, Celastraceae, Ceratophyllaceae and Cercidiphyllaceae families. *Ot Sistematiik Botanik Dergisi*. 9/2:175-199.
- Yıldırım, Ş. 2003 a. The chorology of the Turkish species of Chenopodiaceae, Cistaceae, Convolvulaceae, Cornaceae and Corylaceae families. *Ot Sistematiik Botanik Dergisi*. 10/1: 203-215.
- Yıldırım, Ş. 2003 b. The chorology of the Turkish species of Crassulaceae, Cucurbitaceae, Cuscutaceae, and Cynocrabaceae families. *Ot Sistematiik Botanik Dergisi*. 10/2:249-263.
- Yıldırım, Ş. 2004 a. The chorology of the Turkish species of Datisacaceae, Dipsacaceae, and Droseraceae families. *Ot Sistematiik Botanik Dergisi*. 11/1:163-172.
- Yıldırım, Ş. 2004 b. The chorology of the Turkish species of Ebenaceae, Elaeagnaceae, Elatinaceae, Empetraceae, Ericaceae, and Euphorbiaceae families. *Ot Sistematiik Botanik Dergisi*. 11/2:207--218.
- Yıldırım, Ş. 2005 a. The chorology of the Turkish species of Fabaceae family. *Ot Sistematiik Botanik Dergisi*. 12/1:117-170.
- Yıldırım, Ş. 2005 b. The chorology of the Turkish species of Fagaceae and Frankeniaceae families. *Ot Sistematiik Botanik Dergisi*. 12/2:191-196.
- Yıldırım, Ş. 2006 a. The chorology of the Turkish species of Gentianaceae, Geraniaceae, Globulariaceae, and Grossulariaceae families. *Ot Sistematiik Botanik Dergisi*. 13/1:183-194.
- Yıldırım, Ş. 2006 b. The chorology of the Turkish species of Haloragidaceae, Hamamelidaceae, Hippocastanaceae, Hippuridaceae, Hydrangeaceae, Hydrophyllaceae, Hypericaceae, Illecebraceae, and Juglandaceae families. *O Sistematiik Botanik Dergisi*. 13/2:199-212.
- Yıldırım, Ş. 2007 a. The chorology of the Turkish species of Lamiaceae, family. *Ot Sistematiik Botanik Dergisi*. 14/1:151-198.
- Yıldırım, Ş. 2007 b. The chorology of the Turkish species of Lauraceae, Lentibulariaceae, Linaceae, Lobeliaceae, Loranthaceae and Lythraceae families. *Ot Sistematiik Botanik Dergisi*. 14/2:197-206.
- Yıldırım, Ş. 2008 a. The chorology of the Turkish species of Magnoliaceae, Malvaceae, Meliaceae, Menyanthaceae, Molluginaceae, Moraceae, Morinaceae, Myrtaceae, Nyctaginaceae, Nymphaeaceae and Nysaceae families. *Ot Sistematiik Botanik Dergisi*. 15/1:150-164.
- Yıldırım, Ş. 2008 b. The chorology of the Turkish species of Oleaceae, Onagraceae, Orobanchaceae, and Oxalidaceae families. *Ot Sistematiik Botanik Dergisi*. 15/2:151-166.
- Yıldızıtugay, E., Küçüködük, M. 2010. The flora of Kas Plateau and its surroundings (Anamur – Mersin/Turkey). *Biological Diversity and Conservation*. 3/2: 170-184.
<http://maps.google.com/>

Appendix Floristic List:

PTERIDOPHYTA

EQUISETACEAE

Equisetum arvense L., 09.06.2006, Akaydin 10852.

HYPOLEPIDACEAE

Pteridium a quilinum (L.) Kuhn, 07.05.2006, Akaydin 10628, 13.05.2007, Akaydin 11437.

POLYPODIACEAE

Polypodium australe Fée, 14.04.2007, Akaydin 11290.

SPERMATOPHYTA

GYMNOSPERMAE

CUPRESSACEAE

Juniperus o xycedrus L. subsp. *oxycedrus*, 06.10.2007, Akaydin 11622.

PINACEAE

**Pinus maritima* Mill., 12.05.2007, Akaydin 11305.

ANGIOSPERMAE

DICOTYLEDONEAE

ACERACEAE

**Acer negundo* L., 03.06.2007, Akaydin 11564.

AMARANTHACEAE

Amaranthus albus L., 06.10.2007, Akaydin 11610.

A. chlorostachys Willd., 13.05.2007, Akaydin 11412.

A. graecizans L. var. *graecizans*, 06.10.2007, Akaydin 11644.

A. lividus L., 06.10.2007, Akaydin 11606.

APIACEAE (UMBELLIFERAE)

Caucalis platycarpus L., 09.06.2006, Akaydin 10886.

Conium maculatum L., 09.06.2006, Akaydin 10822.

Daucus carota L., 09.06.2006, Akaydin 10896.

Ferulago c onfusa Velen, 09.06.2006, Akaydin 10817, **Euro.-Sib. VU.**

F. thirkeana (Boiss.) Boiss., A. Baytop, **Endemic. NT.**

Oenanthe fistulosa L., 09.06.2006, Akaydin 10902.

Oenanthe pimpinelloides L., 07.05.2006, Akaydin 10615. A. Baytop.

Orlaya daucooides (L.) Greuter, 07.05.2006, Akaydin 10610. **Medit. ?**

Pimpinella peregrina L., A. Baytop.

Seseli campestre Besser, 06.10.2007, Akaydin 11617.

S. tortuosum L., A. Baytop.

Tordylium a pulum L., 14.04.2007, Akaydin 11272. A. Baytop. **Medit.**

Torilis nodosa (L.) Gaertner, 09.06.2007, Akaydin 10880.

APOCYNACEAE

Nerium oleander* L., 03.06.2007, Akaydin 11591. **Medit.

ARALIACEAE

**Hedera helix* L., 12.05.2007, Akaydin 11384.

ASCLEPIDIACEAE

Vincetoxicum fu scatum (Hornem.) Reichb. subsp. *fuscatum*, 12.05.2007, Akaydin 11352. A. Baytop.

