

Floristic List of İnönü University (Malatya) Main Campus Area

İnönü Üniversitesi Merkez Kampüs Alanı Flora Listesi

Research Article

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ABSTRACT

In this research, floristic list of vascular plant specimens which are located in the main campus area of İnönü University have been compiled with stored specimen in INU herbarium and collected specimens in the field. Collection date of the specimen in the list was dated from 1986 to 2015. After the identification of the specimens, the total flora has been determined as 552 taxa belonging to 534 species, 320 genera and 85 families. These results are indicated that the flora of main campus area of İnönü University is the richest biodiversity when it's compared within the other campus floras in Turkey. The endemism rate of the area is 8.33% for the 46 taxa. The largest 3 families are Fabaceae (57 species), Asteraceae (46 species) and Poaceae (47 species). The largest genera are *Medicago* (10 species), *Euphorbia* (9 species), *Alyssum*, *Astragalus* and *Salvia* (7 species). The phytogeographical spectrum of the species is as follows: Irano-Turanian elements 134 (24.27%), Mediterranean elements 29 (5.25%) and Euro-Siberian elements 9 (1.63%).

Key Words

Malatya, İnönü, flora, university, campus

ÖZET

Bu çalışmada İnönü Üniversitesi merkez kampüs alanı içinde yer alan iletim demetli bitkilerin listesi INU herbaryumunda saklanan ve arazi çalışmasında toplanan örneklerden oluşturulmuştur. Listedeki türler 1986 ve 2015 tarihleri arasında toplanmıştır. Örnek teşhislerinin tamamlanmasından sonra 85 familya, 390 cins ve 534 türde 552 takson tanımlanmıştır. Bu sonuçlar Türkiye'deki diğer kampüs floraları ile kıyaslandığında İnönü Üniversitesi merkez kampüs florasının en zengin biyoçeşitliliğe sahip olduğu görülmektedir. Çalışma alanında 46 endemik tür olup endemizm oranı %8.33'dür. En büyük üç familya Fabaceae (57 tür), Asteraceae (46 tür) ve Poaceae (47 tür)'dir. En büyük cinsler *Medicago* (10 tür), *Euphorbia* (9 tür), *Alyssum*, *Astragalus* ve *Salvia* (7 tür)'dır. Fitocoğrafik bölgelere göre türlerin dağılımı; Iran-Turan elementi 134 (24.27%), Akdeniz elementi 29 (5.25%) ve Avrupa-Sibirya elementi 9'dur (1.63%).

Anahtar Kelimeler

Flora, İnönü, kampüs, Malatya, üniversite

Article History: Received: Jan 15, 2015; Revised: May 19, 2015; Accepted: June 12, 2015; Available Online: Jul 25, 2015.

DOI: 10.15671/HJBC.20154312547

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INTRODUCTION

There are 185 universities in Turkey, 109 of these are State Universities and 76 are Foundation Universities. Some of these universities were constructed in city center or outside of the city center in natural area as a campus. Because of these reason plant biodiversity of some campus area are very rich of the others. Although, campus areas are well protected according to other natural areas but these areas will be exposed to development pressure in the future. Natural structure of the newly established campus areas are destroyed by construction of buildings, afforesting and etc. Therefore flora of the campus areas should be identified as soon as possible.

Until now, the numbers of determined flora of the campus area are twenty eight. These floras are; Akdeniz [1], Anadolu, [2], Balıkesir-Çağış [3], Başkent [4], Celal Bayar [5], Cumhuriyet [6], Çukurova [7], Dumlupınar [8], Gaziantep, [9], Hacettepe-Beytepe [10,11], Harran [12], İzmir-Buca [13], İzzet Baysal [14], Kafkas [15], Karadeniz Teknik [16], Kırıkkale [17], Mersin [18], Muğla [19], Mustafa Kemal [20], Niğde [21], ODTU [22], Ondokuz Mayıs [23], Ordu [24], Osman Gazi-Meşelik [25], Selçuk-Alaeddin Keykubat [26], Süleyman Demirel [27] and Uludağ [28,29].

İnönü University campus area was constructed in 1973-1974, entirely had a steppe composition. But today this area is occupied with forest and buildings. Construction activities are still continuing. Because of this, determined to floristic list and the change of the floristic composition are very important.

All studied campus floras in Turkey are reviewed in this study. For this reason, this study will be referred by researchers who are interested in the other floristic studies on campus areas.

MATERIALS AND METHODS

The materials of this study are 527 vascular plant specimens, collected from the campus area during the vegetation seasons between 2004 and 2015. At least one sample for each taxon is deposited at INU. Some cultivated plants are recorded as observed that its number is 74. Additionally

herbarium (INU) and Yıldız et al. [30] records are included in the floristic list.

Specimens were identified basically using the Flora of Turkey [31-33] and different Floras [30,34].

In the floristic list, the following details are stated: family, genus, species (cultivated plants are indicated an asterisk), authors (abbreviations follow Brummitt and Powell [35]), Turkish name of taxa in quotation marks (according to Güner et al. [36]) locality number, collector(s), collector number, phytogeographical region, endemism and IUCN risk categories [37]. Exclamation mark was added after than the collector's number that specimens of the numbers seen in the herbarium.

Collecting localities in the study area are as follows: (1) steppe 900 m; (2) steppe 950 m; (3) Balıkderesi, calcareous area, 1200-1400 m; (4) wet place, 900 m; (5) between Üzümlü village and water pump station, 900 m, steppe and afforestation area; (6) eastern staff house, 950 m, steppe and afforestation area; (7) surrounding of Science and Art Faculty, 950 m; (8) between heating center and Law Faculty, 980 m; (9) surrounding of eastern staff house, 950 m; (10) surrounding of western staff house, 1070 m; (11) entrance of library, 950 m; (12) surrounding of health center, 950 m; (13) surrounding of rector residence, 950 m; (14) surrounding of main student refectory, 950 m; (15) surrounding of guest house, 950 m; (16) road side, 950 m; (17) swimming pool environment, 950 m; (18) NE slopes of Beydağı, 1350 m; (19) gardens of *Amygdalus vulgaris*, 950 m; (20) surrounding of department of Fine Arts Education, 950 m; (21) surrounding of Education Faculty, 950 m; (22) entrance of INU, 950 m; (23) surrounding of Fine Arts & Design Faculty, 980 m; (24) gardens of TED collage, 980 m; (25) surrounding of Engineering Faculty, 950 m; (26) entrance of indoor sports hall, 950 m.

The abbreviations used in the text and the floristic list are as follows: Ir.-Tur.: Iran-Turanian; Medit.: Mediterranean; E.Med.: East Mediterranean; Eur.-Sib.: Euro-Siberian; End.: Endemic; EN: Endangered; VU: Vulnerable; LR(cd): Lower risk (conservation dependent); LR(nt):

Lower risk (near threatened); LR(lc): Lower risk (least concern); BM: Birol Mutlu; BY: Bayram Yıldız; EA: Ekrem Aktoklu; ED: Erkan Doğan; SKÖ: Serkan Köstekçi; ŞK: Şükrü Karakuş; TA: Turan Arabacı; INU: İnonu University Department of Biology Herbarium in Malatya.

The floristic results were compared with the other campus floras.

RESULTS AND DISCUSSION

At the end of this study on the 527 vascular plant specimens collected from the area, herbarium (INU) and Yıldız et al. (2004) records, 534 species (552 taxa) and 320 genera belonging to 85 families were determined. Two species are non-flowering vascular plants. Fourteen species belong to Gymnospermae, while the other 518 were Angiospermae. Dicotyledones and Monocotyledones consisted of 441 and 77 species respectively. These results are indicated that the campus flora is the richest biodiversity when it's compared within the other campus floras in Turkey. A summary of the statistics is presented in Table 1.

The largest families in the area are Fabaceae (57 sp.), Poaceae (47 sp.), Asteraceae (45 sp.), Brassicaceae (42 sp.) and Lamiaceae (31 sp.). The largest genera respectively are *Medicago* (10 sp.), *Euphorbia* (9 sp.), *Vicia* (8 sp.), *Alyssum*, *Astragalus*, *Aegilops*, *Salvia* (7 sp.), *Allium*, *Silene* and *Hypericum* (6 sp.). Largest family and genus indicated that dominant vegetation type of the campus area is steppe.

An evaluation of the taxa with respect to phytogeographical regions shows the following origins, Ir.-Tur. elements 134 (24.27%) taxa, Medit. elements 29 (5.25%) taxa and Euro-Sib. elements 9 (1.63%) taxa (Table 1). The rest of the taxa are either cosmopolitan or phytogeographically unknown. The dominance of the Ir.-Tur. elements would be expected because the study area is in the Ir.-Tur. region.

In the study area, 46 taxa are endemic to Turkey and the ratio of endemism is 8.33%. The rate of endemizm in the research area is low,

when compare with end ratio (34.5%) in the total Flora of Turkey in volume 11 (Güner et al., 2000). Distribution to the threatened category of endemic and nonendemic taxa are as follows; 1 taxa EN; 10 taxa VU, 7 taxa LR(cd), 4 taxa LR(nt), 28 taxa LR(lc) and 1 taxa DD.

Knowledge of abundance and spread of *Tordylium cappadocicum* "peri davulotu" are inadequate. Because of this, its included in DD (data deficiency) threaten category. Forty endemic species are in the lower risk categories. Seven of them are conservation dependent. These species are *Achillea pseudoaleppica* "harput perçemi", *Onosma briquetii* "yıldız emziği", *Astragalus decurrens* "kulaklı geven", *Astragalus melitenensis* "akça geven", *Salvia euphratica* var. *euphratica* "Fırat şalbası", *Stachys ramosissima* var. *ramosissima* "Harput deliçayı" and *Plantago euphratica* "toklubaşı". Four species are included in VU (vulnerable) threaten categories which they are *Phlomis sintenisii* Rech.f. "yanıkçalba", *Sterigmostemum sulphureum* subsp. *glandulosum* "sidikli sülün", *Hypericum capitatum* var. *capitatum* "bantof" and *Verbascum euphraticum* "Fırat sigirkuyruğu". Seven nonendemic taxa are evaluated in threaten category. One of them is EN category that it is *Scutellaria orientalis* subsp. *cretacea* "kulaklı kaside". Six of nonendemic taxa are VU category that they are *Crepis syriaca* "çöl kiskısı", *Euphorbia physocaulos* "dicle sütleğeni", *Fritillaria imperialis* "ağlayangelin", *Orobanche sintenisii* "Fırat canavarotu", *Nigella arvensis* var. *caudata* "tarla çörekotu" and *Crithopsis delileana* "süslü arpa".

Especially, the species which are included in the categories of endangered, vulnerable and conservation dependent, must be protected in the campus area when any construction will be made.

Results of this study will be the basis for the book of illustrated flora which will be made later.

Table 1. Comparisons of the other floras (abbreviations are below the table).