ASTERACEAE (COMPOSITAE)

Anthemis auriculata Boiss., 12.05.2007, Akaydin 11311. **E. Medit.**

A. cretica L. subsp. *tenuiloba* (DC.) Grierson, 07.05.2006, Akaydin 10676. A. Baytop.

A. tinctoria L. var. *discoidea* (All.) DC., 09.06.2006, Akaydin 10864. A. Baytop.

A. tinctoria L. var. *pallida* DC., 12.05.2007, Akaydin 11399.

Bellis perennis L., 07.05.2006, Akaydin 10612. A. Baytop. **Euro.-Sib.**

- B. sylvestris* Cry., 06.10.2007, Akaydin 11641. **Medit.**
Calendula arvensis L. 14.04.2007, Akaydin 11265. A. Baytop.
 **C. officinalis* L., 17.03.2007, Akaydin 11182.
Carduus n utans L. sensu lato, 03.06.2007, Akaydin 11587. A. Baytop.
C. py cnocephalus L. subsp. *albidus* (Bieb.) Kazmi, 14.04.2007, Akaydin 11225.
Carlina corymbosa L., A. Baytop. **Medit.**
Centaurea arenaria Bieb. ex Willd., A. Baytop. **Euro.-Sib. VU.**
C. calcitrapa L., A. Baytop.
C. cuneifolia Sm., 03.06.2007, Akaydin 11555.
C. diffusa Lam., A. Baytop. **Medit.**
C. iberica Trev. ex Sprengel, 03.06.2007, Akaydin 11561.
C. polyclada DC., 09.06.2006, Akaydin 10835. **Endemic. E. Medit. LC.**
C. solstitialis L. subsp. *solstitialis*, 09.06.2006, Akaydin 10872. A. Baytop.
Chondrilla juncea L. var. *juncea*, 06.10.2007, Akaydin 11614. A. Baytop.
Chrysanthemum coronarium L., 07.05.2006, Akaydin 10636. **Medit.**
Cichorium intybus L., 09.06.2006, Akaydin 10890.
Cirsium italicum (Savi) DC., 09.06.2006, Akaydin 10828. **Medit.**
C. pol ycephalum DC., 06.10.2007, Akaydin 11634. **Endemic. E. Medit.? CR.**
C. vulgare (Savi) Ten., 12.05.2007, Akaydin 11346.
Conyza canadensis (L.) Cronquist, 13.05.2007, Akaydin 11428.
Crepis foetida L., subsp. *commutata* (Spreng.) Babcock, 12.05.2007, Akaydin 11339.
C. reuteriana Boiss. subsp. *reuteriana*, 14.04.2007, Akaydin 11278. **E. Medit.**
C. sancta (L.) Babcock., 14.04.2007, Akaydin 11257. A. Baytop.
C. smyrnaea DC. ex Froehlich, 12.05.2007, Akaydin 11394. **E.Medit.**
C. vesicaria L., 12.05.2007, Akaydin 11405. **Medit.**
Crupina crupinastrum (Moris) Vis., 07.05.2006, Akaydin 10620.
C. vulgaris Cass., 12.05.2007, Akaydin 11381. A. Baytop
Echinops microcephalus Sm., A. Baytop.
Evax pygmaea (L.) Brot., 12.05.2007, Akaydin 11360. **Medit.**
Filago pyramidata L., 03.06.2007, Akaydin 11589.
F. vulgaris Lam., 12.05.2007, Akaydin 11327-a. A. Baytop
Helminthotheca echioides (L.) Holub, 09.06.2006, Akaydin 10879.
Hypochoeris r adicata L., 09.06.2006, Akaydin 10850. A. Baytop. **Euro.-Sib.**
Inula ensifolia L., 09.06.2006, Akaydin 10833. **Euro.-Sib.**
I. graveolens (L.) Desf., A. Baytop. **Medit.**
I. heterolepis Boiss. 09.06.2006, Akaydin 10878. **E. Medit.**
I. salicina L., 09.06.2006, Akaydin 10861. **Euro.-Sib.**
I. viscosa (L.) Aiton, 06.10.2007, Akaydin 11616. **Medit.**
Lapsana communis L. subsp. *intermedia* (Bieb.) Hayek, 13.05.2007, Akaydin 11419.
Leondoton t uberosus L., 07.05.2006, Akaydin 10683. A. Baytop. **Medit.**
Leucanthemum vu lgare Lam., 07.05.2006, Akaydin 10691. **Euro.-Sib.**
Logfia gallica (L.) Cosson & Germ., 12.05.2007, Akaydin 11327-b. A. Baytop.
Pallenis spinosa (L.) Cass., 09.06.2006, Akaydin 10837. **Medit.**
Pilosella piloselloides (Vill.) Sojak subsp. *megalomastix* (NP.) Sell & West, 12.05.2007, Akaydin 11342.
Pulicaria odorata (L.) Rechb., A. Baytop. **Medit.**
Scorzonera c ana (C.A.Meyer) Hoffm. var. *cana*, 03.06.2007, Akaydin 11574. A. Baytop.
S. elata Boiss., 14.04.2007, Akaydin 11233. **E. Medit.**
S. mollis Bieb. subsp. *mollis*, 14.04.2007, Akaydin 11289. A. Baytop.
S. sublanata Lipschitz, 17.03.2007, Akaydin 11206. **E. Medit.**
Senecio a quaticus Hill subsp. *aquaticus*, 12.05.2007, Akaydin 11377. **Euro.-Sib.**
S. vernalis Waldst. & Kit., 17.03.2007, Akaydin 11191.
Silybum ma rianum (L.) Gaertner, 09.06.2006, Akaydin 10829. **Medit.**