No	Name of University	Family	Genus	Species	Subspecies	Variety	Taxa	Culture Species	Endemic Species	Ir.-ur.	Euro-Sib.	Medit.	Multi-regional or unknown phytogeog. region
1	İnö.	85	320	534	9	9	552	96	46	134	9	29	310
2	Bey.	56	263	502	4	2	508	84	65	137	31	18	303
3	Ort.	72	251	463	-	-	463	21	48	110	28	36	289
4	İze.	70	268	437	6	4	447	30	19	19	110	45	273
5	Akd.	-	-	418	-	-	452	18	30	12	7	188	211
6	Çuk.	67	265	415	-	-	415	-	20	11	7	109	288
7	Niğ.	74	262	-	-	-	405	22	33	85	25	26	269
8	Cum.	-	-	-	-	-	403	-	68	140	24	24	215
9	Baş.	51	216	373	2	7	382	45	63	119	15	20	228
10	Ond.	67	230	381	-	1	382	117	-	5	65	57	255
11	Kır.	61	238	371	-	-	371	15	45	96	9	26	225
12	Ulu.	56	217	252	71	33	356	-	9	4	39	78	235
13	Osm.	53	228	337	-	6	343	3	32	63	17	22	241
14	Cel.	62	209	315	-	-	315	-	10	7	15	112	181
15	Ana	74	241	361	-	2	363	151	10	28	32	12	291
16	Kaf.	51	172	291	1	1	293	5	-	64	56	5	168
17	Muğ.	62	233	275	9	1	285	-	21	15	11	189	-
18	Bal.	62	206	246	-	-	246	21	1	8	22	53	163
19	Ord.	58	167	223	-	-	223	3	5	1	56	5	161
20	Sel.	37	155	-	-	-	222	-	-	-	-	-	-
21	Dum.	44	140	-	-	-	214	-	28	-	-	-	-
22	Har.	37	129	-	-	-	204	-	5	65	7	26	99
23	Kar.	50	146	192	-	-	192	-	1	7	47	18	120
24	Gaz.	51	133	-	-	-	176	-	-	-	-	-	-
25	Sül.	38	119	-	-	-	161	-	33	25	6	30	68
26	Buc.	52					108						
27	Mer.	29	67	75	-	-	75	-	-	-	-	-	-
28	Muk.	-	-	-	-	-	-	129	-	-	-	-	-

Abbreviations for Table 1;

Akd.: Akdeniz, (Ünal, 1998); **Ana.** Anadolu, (Türe and Böcük, 2001); **Bal.**: Balıkesir, (Sanön & Özen, 2001); **Baş.**: Başkent (Töre and Erik, 2012); **Bey.**: Beytepe, Hacettepe (Erik, 1994; Mutlu et al., 2008); **Buc.**: Buca, İzmir, (Uğurlu et al., 2012); **Cel.**: Celal Bayar, (Uğurlu, 1997); **Cum.**: Cumhuriyet, (Çelik & Yıldız, 1988); **Çuk.**: Çukurova, (Türkmen, 1987); **Dum.**: Dumluşpınar, (Tatlı et al, 2002); **Gaz.**: Gaziantep, (Özuslu, 2004); **İnö.**: İnönü; **Har.**: Harran (Parmaksız et al., 2006); **İze.**: Abant İzzet Baysal, (Turgut, 1996); **Kaf.**: Kafkas, (Mehmet, 2012); **Kar.**: Karadeniz Teknik, (Coşkunçelebi, 1995); **Kır.**: Kırıkkale, (Nugay et al., 2007); **Mer.**: Mersin, (Zeren & İspirgil, 1996); **Muğ.**: Muğla, (Ceylan, 2007); **Muk.**: Mustafa Kemal, (Altay, 2012); **Niğ.**: Niğde, (Başköse et al., 2012); **Ond.**: Samsun Ondokuz Mayıs, (Kılıç & Özen, 1988); **Ord.**: Ordu, (Deveci et al., 2012); **Ort.**: Ortadoğu Teknik, (Bilge, 2001); **Osm.**: Osmangazi, (Öcak & Türe, 2001); **Sel.**: Selçuk, Alaeddin Keykubat, (Kargioğlu, 1990). **Sül.**: Süleyman Demirel, (Fakir et al., 2009); **Ulu.**: Uludağ, (Tarımcılar & Kaynak, 1994, 1995).

- : not state in relevant reference and absent.

Floristic list is given below;

1. PTERIDOPHYTA / EĞRELTİ BÖLÜMÜ

(2 family/2 genus/2 species)

ASPLENIACEAE / SAÇAKOTUGİLLER (1/1)

Asplenium ceterach L. "dalakotu", observed by BY.

CYSTOPTERIDACEAE/ GEVREKEĞRELTİGİLLER (1/1)

Cystopteris fragilis (L.) Bernh. "gevrek eğrelti", observed by BY.

2. PINOPHYTA / AÇIK TOHUMLULAR (4/8/14)

CUPESSACEAE / SERVİGİLLER (3/6)

***Cupressus sempervirens** L. "servi", (7), 06/10/2008, SKÖ20! ***C. arizonica** Green "Arizona servisi", (7), 06/10/2008, ED13! ***Juniperus excelsa** M.Bieb. var. *excelsa* "boz ardıç", (9), observed by BM. ***J. rigida** Siebold & Zucc. "ardıç", (26) observed by BM. ***J. sabina** L. "saç ağacı", (9), 06/10/2008, SKÖ13! ***Thuja orientalis** L. "mazı", (7), 06/10/2008, ED7.

GINKGOACEAE / ÇINSAÇİGİLLER (1/1)

***Ginkgo biloba** L. "çinsaçı", (7), observed by BM.

PINACEAE / ÇAMGİLLER (3/6)

***Cedrus libani** A.Rich. "katranağacı", (7), 06/10/2008, ED12. ***Picea orientalis** (L.) Link "ladın", (21), 06/10/2008, SKÖ21! ***P. pungens** Engelm. "mavi ladin", (7), 06/10/2008, ED10! ***Pinus brutia** Ten. "kızılçam", (7), 15/05/2009, SKÖ30! ***P. nigra** J.F.Arnold. subsp. *pallasiana* (Lamb.) Holmboe var. *pallasiana*, "karaçam", (7), 06/10/2008, ED3! ***P. nigra** J.F.Arnold. subsp. *pallasiana* (Lamb.) Holmboe var. *pyramidalis* (Acatay) Yalt. "piramit karaçam", (7), observed by BM. ***P. sylvestris** L. var. *hamata* Steven "sarıçam", (7), 06/10/2008, ED4!

TAXACEAE / PORSUKGİLLER (1/1)

***Taxus baccata** L. "porsuk", (7), 06/10/2008, ED11!

3. MAGNOLIOPHYTA / KAPALI TOHUMLULAR (79/309 /518)

4. MAGNOLIOPSIDA/ MANOLYA SINIFI

(69/260 /441)

ALTINGIACEAE / GÜNLÜKAĞACIGİLLER (1/1)

***Liquidambar styraciflua** L. "Amerikan günlüğü", (24), observed by BM.

AMARANTHACEAE / HOROZİBİĞİGİLLER (6/6)

Amaranthus albus L. "kömürş macarı", (9), 16/10/2011, BM11647. **Atriplex nitens** Schkuhr "dağ ıspanağı", (9), 16/10/2011, BM11641. **Chenopodium album** L. subsp. *album* var. *album* "at sirken", observed by BY. **Noaea mucronata** (Frossk.) Aschers & Schweinf "hölmezotu", (9), 16/10/2011, BM11638. **Salsola tragus** L. subsp. *tragus* "kum dönglelesi", (9), 16/10/2011, BM11639. **Spinacia tetrandra** Stev. "yabani ıspanak", (1), 28/05/1991, BY8448a.

ANACARDIACEAE / MENENGİÇGİLLER (1/1)

***Rhus coriaria** L."sumak", (9), 16/07/2011, BM11635.

APIACEAE / MAYDANOZGİLLER (13/18)

Actinolema macrolema Boiss. "koca aklema", (1), 09/05/1986, BY7280. **Artemia squamata** L. "karabenek", (1), 14/06/1986, BY7656; (8), 11/06/2011, BM11452; (6), 04/06/2011, BM11401. **Astrodaucus orientalis** (L.) Drude "havyıldız", (1), 14/06/1986, BY7639; (8), 11/06/2011, BM11463. **Bunium paucifolium** DC. var. *paucifolium* "koçkuzu", (3), 15/05/1991, BY8777; (8), 11/06/2011, BM11489; (6), 04/06/2011, BM11390, (Ir.-Tur.). **Bupleurum aleppicum** Boiss. "Halep şeytanayağı", (10), 18/06/2011, BM11542. **B. croceum** Fenzl. "çiğdem şeytani", (1), 04/05/1987, GT1019b, (Ir.-Tur.). **B. gerardii** All. "çalı şeytani", (1), 04/06/1986, BY7672; (10), 18/06/2011, BM11545. **Echinophora tenuifolia** L. subsp. *sibthorpiana* (Guss.) Tutin "sarı çördük", (10), 18/06/2011, BM11648, (Ir.-Tur.). **Eryngium billardieri** F.Delaroche "hıyarok", (7), observed by BM. **Lisaea heterocarpa** (DC.) Boiss. "ak gelinpitrağı", (1), 14/06/1986, BY7694, (Ir.-Tur.). ***Petroselinum crispum** (Miller) A.W.Hill "maydanoz", (9), 08/08/2013, BM11047. **Scandix aucheri** Boiss. "karabağ kişişi", (1), GT1041. **S. iberica** M.Bieb. "at kişnekotu", (1), 04/05/1987, İE1032; (6), 04/06/2011, BM11358. **S. pecten-veneris** L. "zühretarağı" (9), 03/04/2013, BM11678. **S. stellata** Banks & Sol. "dağ kişişi", (5),

04/6/2011, BM11328. ***Tordylium cappadocicum*** Boiss. "peri davulotu", (8), 11/06/2011, BM11455, (End., DD). ***Torilis leptophylla*** (L.) Rchb. f. "ince dericikotu", (5), 04/6/2011, BM11305; (10), 18/06/2011, BM11544. ***Turgenia latifolia*** (L.) Hoffm. "karaheci", (1), 09/05/1986, BY7277; (7), 07/06/2011, BM11434; (6), 04/06/2011, BM11388.

APOCYNACEAE / ZAKKUMGİLLER (1/1)

Vincetoxicum tmoleum Boiss. "hiyaluk", (10), 18/06/2011, BM11505; (5), 04/6/2011, BM11276.

AQUIFOLIACEAE / İŞILGANGİLLER (1/1)

****Ilex aquifoliace*** L. "ışılgan", (7), 02/04/2013, BM11675.

ARISTOLOCHIACEAE / LOHUSAOTUGİLLER

(1/1)

Aristolochia maurorum L. "Kargabardağı", (9), 08/05/2005, observed by BM.