Sonchus as per (L.) Hill subsp. *glaucescens* (Jordan) Ball, 07.05.2006, Akaydin 10630.
Tanacetum parthenium (L.) Schultz Bip., 09.06.2006, Akaydin, 10824.
Taraxacum scaturiginosum G.Hagl. 17.03.2007, Akaydin 11196.
Tolpis barbata (L.) Gaertner. A. Baytop. **Medit.**
Tragopogon dubius Scop., 12.05.2007, Akaydin 11333.
Tussilago farfara L., 17.03.2007, Akaydin 11207. **Euro.-Sib.**
Xanthium spinosum L., 06.10.2007, Akaydin 11629.
X. strumarium L. subsp. *strumarium*, 06.10.2007, Akaydin 11604. **BERBERIDACEAE**
 Berberis vulgaris* L., 03.06.2007, Akaydin 11581. **BORAGINACEAE
Anchusa u ndulata L. subsp. *hybrida* (Ten) Coutinho, 07.05.2006, Akaydin 10638. **Medit.**
Borago officinalis L., 09.06.2006, Akaydin 10813. **Medit. ?**
Echium angustifolium Miller, 12.05.2007, Akaydin 11330. **E. Medit.**
E. italicum L., A. Baytop.
E. plantagineum L., 13.05.2007, Akaydin 11446. **Medit.**
E. vulgare L., 12.05.2007, Akaydin 11309. **Euro.-Sib.**
Heliotropium europaeum L., 06.10.2007, Akaydin 11609. **Medit.**
Myosotis d iscolor Pers., 14.04.2007, Akaydin 11274. A. Baytop. **Euro.-Sib.**
Onosma aucheranum DC., 09.06.2006, Akaydin 10907. **E.Medit.**
O. thracicum Velen., 07.05.2006, Akaydin 10686. **Euro.-Sib. ?** **BRASSICACEAE (CRUCIFERAE)**
Alyssum dasy carpum Steph. ex Willd., 17.03.2007, Akaydin 11189.
A. minus (L.) Rothm. var. *micranthum* (Meyer) Dudley, A. Baytop.
A. umbellatum Desv., A. Baytop. **E. Medit.**
Arabidopsis thaliana (L.) Heynhold, 14.04.2007, Akaydin 11270. A. Baytop.
Brassica nigra (L.) Koch, 14.04.2007, Akaydin 11268.
Calepina ir regularis (Asso) Thellung, 17.03.2007, Akaydin 11179. A. Baytop.
Capsella bursa-pastoris (L.) Medik., 12.05.2007, Akaydin 11401.
C. rubella Reuter., 17.03.2007, Akaydin 11180. **Medit.**
Cardamine hirsuta L., 14.04.2007, Akaydin 11222. A. Baytop.
Cardaria dr aba (L.) Desv. subsp. *draba*, 07.05.2006, Akaydin 10672.
Clypeola jon thlaspi L., 14.04.2007, Akaydin 11271.
Diplotaxis tenuifolia (L.) DC., 06.10.2007, Akaydin 11627.
Erophila ver na (L.) Chevall. subsp. *praecox* (Stev.) Walters, 14.04.2007, Akaydin 11296, A. Baytop.
Hirschfeldia incana (L.) Lag.-Foss., 12.05.2007, Akaydin 11299.
Lepidium campestre (L.) R. Br., 07.05.2006, Akaydin 10603.
L. graminifolium L., 06.10.2007, Akaydin 11623.
L. spinosum Ard., A. Baytop.
Raphanus raphanistrum L., 07.05.2006, Akaydin 10605.
Rapistrum rugosum (L.) All, 07.05.2006, Akaydin 10629.
Sinapis arvensis L., 14.04.2007, Akaydin 11221.
Sisymbrium officinale (L.) Scop., 12.05.2007, Akaydin 11406.
Teesdalia co ronopifolia (Berg.) Thellung, 17.03.2006, Akaydin 11185. A. Baytop. **Medit.** **CAMPANULACEAE**
Campanula lyrata Lam. subsp. *lyrata*, 13.05.2007, Akaydin 11436. **Endemic. LC.**
Legousia pentagonia (L.) Thellung, 12.05.2007, Akaydin 11302. **E. Medit.**
L. speculum-veneris (L.) Chaix, 07.05.2006, Akaydin 10594. **Medit.** **CAPRIFOLIACEAE**
 Lonicera etrusca* Santi var. *etrusca*, 03.06.2007, Akaydin 11568. **Medit.
 Viburnum tinus* L., 09.06.2006, Akaydin 10832. **CARYOPHYLLACEAE
Arenaria serpyllifolia L., A. Baytop.
Cerastium g lomeratum Thuill., 14.04.2007, Akaydin 11291. A. Baytop.
C. perfoliatum L., 12.05.2007, Akaydin 11356.
Corrigiola litoralis L., A. Baytop.
Dianthus pal lens Sibth. & Sm. var. *pallens*, 09.06.2006, Akaydin 10847. A. Baytop.
D. pubescens L., A. Baytop.
D. pinifolius Sibth. & Sm., 09.06.2006, Akaydin 10887. A. Baytop. **VU.**
Minuartia anat olica (Boiss.) Woron. var. *pol ymorpha* McNeill, 07.05.2006, Akaydin 10695.
M. mediterranea (Ledeb.) K. Maly, 12.05.2007, Akaydin 11307. A. Baytop.
Moenchia mantica (L.) Bartl. subsp. *mantica*, 07.05.2006, Akaydin 10654. A. Baytop.
Petrorhagia velutina (Guss.) Ball & Heywood, 12.05.2007, Akaydin 11362.