ASTERACEAE / PAPATYAGİLLER (34/45)

Achillea arabica Kotschy "hanzabel", (7), 07/06/2011, BM11432, (Ir.-Tur.). ***A. magnifica*** Heilmel ex Hub.-Mor. "karcivani", (8), 11/06/2011, BM11468, (Ir.-Tur.), (End., LR(nt)). ***A. pseudoaleppica*** Hausskn. ex Hub.-Mor. "harput perçemi", (1), 09/05/1986, BY7281; (6), 04/06/2011, BM11376; (8), 11/06/2011, BM11448, (Ir.-Tur.), (End., LR(cd)). ***A. santolinoides*** Lag. subsp. ***wihelmsii*** (K.Koch) Greuter "kardaşinası", (7), observed by BM, (Ir.-Tur.). ***Anthemis pauciloba*** Boiss. var. ***pauciloba*** "bolpapatya", (6), 04/06/2011, BM11385, (End., LR(Ic)). ****Calendula officinalis*** L. "aynisafa", (15), observed by BM. ***Carduus nutans*** L. subsp. ***nutans*** "eşek diken", (1), 27/06/1986, EA223. ***C. pycnocephalus*** L. subsp. ***albidus*** (M.Bieb.) Kazmi "eşek soymacı", (5), 04/6/2011, BM11254. ***Carthamus dentatus*** (Forssk.) Vahl. "kinadikeni", (1), 18/06/1986, EA229. ***C. persicus*** Desf. ex Willd. "İhriz", (1), 04/06/1986, EA188, (Ir.-Tur.). ***Cyanus depressus*** (M.Bieb.) Soják "gökbaş", (1), 28/05/1988, GT1054a; (8), 11/06/2011, BM11458. ***C. triumfetti*** (All.) Dostal ex A.Löve & D.Löve subsp. ***triumfetti*** "deli kapele", (1), 25/06/1986, EA103. ***Centaura urvillei*** DC. subsp. ***armata*** Wagenitz "kötürüm", (6), 04/06/2011, BM11383, (E.Med.). ***Chardinia orientalis*** (L.) O.Kuntze "çağlaotu", (6), 04/06/2011, BM11386; (5), 04/6/2011, BM11263, (Ir.-Tur.). ***Cichorium intybus*** L. "hindiba", (9),

14/06/2011, BM11497. ***Cnicus benedictus*** L. var. ***benedictus*** "topdiken", (1), 09/05/1986, BY7244. ***C. benedictus*** L. var. ***kotschy*** Boiss. "topdiken", (6), 04/06/2011, BM11375; (8), 11/06/2011, BM11449. ***Conzya canadensis*** (L.) Cronquist "selviotu", (1), 11/05/1986, EA246. ***Cota coelopoda*** (Boiss.) Boiss. var. ***bourgaei*** (Boiss.) U.Özbek & Vural "çiçek papatyası", (1), 26/06/1986, EA114; (6), 04/06/2011, BM11404; (10), 18/06/2011, BM11527. ***C. wiedemanniana*** (Fisch. & C.A.Mey.) Holub. "bodur babuça", (5), 04/6/2011, BM11253, (End., LR(Ic)). ***Cousinia cataonica*** Boiss. & Hausskn. "kirkkızan", (8), 11/06/2011, BM11490, (End., LR(nt)). ***Crepis foetida*** L. subsp. ***foetida*** "kohum", (1), 25/06/1986, EA106. ***C. foetida*** L. subsp. ***rheeadifolia*** (M.Bieb.) elak. "sakarkanat", (1), 16/06/1986, BY7651; (5), 04/6/2011, BM11273. ***C. pulchra*** L. subsp. ***pulchra*** "zarif kiskis", (7), 07/06/2011, BM11433. ***C. sancta*** (L.) Bornm. "yaban kiskisi", (5), 04/6/2011, BM10258. ***C. syriaca*** (Bornm.) Babc. & Navashin "çöl kiskisi", (5), 04/6/2011, BM11257, (VU). ***Crupina crupinastrum*** (Moris) Vis. "gelin döndüren", (5), 04/6/2011, BM11272; (7), 07/06/2011, BM11421. ***Cymbolaena griffithii*** (A.Gray) Wagenitz "boz kisaayaklı", (5), 04/6/2011, BM11300. (10), 18/06/2011, BM11532, (Ir.-Tur.). ***Echinops orientalis*** Trautv. (25), 26/09/2014, Söterkuş sn. ***Filago pyramidalis*** L. "ateşpamuğu", (1), 09/05/1986, BY7652. (8), 11/06/2011, BM11480. ***Garhadiolus hedypnois*** Jaub. & Spach "bostan kiskisi", (5), 04/6/2011, BM11290; (8), 11/06/2011, BM11473, (Ir.-Tur.). ***Gundelia tournefortii*** L. var. ***armanta*** Freyn & Sint. "kenger", (5), 04/6/2011, BM11304, (Ir.-Tur.). ****Helianthus tuberosus*** L. "yer elması", (6), 20/09/2014, BM11731. ***Helichysum plicatum*** DC. subsp. ***plicatum*** "mantuvar", (6), 04/06/2011, BM11395. ***Inula graveolens*** (L.) Desf. "delisariot", (1), 03/03/1987, EA2645, (Medit.). ***Onopordum anatomicum*** (Boiss.) Heldr. ex Eig. "kangal", (8), 11/06/2011, BM11492. Ir-Tur, (End., LR(Ic)). ***O. candidum*** Nabelek "kalafat diken", (9), 22/07/2012, BM11662, (Ir.-Tur.). ****Santolina chamaecyparissus*** L. "lavantin", (13), observed by BM. ***Scorzonera suberosa*** K.Koch. subsp. ***suberosa*** "çalık", (1), 11/5/1987, HEs.n., (Ir.-Tur.). ***Senecio vernalis*** Waldst. & Kit. "kanarya otu", (5), 04/6/2011, BM11252. ***Sonchus asper*** (L.) Hill. subsp. ***glaucescens*** (Jord.) Ball ex Ball "gevirtlek", (7), 02/04/2013, BM11674. ***Taraxacum buttkleri*** Soest "karahindiba", (1), 04/07/1987, GT1049.

Tragopogon coloratus C.A.Mey. "katır yemliği", (1), 04/05/1986, BY7612, (Ir.-Tur.). **T. porrifolius** L. subsp. **longirostris** (Sch.Bip.) Greuter "yemlik", (5), 04/6/2011, BM11255. **Tussilago farfara** L. "öksürükotu", (1), 03/03/1987, EA254. (Eur.-Sib.). **Xanthium orientale** L. subsp. **italicum** (Moretti) Greuter "domuz pitrağı". **Xeranthemum longipapposum** Fisch. & C.A.Mey. "uslu kağıtçiçeği", (1), 25/05/1986, EA93, (Ir.-Tur.). **Zoea leptaurea** L. "sarıldığme", (8), 11/06/2011, BM11476, (Ir.-Tur.).

BERBERIDACEAE / KARAMUKGİLLER (1/1)

***Berberis thunbergii** DC. cv. **atropurpurea** "kızılıkaramuk" (13), observed by BM.

BETULACEAE / HUŞGİLLER (1/1)

***Betula pendula** Roth. "huş ağacı", (7), 14/06/2011, BM11666.

BIGNONIACEAE / KATALPAGİLLER (1/1)

***Catalpa bignonioides** Walter "katalpa", (9), 17/06/2011, BM11503.

BORAGINACEAE / HODANGİLLER (14/18)

Alkanna trichophila Hub.-Mor. var. **mardinensis** Hub.-Mor. "goriz", (8), 11/06/2011, BM11475, (Ir.-Tur.), (End., LR(Ic)). **Anchusa azurea** Miller var. **azurea** "sığır dili", (3), BY8784. (6), 04/06/2011, BM11369. **A. leptophylla** Roem. & Schult. subsp. **incana** (Ledeb.) D.F.Chamb. "ballık", (19), 15/05/2009 SKÖ32, (Ir.-Tur.), (End., LR(Ic)). **A. pusilla** Guşul. "kırkbatıran", (1), 04/05/1987, GT1051. **Buglossoides arvensis** (L.) I.M.Johnst. subsp. **sibthorpiana** (Griseb.) R.Fern. "tarla taşkeseni", (1), 16/07/1986, BY7673; (1), 05/05/1987, GT1061. **Echium glomeratum** Poir. "gülüsgirdili", (1), 16/06/1986, BY7629, (E.Med.). **E. angustifolium** Miller "agres", (2), 04/05/1987, GT1058; (8), 11/06/2011, BM11454. (E.Med.). **Heliotropium dolosum** DeNot. "bamboilotu", (9), 04/06/2011, BM11363. **Lappula patula** (Lehem.) Asch. ex Gürke "bozgürke", (1), 11/05/1987, HÇs.n. **Moltzia coerulea** (Willd.) Lehm. "mavikesen", (1), GT1031, (Ir.-Tur.). **Myosotis refracta** Boiss. subsp. **refracta** "yünlü kuşgözü", (1), 04/05/1987, GT1042, (Medit.). **Neostema apulum** (L.) I.M.Johnst. "sarı taşkesen", (1), 09/05/1986, BY7243. (Medit.). **Nonea melanocarpa** Boiss. "gelin sormuğu", (1), 24/06/1988, HÇ1062, (Ir.-

Tur.). **Onosma briquetii** Czeczott "yıldız emziği", (5), 04/6/2011, BM11304, (Ir.-Tur.), (End., LR(cd)).

O. sericeum Willd. var. **taurica** "kağıt emcek", (1), 18/06/1986, EA174a. **Paracaryum strictum** (K.Koch) Boiss. "meşe çardakotu", (1), 18/06/1986, EA174b, (Ir.-Tur.). **Rochelia disperma** (L.f.) K.Koch var. **disperma** "kuşçırnağı", (1), 04/06/1986, GT1024. (7), 07/06/2011 BM11438, (Ir.-Tur.). **Sympytum brachycalyx** Boiss. "dere kafesotu", (1), 27/04/1987, GT1007, (E.Med.).