- Silene alba* (Miller) Krause subsp. *divaricata* (Reichb.) Walters, 09.06.2006, Akaydin 10912.
- Silene d'ichotoma* Ehrh. subsp. *sibthorpiana* (Reichb.) Rech., 09.06.2006, Akaydin 10814.
- S. g'allica* L., 07.05.2006, Akaydin 10618, 12.05.2007, Akaydin 11326.
- S. ita lica* (L.) Pers., 07.05.2006, Akaydin 10600, 12.05.2007, Akaydin 11409.
- S. v'ulgaris* (Moench) Garcke var. *vulgaris*, 7.05.2006, Akaydin 10622.
- Spergula pentandra* L., A. Baytop.
- Spergularia marina* (L.) Gris., 06.10.2007, Akaydin 11646.
- S. rubra* (L.) J. & C. Presl., 12.05.2007, Akaydin 11335, A. Baytop.
- Stellaria media* (L.) Vill. subsp. *pallida* (Dumort) Aschers&Graebn., A. Baytop.
- CHENOPODIACEAE**
- Beta maritima* L. var. *maritima*, 13.05.2007, Akaydin 11445.
- Chenopodium glaucum* L., 06.10.2007, Akaydin 11625. **Euro.-Sib.**
- CISTACEAE**
- Cistus creticus* L., 07.05.2006, Akaydin 10606. A. Baytop.
- C. salvifolius* L., 07.05.2006, Akaydin 10607. A. Baytop.
- Tuberaria guttata* (L.) Fourr. var. *guttata*, 14.04.2007, Akaydin 11294, A. Baytop.
- CONVOLVULACEAE**
- Calystegia sepium* (L.) R. Br. subsp. *sepium*, 09.06.2006, Akaydin 10857.
- C. sylvatica* (Kit.) Griseb., 03.06.2007, Akaydin 11547.
- Convolvulus arvensis* L., 09.06.2006, Akaydin 10892.
- C. cantabrica* L., 03.06.2007, Akaydin 11549.
- CRASSULACEAE**
- Sedum hispanicum* L. var. *hispanicum*, A. Baytop.
- S. pallidum* Bieb. var. *pallidum*, 09.06.2006, Akaydin 10899.
- Umbilicus rupestris* (Salisb.) Dandy, 07.05.2006, Akaydin 10670. A. Baytop.
- CUCURBITACEAE**
- Echallium elaterium* (L.) A. Rich., 09.06.2006, Akaydin 10851. **Medit.**
- CUSCUTACEAE**
- Cuscuta obtusata* Trabut, 12.05.2007, Akaydin 11373. A. Baytop.
- Endemic. Medit. DD.**
- DIPSACACEAE**
- Scabiosa atropurpurea* L. subsp. *maritima* (L.) Arc., 09.06.2007, Akaydin 10891. A. Baytop.
- S. columbaria* L. subsp. *ochroleuca* (L.) Čelak. var. *ochroleuca* (L.) Coulter, 09.06.2006, Akaydin 10849, A. Baytop.
- ELAEAGNACEAE**
- **Elaeagnus angustifolia* L., 06.10.2007, Akaydin 11621.
- ERICACEAE**
- Arbutus unedo* L., 07.05.2006, Akaydin 10642, 17.03.2007, Akaydin 11181.
- Erica arborea* L., 17.03.2007, Akaydin 11203, A. Baytop.
- E. ma nipuliflora* Salisb., 07.05.2006, Akaydin 10651, A. Baytop. **Medit. ?**
- EUPHORBIACEAE**
- Andrachne telephioides* L., A. Baytop.
- Euphorbia exigua* L., A. Baytop.
- E. falcata* L. subsp. *falcata* var. *falcata*, 14.04.2007, Akaydin 11252.
- E. helioscopia* L., 07.05.2006, Akaydin 10655, 17.03.2007, Akaydin 11195.
- E. lucida* Waldst. & Kit., 12.05.2007, Akaydin 11359. **Euro.-Sib.**
- E. s'equieriana* Necker subsp. *sequieriana*, 14.04.2007, Akaydin 11239. **Euro.-Sib.**
- E. villosa* Waldst. & Kit. Ex Willd., 14.04.2007, Akaydin 11226. **Euro.-Sib.**
- Mercurialis annua* L., 09.06.2006, Akaydin 10818, 17.03.2007, Akaydin 11217. A. Baytop.
- FABACEAE (LEGUMINOSAE)**
- Calicotome villosa* (Poir.) Link, 7.05.2006, Akaydin 10668. **Medit.**
- Cercis siliquastrum* L. subsp. *siliquastrum*, 13.05.2007, Akaydin 11422.
- Dorycnium g'raecum* (L.) Ser., 7.05.2006, Akaydin 10631, A. Baytop. **Eux.**
- D. pentaphyllum* Scop. subsp. *herbaceum* (Vill.) Rouy, 12.05.2007, Akaydin 11380. A. Baytop.
- Genista carinalis* Gris., 7.05.2006, Akaydin 10624.
- G. lydia* Boiss. var. *lydia*, 12.05.2007, Akaydin 11355.
- G. tinctoria* L., A. Baytop. **Euro.-Sib.**
- Hymenocarpus cirrinnatus* (L.) Savi., 14.04.2007, Akaydin 11227, A. Baytop. **Medit.**
- Lathyrus aphaca* L., A. Baytop.
- L. cicera* L., 14.04.2007, Akaydin 11273, A. Baytop.
- L. digitatus* (Bieb.) Fiori, 7.05.2006, Akaydin 10609. **Medit.**
- L. la xiflorus* (Desf.) O. Kuntze subsp. *laxiflorus*, 12.05.2007, Akaydin 11393, A. Baytop.
- L. pratensis* L., A. Baytop. **Euro.-Sib.**
- L. setifolius* L., 14.04.2007, Akaydin 11224.
- L. sphaericus* Retz., 17.03.2007, Akaydin 11214.
- L. undulatus* Boiss., 7.05.2006, Akaydin 10663. **Endemic. Eux. ? VU.**
- Lens ervoides* (Brign.) Grande, 17.03.2007, Akaydin 11204. **Medit.**
- Lotus angustissimus* L., 13.05.2007, Akaydin 11427, A. Baytop.
- L. corniculatus* L. var. *tenuifolius*, 03.06.2007, Akaydin 11576, A. Baytop.
- L. ornithopodioides* L., 13.05.2007, Akaydin 11430. **Medit.**
- L. peregrinus* L. var. *peregrinus* Heyn, 09.06.2006, Akaydin 10853.
- Lupinus micranthus* Guss., A. Baytop. **Medit.**
- Medicago arabica* (L.) Huds., 12.05.2007, Akaydin 11408.
- M. disciformis* DC., A. Baytop. **Medit.**
- M. lupulina* L., 03.06.2007, Akaydin 11593.
- M. minima* (L.) Bart., A. Baytop.
- M. orbicularis* (L.) Bart., 13.05.2007, Akaydin 11438.
- M. praecox* DC., A. Baytop. **Medit.**
- Melilotus alba* Desr., 09.06.2006, Akaydin 10913, 06.10.2007, Akaydin 11632.
- M. officinalis* (L.) Desr. 13.05.2007, Akaydin 11444.
- Onobrychis caput-galli* (L.) Lam., A. Baytop. **Medit.**
- Ornithopus compressus* L., 14.04.2007, Akaydin 11293. **Medit.**
- **Robinia pseudoacacia* L., 07.05.2006, Akaydin 10632, 12.05.2007, Akaydin 11324.
- Scorpiurus muricatus* L. var. *subvillosus* (L.) Fiori, 13.05.2007, Akaydin 11429. **Medit.**
- Spartium junceum* L., 12.05.2007, Akaydin 11411. **Medit.**
- Trifolium angustifolium* L., 12.05.2007, Akaydin 11331, A. Baytop.
- T. arvense* L. var. *arvense*, 12.05.2007, Akaydin 11343.
- T. campestre* Schreb., 7.05.2006, Akaydin 10599, A. Baytop.
- T. cherleri* L., 09.06.2006, Akaydin 10816. **Medit.**
- T. constantinopolitanum* Ser., 07.05.2006, Akaydin 10692.
- T. globosum* L., A. Baytop.
- T. hirtum* All., 12.05.2007, Akaydin 11344, 11349. **Medit.**
- T. lappaceum* L., 13.05.2007, Akaydin 11432. A. Baytop. **Medit.**
- T. medium* L. var. *medium*, 9.06.2007, Akaydin 10866 a.
- T. ochroleucum* Huds., 14.04.2007, Akaydin 11223.
- T. pallidum* Wadst. & Kit., 14.04.2007, Akaydin 11264.
- T. pannoni cum* Jacq. subsp. *elongatum* (Willd.) Zoh, 12.05.2007, Akaydin 11370, **Endemic. LC.**
- T. pauciflorum* d' Urv., 12.05.2007, Akaydin 11341. **E. Medit.**
- T. pratense* L. var. *pratense*, 7.05.2006, Akaydin 10693.
- T. purpureum* Lois. var. *purpureum*, 03.06.2007, Akaydin 11565.
- T. resupinatum* L. var. *resupinatum*, 03.06.2007, Akaydin 11556.
- T. s'tellatum* L. var. *stellatum*, 07.05.2006, Akaydin 10679. A. Baytop.
- T. subterraneum* L., A. Baytop.
- T. uniflorum* L., 7.05.2006, Akaydin 10685, A. Baytop. **Medit.**
- Trigonella monantha* C. A. Meyer, 13.05.2007, Akaydin 11434. **Ir.-Tur.**
- Vicia cracca* L. subsp. *gerardii* Gaudin, 12.05.2007, Akaydin 11403.
- V. hirsuta* (L.) S. F. Gray, 12.05.2007, Akaydin 11301, A. Baytop.
- V. hybrida* L., 7.05.2006, Akaydin 10674.
- V. lathyroides* L., A. Baytop.
- V. pubescens* (DC.) Link, 09.06.2006, Akaydin 10894, A. Baytop. **Medit.**
- V. sativa* L. subsp. *nigra* (L.) Ehrh. var. *nigra*, 07.05.2006, Akaydin 10596.
- V. sativa* L. subsp. *nigra* (L.) Ehrh. var. *segetalis* (Thuill) Ser., 14.04.2007, Akaydin 11220.
- V. villosa* Roth. subsp. *villosa*, 07.05.2006, Akaydin 10602.
- FAGACEAE**
- Quercus coccifera* L., 09.06.2006, Akaydin 10908, A. Baytop. **Medit.**
- Q. in fectoria* Olivier subsp. *boissieri* (Reuter) O. Schwarz, 06.10.2007, Akaydin 11648, A. Baytop.