BRASSICACEAE / TURUPGİLLER (25/42)

Aethionema arabicum (L.) Andrz. ex DC. "arap taşçantası", (6), 04/06/2011, BM11366. **A. carneum** (Banks & Sol.) B.Fedtsch. "alkayagülü", (1), 11/04/1987, GT1068. **A. heterocarpum** J.Gay "çarşaklıgülü", (1), 04/07/1986, EA192. **Alyssum aureum** (Fenzl) Boiss. "altın kuduzotu", (1), 09/05/1986, BY7258. (9), 04/06/2011, BM11341. (Ir.Tur.). **A. condansatum** Boiss. & Hausskn. subsp. **flexibile** (Nyár) T.R.Dudley "gevrek kuduzotu", (1), BY7659. **A. desertorum** Staph. "dumanotu", (1), 11/05/1987, HE20. **A. simplex** Rudolph "seda kuduzotu", (1), 09/05/1986, BY7266. **A. sibiricum** Willd. "kedidili", (10), 18/06/2011, BM11515. **A. strigosum** Banks & Sol. subsp. **strigosum** "dökük kuduzotu", (1), GT1046; (5), 04/6/2011, BM11277; (5), 04/6/2011, BM11323; (1), HE51. **A. szovitsianum** Fisch. & C.A.Mey. "çar kuduzotu", (5), 04/6/2011, BM11324. **Arabis aucheri** Boiss. "cılız tere", (1), EA120. **A. montbretiana** Boiss. "ova kazteresi", (1), GT1039, (Ir.-Tur.). **Boreave orientalis** Jaub. & Spach "sariot", (5), 04/6/2011, BM11290. (1), 04/05/1987, GT1059. **Brassica elongata** Ehrh. "uzun şalgam", (14), 05/05/2012, BM11655. **B. oleracea** L. cv. **asepala** "süs lahana", (14), 05/05/2012, BM11655. **Camelina rumelica** Velen. "ketentere", (5), 04/06/2011, BM11270. **Capsella bursa-pastoris** (L.) Medik. "çobançantası" (7) observed by BM. **Chorispora purpuascens** (Banks & Sol.) Eig "ala külük", (1), 27/04/1987, GT1003. **Clypeola jonthlaspi** L. "akyumak", (6), 04/06/2011, BM11260. **Conringia orientalis** (L.) Dumort "kocatekları", (5), 04/6/2011, BM11295. **C. clavata** Boiss. subsp. **orientalis** "topuz telkari", (1), 24/04/1998, HÇ1053. (5), 04/6/2011, BM11321. **Crambe orientalis** L. var. **orientalis** "akyumak", (1), 11/05/1987, GT1083. (6), 04/06/2011, BM11336, (Ir.-Tur.). **Descurainia sophia** (L.) Webb ex Prantl subsp. **sophia** "sadırotu", (1), 13/05/1989, BY8447.

Draba minima (C.A.Mey) Steud. "küçük dolama", (9), 08/03/2013, BM11669. **D. verna** L. subsp. **spathulata** Lang. "çırçırotu", (9), 08/03/2013, BM11670. ***Erysimum** x **cherii** (L.) Crantz "sarışebboy", (11), 08/06/2008, BM10606. **E. crassipes** Fisch. & C.A.Mey. "zarife otu", (1), 18/07/1986, EA239; (6), 04/06/2011, BM11405. **E. kotschyanum** J.Gay "teke zarifesi", (1), GT1026, (End., LR(Ic)). **E. repandum** L. "çatal zarife", (13), 23/04/2007, BM10237. **Glastaria glastifolia** (DC.) Kuntze "üzüm hardalı", (1), 13/05/1989, BY8446, (Ir.-Tur.). **Isatis aucheri** Boiss. "pos çivitotu", (6), 04/06/2011, BM11477, (Ir.-Tur.), (End., LR(Ic)). **I. glauca** Aucher ex Boiss. subsp. **glauca** "soğutotu", (1), 04/07/1986, EA194, (Ir.-Tur.). **Lepidium perfoliatum** L. "gübretotu", (1), 09/05/1986, BY7272. **Matthiola longipetala** (Vent) DC. subsp. **bicornis** (Sibth. & Smith) P.W.Ball "boynuzlu şebboy", (1), 27/04/1987, GT1005; (5), 04/06/2011, BM11264. **Microthlaspi perfoliatum** (L.) F.K.Mey. "giyle" (7), 15/4/2014, observed by BM. **Neslia paniculata** (L.) Desv. subsp. **thracica** (Velen.) Bornm. "göçmen hardalı", (1), 09/05/1986, BY7246; (5), 04/06/2011, BM11268. **Nocceaia violascens** (Schott & Kotschy) F.K.Mey. "morkuşbaşı otu", (1), GT1040, (End., LR(Ic)). **Sinapis alba** L. subsp. **alba** "mamanık", (1), 27/06/1986, EA163. **Sisymbrium altissimum** L. "ergelenotu", (1), 09/05/1986, BY7262. **S. septulatum** DC. "harran bülbütotu", (7), 09/05/2005, BM9561. **Sterigmostemum sulphureum** (Banks & Soland.) Bornm. subsp. **glandulosum** Hub.-Mor. & Reese "sidikli sülün", (22), 15/05/2008, BM10550, (End., VU). **Strigosella africana** (L.) Botsch. "keçe teresi", (1), 27/04/1987, GT1002.

BUXACEAE / ŞİMŞİRGİLLER (1/1)

***Buxus sempervirens** L. subsp. **sempervirens** "şimşir", (13), 15/4/2014, observed by BM.

CAMPANULACEAE / ÇANÇİÇEĞİLLER (2/3)

Campanula reuteriana Boiss. & Balansa "sel çançiceği", (10), 18/06/2011, BM11565. **Legousia pentagonia** (L.) Thell. "kadınaynasi", (1), 04/07/1986, EA208, (E.Med.). **L. speculum-veneris** (L.) Durande ex Vill. "hoş kadınaynasi", (3), 15/05/1991, BY8790. (Medit.).