Q. infectoria Olivier subsp. *infectoria*, 06.10.2007, Akaydin 11637, 11615, A. Baytop. **Euro.-Sib.**

GERANIACEAE

Blackstonia perfoliata (L.) Hudson, A. Baytop.

Centaureum erythraea Rafn. subsp. *rumelicum* (Velen) Melderis, 03.06.2007, Akaydin 11579, A. Baytop. **Medit.**

C. maritimum (L.) Fritsch, 13.05.2007, Akaydin 11435, A. Baytop. **Medit.**

C. tenuiflorum (Hoffmanns. & Link) subsp. *tenuiflorum*, 09.06.2006, Akaydin 10901.

GERANIACEAE

Erodium botrys (Cav.) Bertol., 07.05.2006, Akaydin 10641, A. Baytop. **Medit.**

E. cicutarium (L.) L'Hérit. subsp. *cutarium*, 17.03.2007, Akaydin 11190. A. Baytop.

E. hoefltianum C.A.Meyer, 14.04.2007, Akaydin 11269.

Geranium a sphodeloides Burm. subsp. *asphodeloides*, 07.05.2006, Akaydin 10653, A. Baytop. **Euro.-Sib.**

G. dissectum L., 07.05.2006, Akaydin 10597.

G. lanuginosum Lam., 07.05.2006, Akaydin 10656.

G. molle L. subsp. *molle*, 14.04.2007, Akaydin 11240.

G. purpureum Vill., 07.05.2006, Akaydin 10643, A. Baytop.

HYPERICACEAE (GUTTIFERAE)

Hypericum calycinum L., 09.06.2006, Akaydin 10825, A. Baytop. **Eux.**

H. cerastoides (Spach) Robson, 07.05.2006, Akaydin 10665, A. Baytop.

H. montbretii Spach, 12.05.2007, Akaydin 11371, A. Baytop.

H. perfoliatum L., 07.05.2006, Akaydin 10598. **Medit.**

H. perforatum L., 09.06.2006, Akaydin 10830, A. Baytop.

ILLECEBRACEAE

Herniaria hirsuta L., 12.05.2007, Akaydin 11300.

LAURACEAE

Laurus nobilis* L., 14.04.2007, Akaydin 11236. **Medit.

LAMIACEAE (LABIATAE)

Ajuga reptans L., A. Baytop. **Euro.-Sib.**

Ballota nigra L. subsp. *anatolica* P.H. Davis, 06.10.2007, Akaydin 11645. **Endemic. Ir.-Tur. LC.**

Calamintha nepeta (L.) Savi subsp. *glandulosa* (Req.) P.W. Ball, 06.10.2007, Akaydin 11631, A. Baytop.

Lamium amplexicaule L., A. Baytop. **Euro.-Sib.**

L. purpureum L. var. *purpureum*, 07.05.2006, Akaydin 10666, A. Baytop. **Euro.-Sib.**

Lavandula stoechas L. subsp. *stoechas*, 07.05.2006, Akaydin 10601, A. Baytop. **Medit.**

Mentha aquatica L., 06.10.2007, Akaydin 11635, Akaydin 11649.

Micromeria juliana (L.) Benth. ex. Reichb., 10.06.2006, Akaydin 10915. **Medit.**

Origanum vulgare L. subsp. *vulgare*, 10.06.2006, Akaydin 10918. **Euro.-Sib.**

Prunella laciniata (L.) L., 13.05.2007, Akaydin 11425. **Euro.-Sib.**

P. vulgaris L., 12.05.2007, Akaydin 11375. **Euro.-Sib.**

Salvia forskahlei L., 09.06.2006, Akaydin 10819, A. Baytop. **Eux.**

S. verbenaca L., 07.05.2006, Akaydin 10678. **Medit.**

S. virgata Jacq., 09.06.2006, Akaydin 10840, A. Baytop.

Scutellaria albida L. subsp. *albida*, 03.06.2007, Akaydin 11595, A. Baytop. **E. Medit.**

Stachys arvensis (L.) L., 14.04.2007, Akaydin 11234, 12.05.2007, Akaydin 11304.

S. byzantina C. Koch, 13.05.2007, Akaydin 11421. **Euro.-Sib.**

S. thirkei C. Koch, 12.05.2007, Akaydin 11351, Akaydin 11392, A. Baytop.

Teucrium chamaedrys L. subsp. *chamaedrys*, 09.06.2006, Akaydin 10842. **Euro.-Sib.**

T. montanum L., 10.06.2006, Akaydin 10917.

T. polium L., 03.06.2007, Akaydin 11553, A. Baytop.

Thymus longicaulis C. Presl subsp. *longicaulis*, var. *subisophyllus* (Borbas) Jalas, 07.05.2006, Akaydin 10689.

T. thymoides Velen. var. *longidens* (Velen.) Jalas, 14.04.2007, Akaydin 11250.

LINACEAE

Linum catharticum Boiss & Orph., 07.05.2006, Akaydin 10700.

L. bienne Miller, 12.05.2007, Akaydin 11354. **Medit.**

L. trifyllum L., 12.05.2007, Akaydin 11340, A. Baytop, **Medit.**

LYTHRACEAE

Lythrum hyssopifolia L., 03.06.2007, Akaydin 11599, A. Baytop.

MALVACEAE

Lavatera cretica L., 13.05.2007, Akaydin 11439.

Malva nicaeensis All., 12.05.2007, Akaydin 11321.

M. sylvestris L., 07.05.2006, Akaydin 10690.

M. neglecta Wallr., 09.06.2006, Akaydin 10846.

MORACEAE

**Ficus carica* L. subsp. *carica*, A. Baytop.

OLEACEAE

Ligustrum vulgare* L., 09.06.2006, Akaydin 10893. **Euro.-Sib.

Phillyrea latifolia L., 07.05.2006, Akaydin 10661, A. Baytop. **Medit.**

OROBANCHACEAE

Orobancha alba Stephan, 13.05.2007, Akaydin 11418, A. Baytop.

O. minor Sm., A. Baytop.

O. mutellii F. Schultz, 12.05.2007, Akaydin 11376.

O. ramosa L., 07.05.2006, Akaydin 10664.

PAPAVERACEAE

Fumaria kralikii Jordan, 11.05.2007, Akaydin 11357. **Medit.**

F. officinalis L., 14.04.2007, Akaydin 11253.

F. parviflora Lam., 07.05.2006, Akaydin 10659.

Papaver argemone L., 03.06.2007, Akaydin 11585.

P. dubium L., 07.05.2006, Akaydin 10637, A. Baytop.

P. rhoeas L., 12.05.2007, Akaydin 11361, A. Baytop.

PHYTOLACCACEAE

Phytolacca americana L., 06.10.2007, Akaydin 11642.

PLANTAGINACEAE

Plantago bellardii All., 14.04.2007, Akaydin 11286. **E. Medit.**

P. c. oronopus L. subsp. *commutata* (Guss.) Pilger, 09.06.2006, Akaydin 10815, A. Baytop. **E. Medit.**

Plantago c. oronopus L. subsp. *oronopus*, 12.05.2007, Akaydin 11338. **Euro.-Sib.**

P. lagopus L., 12.05.2007, Akaydin 11372, A. Baytop. **Medit.**

P. lanceolata L., 03.06.2007, Akaydin 11559, A. Baytop.

P. major L. subsp. *intermedia* Gilib., 06.10.2007, Akaydin 11650, A. Baytop.

***PLATANACEAE**

**Platanus orientalis* L., 12.05.2007, Akaydin 11334.

POLYGALACEAE

Polygala supina Schreb., 12.05.2007, Akaydin 11391.

P. vulgaris L. 07.05.2006, Akaydin 10623. **Euro.-Sib.**

POLYGONACEAE

Polygonum arenarium Waldst. & Kit., A. Baytop.

P. aviculare L., 09.06.2006, Akaydin 10823, A. Baytop.

P. lapathifolium L., 06.10.2007, Akaydin 11643, A. Baytop.

P. pulchellum Lois., 13.05.2007, Akaydin 11417.

Rumex acetosella L., 07.05.2006, Akaydin 10701.

R. conglomeratus Murray, 07.05.2006, Akaydin 10633, A. Baytop.

R. crispus L., 12.05.2007, Akaydin 11312.

R. pulcher L., 09.06.2006, Akaydin 10903, A. Baytop.

R. sanguineus L., 12.05.2007, Akaydin 11332

R. tuberosus L. subsp. *tuberosus*, 07.05.2006, Akaydin 10698.

PORTULACACEAE

Montia minor Gmelin, A. Baytop.

Portulaca oleracea L., 06.10.2007, Akaydin 11605.

PRIMULACEAE

Anagallis arvensis L. var. *arvensis*, 07.05.2006, Akaydin 10614.

A. arvensis L. var. *caerulea* (L.) Gouan, 07.05.2006, Akaydin 10613.

Lysimachia verticillaris L., 09.06.2006, Akaydin 10831. **Hyr.-Eux.**

PUNICACEAE

**Punica granatum* L., 03.06.2007, Akaydin 11562.

RAFFLESIACEAE

Cytinus hypocistis L. subsp. *kermesinus* (Guss.) Wettst., 07.05.2006, Akaydin 10627. **Medit.element.**

RANUNCULACEAE

Ranunculus arvensis L., A. Baytop.

R. constantinopolitanus (DC.) d'Urv., 14.04.2007, Akaydin 11276.

R. cornutus DC., 12.05.2007, Akaydin 11329

R. gracilis Clarke, 14.04.2007, Akaydin 11246, A. Baytop.

R. ficaria L. subsp. *ficariiformis* Rouy & Fouc., 17.03.2007, Akaydin 11177, A. Baytop.

R. marginatus d'Urv. var. *marginatus*, 09.06.2006, Akaydin 10865

R. muricatus L., 07.05.2006, Akaydin 10675

R. neopolitanus Ten., 07.05.2006, Akaydin 10667, A. Baytop.

R. paludosus Poiret, 14.04.2007, Akaydin 11245, A. Baytop.

R. repens L., 07.05.2006, Akaydin 10626.

R. saniculifolius Viv., A. Baytop.

RHAMNACEAE

Paliurus spina-christi Miller, 09.06.2006, Akaydin 10821, A. Baytop.

ROSACEAE

Agrimonia eupatoria L., A. Baytop.

Crataegus curvisepala Lindman, 07.05.2006, Akaydin 10639.

C. m onogyna Jacq. subsp. *azarella* (Gris.) Franco, 07.05.2006, Akaydin 10645.

C. monogyna Jacq. subsp. *monogyna*, 14.04.2007, Akaydin 11263, A. Baytop.

**Laurocerasus officinalis* Roemer, 07.05.2006, Akaydin 10696.

Mespilus germanica L., 03.06.2007, Akaydin 11578. **Hyr.-Eux.**

Potentilla inclinata Vill., 07.05.2006, Akaydin 10684.

Prunus spinosa L. subsp. *dasyphylla* (Schur) Domin, 17.03.2007, Akaydin 11205. **Euro.-Sib.**

Pyracantha coccinea Roemer, 07.05.2006, Akaydin 10687.

Rosa canina L., 14.04.2007, Akaydin 11244.

Rubus canescens DC. var. *canescens*, 09.06.2006, Akaydin 10858.

R. sanctus Schreber, 06.10.2007, Akaydin 11639, A. Baytop.

Sanguisorba minor Scop. subsp. *muricata* (Spach) Briq., 09.06.2006, Akaydin 10820.

Sarcopoterium spinosum (L.) Spach, 07.05.2006, Akaydin 10647. **E. Medit.**

RUBIACEAE

Asperula involucrata Wahlenb., 12.05.2007, Akaydin 11400. **Eux.**

Cruciata laevipes Opiz., 07.05.2006, Akaydin 10652.

C. pedemontana (Bellardi) Ehrend., 14.04.2007, Akaydin 11251.

Galium odoratum (L.) Scop., 12.05.2007, Akaydin 11398. **Euro.-Sib.**

G. verum L. subsp. *verum*, 09.06.2006, Akaydin 10839. **Euro.-Sib.**

SALICACEAE

**Populus nigra* L. subsp. *nigra*, 12.05.2007, Akaydin 11390.

SANTALACEAE

Osyris alba L., 07.05.2006, Akaydin 10681, 06.10.2007, Akaydin 11602. **Medit.**

Thesium bergeri Zucc., 12.05.2007, Akaydin 11314. **E. Medit.**

SCROPHULARIACEAE

Bellardia trixago (L.) All., 09.06.2006, Akaydin 10855, A. Baytop.

Gratiola officinalis L., A. Baytop.

Linaria genistifolia (L.) Miller subsp. *genistifolia*, 09.06.2006, Akaydin 10841. **Euro.-Sib.**

L. pelisseriana (L.) Miller, 07.05.2006, Akaydin 10660. **Medit.**

Odontites verna (Bellardi) Dumort. subsp. *serotina* (Dumort.) Corb., A. Baytop. **Euro.-Sib.**

Parentucellia latifolia (L.) Car., A. Baytop.

P. viscosa (L.) Caruel, 03.06.2007, Akaydin 11577.

Scrophularia scopoli [Hoppe ex] Pers. var. *scopoli*, 07.05.2006, Akaydin 10635.

Verbascum bugulifolium Lam., 07.05.2006, Akaydin 10677, A. Baytop. **Euro.-Sib.**

V. lagurus Fisch. & Mey., 14.04.2007, Akaydin 11232, A. Baytop. **Euro.-Sib.**

V. sinuatum L., A. Baytop.

V. xanthocephalicum Griseb., A. Baytop. **E. Medit.**

Veronica chamaedrys L., 07.05.2006, Akaydin 10617, A. Baytop. **Euro.-Sib.**

V. hederifolia L., 17.03.2007, Akaydin 11210.

V. multifida L., 12.05.2007, Akaydin 11353. **Endemic. Ir.-Tur. LC.**

V. pectinata L. var. *pectinata*, 07.05.2006, Akaydin 10688.

SOLANACEAE

Datura stramonium L., 06.10.2007, Akaydin 11608.

Solanum nigrum L. subsp. *schultesii* (Opiz) Wessely, 06.10.2007, Akaydin 11613.

TAMARICACEAE

**Tamarix smyrnensis* Bunge, 12.05.2007, Akaydin 11389.

TILIACEAE

Tilia argentea* Desf. ex DC. 03.06.2007, Akaydin 11596. **Euro.-Sib.

VALERIANACEAE

Valerianella carinata Lois., A. Baytop.

VERBENACEAE

Verbena officinalis L., 06.10.2007, Akaydin 11630, A. Baytop.

VIOLACEAE

Viola arvensis Murray, 14.04.2007, Akaydin 11266

Viola kitaibeliana Roem. & Schult., A. Baytop.

V. odorata L., 17.03.2007, Akaydin 11201.

V. sieheana Becker., 14.04.2007, Akaydin 11277.

VITACEAE

**Vitis sylvestris* Gmelin, 12.05.2007, Akaydin 11379.

MONOCOTYLEDONEAE

AMARYLLIDACEAE

Sternbergia colchiciflora Waldst. & Kit., A. Baytop.

CYPERACEAE

Carex caryophylla Latourr., 14.04.2007, Akaydin 11248. **Euro.-Sib.**

C. flacca Schreber subsp. *serrulata* (Biv.) Greuter, 07.05.2006, Akaydin 10658, A. Baytop. **Medit.**

Scirpoides holoschoenus (L.) Sojak, A. Baytop.

IRIDACEAE

Crocus biflorus Miller subsp. *biflorus*, A. Baytop. **E. Medit.**

C. pulchellus Herbert., A. Baytop. **E. Medit.**

Iris sintenisii Janka, 12.05.2007, Akaydin 11347, A. Baytop. **Euro.-Sib.**

I. savaeolens Boiss. & Reuter., 14.04.2007, Akaydin 11242, A. Baytop. **E. Medit.**

Romulea columnae Seb. & Mauri subsp. *columnae*, 17.03.2007, Akaydin 11202, **Medit.**

R. linarestii Parl., A. Baytop.

JUNCACEAE

Juncus articulatus L., A. Baytop. **Euro.-Sib.**

J. effusus L., A. Baytop.

J. conglomeratus L., 09.06.2006, Akaydin 10895. **Euro.-Sib.**

Luzula campestris (L.) DC., A. Baytop. **Euro.-Sib.**

L. forsteri (Sm.) DC., A. Baytop. **Euro.-Sib.**

LILIACEAE

Allium ampeloprasum L., 03.06.2007, Akaydin 11572. **Medit.**

A. peroninianum Aznav., A. Baytop. **Endemic. Eux. NT.**

A. stamineum Boiss. A. Baytop.

Asparagus acutifolius L., 07.05.2006, Akaydin 10682, A. Baytop. **Medit.**

Asphodelus aestivus Brot., 07.05.2006, Akaydin 10657, A. Baytop. **Medit.**

Colchicum lingulatum Boiss. & Spruner ex Boiss., A. Baytop.

C. micranthum Boiss., A. Baytop. **Endemic. Eux. ? EN.**

Gagea chrysantha (Jan) Schultes & Schultes fil., 17.03.2007, Akaydin 11209, A. Baytop. **Medit.**

Muscari comosum (L.) Miller, 07.05.2006, Akaydin 10634. **Medit.**

M. neglectum Guss., 07.05.2006, Akaydin 10616, 17.03.2007, Akaydin 11178, A. Baytop.

Ornithogalum fimbriatum Willd., A. Baytop.

O. montanum Cyr., 14.04.2007, Akaydin 11281, A. Baytop. **E. Medit.**

O. orthophyllum Ten., 17.03.2007, Akaydin 11192, A. Baytop.

O. sigmoidium Freyn & Sint., 07.05.2006, Akaydin 10619. **Euro.-Sib.**

O. sphaerocarpon Kerner, A. Baytop.

Ruscus aculeatus L. var. *aculeatus*, 07.05.2006, Akaydin 10644.

Scilla autumnalis L., 06.10.2007, Akaydin 11647, A. Baytop. **Medit.**

Smilax excelsa L., A. Baytop. **Eux.**

ORCHIDACEAE

Orchis collina Banks & Sol., A. Baytop. **Medit.**

Serapias vomeracea (Burm. Fil.) Briq. subsp. *laxiflora* (Soo') Götz & Reinhard, 12.05.2007, Akaydin 11328. **E. Medit.**

Spiranthes spiralis (L.) Chevall., 06.10.2007, Akaydin 11640. **Medit. ?**

POACEAE (GRAMINEAE)

Aegilops geniculata Roth, 07.05.2006, Akaydin 10611. **Medit.**

Ae. neglecta Req. ex Bertol., A. Baytop.

Ae. triuncialis L. *triuncialis*, A. Baytop.

Anthoxanthum odoratum L. subsp. *odoratum*, 07.05.2006, Akaydin 10673, A. Baytop. **Euro.-Sib.**

Arrhenatherum elatius (L.) P. Beauv. ex J. & C. Presl subsp. *elatius*, 12.05.2007, Akaydin 11316. **Euro.-Sib.**

Avena barbata Pott ex Link subsp. *barbata*, 12.05.2007, Akaydin 11382. **Medit.**

Brachypodium pinnatum (L.) P. Beauv., 09.06.2006, Akaydin 10856. **Euro.-Sib.**

Briza maxima L., 07.05.2006, Akaydin 10621.

B. media L., A. Baytop.

Bromus madritensis L., A. Baytop.

B. scoparius L., 07.05.2006, Akaydin 10699, A. Baytop.

- B. squarrosus* L., A. Baytop.
Chrysopogon gryllus (L.) Trin. subsp. *gryllus*, A. Baytop.
Cynodon dactylon (L.) Pers. var. *dactylon*, 03.06.2007, Akaydin 11594.
Cynosurus chinatus L., 09.06.2006, Akaydin 10910, A. Baytop.
Medit.
Dactylis glomerata L. subsp. *glomerata*, 09.06.2006, Akaydin 10848.
Euro.-Sib.
D. glomerata L. subsp. *hispanica* (Roth) Nyman, 07.05.2006, Akaydin 10680.
D. glomerata L. subsp. *lobata* (Drej.) Lindb., 12.05.2007, Akaydin 11397. **Euro.-Sib.**
Dasyphyrum villosum (L.) Cand., 09.06.2006, Akaydin 10812. **Medit.**
Elymus repens (L.) Gould subsp. *repens*, 03.06.2007, Akaydin 11582.
Festuca arundinacea Schreber subsp. *arundinacea*, 09.06.2006, Akaydin 10888.
F. valesiaca Schleicher ex Gaudin, 12.05.2007, Akaydin 11365.
Gaudina fragilis (L.) P. Beauv., 09.06.2006, Akaydin 10867, A. Baytop. **Euro.-Sib.**
Holcus annuus Salzm. ex C.A. Meyer, 09.06.2006, Akaydin 10869.
Medit.
H. lanatus L., 09.06.2006, Akaydin 10906. **Euro.-Sib.**
Hordeum bulbosum L., 07.05.2006, Akaydin 10694, 09.06.2006, Akaydin 10897.
H. murinum L. subsp. *glaucum* (Steudel) Tzvelev, 09.06.2006, Akaydin 10863, A. Baytop.
Lolium multiflorum Lam., 09.06.2006, Akaydin 10827.
L. perenne L., 12.05.2007, Akaydin 11350.
Melica ciliata L., A. Baytop.
Microphyrum tenellum (L.) Link, 07.05.2006, Akaydin 10702.
Medit.
Molineria minuta (L.) Rouy, A. Baytop. **Medit.**
Phleum bertolonii DC., 09.06.2006, Akaydin 10898.
P. phleoides (L.) Karsten, 03.06.2007, Akaydin 11554. **Euro.-Sib.**
Poa bulbosa L., 07.05.2006, Akaydin 10648, A. Baytop.
P. trivialis L., 07.05.2006, Akaydin 10697.
Polygonum maritimum Willd. subsp. *maritimum*, 09.06.2006, Akaydin 10868. **Euro.-Sib.**
P. monspeliensis (L.) Desf., 09.06.2006, Akaydin 10860.
Rostraria cristata (L.) Tzvelev var. *cristata*. A. Baytop.
Sesleria alba Sm., A. Baytop.
Setaria viridis (L.) P. Beauv., 06.10.2007, Akaydin 11651.
Stipa bromoides (L.) Dörfler, 09.06.2006, Akaydin 10909. **Medit.**
S. pulcherrima C. Koch. subsp. *epilosa* (Martynovský) Tzvelev, 09.06.2006, Akaydin 10889.
Taeniatherum caput-medusae (L.) Nevski subsp. *asper* (Simonkai) Melderis, A. Baytop.
Trisetum flavescens (L.) P. Beauv., 12.05.2007, Akaydin 11396.
Euro.-Sib.
Vulpia ciliata Dumort. subsp. *ciliata*, 13.05.2007, Akaydin 11431.

(Received for publication 10 August 2010; The date of publication 01 April 2011)