CANNACEAE / KANNAÇİÇEĞİLLER (1/1)

***Canna indica** L. "Kanna çiçeği", (15) observed by BM.

CAPRIFOLIACEAE / HANIMELİGİLLER (6/13)

Cephalaria syriaca (L.) Schrad. "pelemir", (1), 04/06/1986, BY7623. ***Lonicera etrusca** Santivar. **etrusca** "dokuz don", (21), 27/04/2014, observed by BM ***L. japonica** Thunb "Japon hanimeli", (7), 14/06/2011, BM11496. **Pterocephalus plumosus** (L.) Coulter "gök çückotu", (5), 04/06/2011, BM11262. **Scabiosa argentea** L. "yazı süpürgesi", (10), 18/06/2011, BM11553. **S. calocephala** Boiss. "çayır uyuzotu", (6), 04/06/2011, BM11501, (Ir.Tur.). **S. micrantha** Desf. "kavurotu", (6), 04/06/2011, BM11373. **S. rotata** M.Bieb. "topuyuzotu", (6), 04/06/2011, BM11403, (Ir.-Tur.). ***Simphoricarpus albus** Blake "inci çalısı" (7), observed by BM. **Valerianella coronata** (L.) DC. "taçlı kuzugevreği", (1), BY7657. (7), 07/06/2011, BM11437. **V. locusta** (L.) Laterr. "nazlı kuzugevreği", (1), 04/05/1987, HEs.n., (Eur.-Sib.). **V. vesicaria** (L.) Moench "kuzu gevreği", (6), 04/06/2011, BM11343. **V. pumila** (L.) DC. "bağ kuzugevreği", (5), 04/06/2011, BM11267.

CARYOPHYLLACEAE / KARANFİLGİLLER

(14/24)

Arenaria serpyllifolia L. subsp. **serpyllifolia** "tarlakumotu", (7), 07/06/2011, BM11423. **A. serpyllifolia** L. subsp. **leptoclados** (Rchb.) Nyman "kurukumotu", (6), 04/06/2011, BM11381. **Dianthus floribundus** Boiss. "kirk karanfil", (10), 18/06/2011, BM11556, (Ir.-Tur.). **Eremogone ledebouriana** (Fenzl) Ikom. "ığnekumotu", (1), 04/07/1986, EA198, 238 (determined as *Minuartia juniperina* (L.) Maire & Petitm.) (10), 18/06/2011, BM11508, (End., LR(Ic)). **Gypsophila pilosa** Hudson "tarla çöveni", (6), 04/06/2011, BM11398, (Ir.-Tur.). **G. perfoliata** L. var. **perfoliata** "helvacı çöveni", (10), 18/06/2011, BM11514. **Herniaria incana** Lam. "kabayaran", (8), 11/06/2011, BM11460. **Holesteum umbellatum** L. var. **glutinosum** (M.Bieb.) Gay "şeytan küpesi", (6), 04/06/2011, BM11337. **H. tenerrimum** Boiss. "kaşikkiran", (1), 24/04/1988, HÇ10021; (1), 03/03/1987, EA258! **Minuartia hamata** (Hausskn.) Mattf. "koruotu", (5), 04/06/2011, BM11314. **M. hybrida** (Vill.) Schischk. subsp. **turcica** McNeill "ekintistisi", (5), 04/06/2011, BM11292. **M. montana** L. subsp. **wiesneri** (Stapf) McNeill "demet tıstısı", (5), 04/06/2011, BM11315, (Ir.Tur.). **M. meyeri** (Boiss.) Bornm. "koza tıstısı", (1), BY7653, (Ir.-Tur.). **Paronychia kurdica** Boiss. subsp. **haussknechtii** Chaudhri "kepeketotu", (5), 04/06/2011, BM11274. (End., LR(Ic)). **Petrorhagia**

cretica (L.) P.W.Ball & Heywood "ada zincirceği", (1), BY7666. **Saponaria officinalis** L. "deli sabunotu", (10), 18/06/2011, BM11628. **Silene argentea** Ledeb. "boz nakıl", (1), 14/06/1986, BY7640; (10), 18/06/2011, BM11546, (Ir.-Tur.). **S. cheatodonta** Boiss. "etekli nakıl", (9), 24/07/2012, BM11663; (10), 18/06/2011, BM11557, (Ir.-Tur.). **S. conoidea** L. "şivananotu", (1), 04/06/1986, GT1037. **S. spargulifolia** Boiss. & Heldr. "ananaklı", (9), 16/10/2011, BM11642, (Ir.-Tur.). **S. stenobotrys** Boiss. & Hausskn. "maraşnakılı", (10), 18/06/2011, BM11551, (Ir.-Tur.). **S. supina** Bieb. subsp. **pruinosa** (Boiss.) Chowdh. "firat nakılı", (1), 28/05/1988, GT1054d. **Telephium imperati** L. subsp. **orientale** (Boiss.) Nyman "zulzula", (5), 04/6/2011, BM11319. **Vaccaria hispanica** (Mill.) Rauschert "ekinebesi", (5), 04/6/2011, BM11271. **Valezia rigida** L. "tiğotu", (6), 04/06/2011, BM11372.

CELASTRACEAE / İĞAĞACIGİLLER (1/2)

***Euonymus fortunei** (Turcz) Hand.-Mazz. "iğacı", (7), observed by BM. ***E. europaeus** L. "iğcik ağıacı", 23/6/2013, (9), BM11690.

CISTACEAE / LADENGİLLER (1/1)

Helianthemum salicifolium (L.) Miller "söğüt gungülü", (1), 09/05/1986, BY7269.

CLEOMACEAE / SAÇAKGÜLÜ (1/1)

Cleome ornithopodioides L. "taş saçakgülü", (1), 28/05/1988, GT1054b. (E.Med.).

CONVOLVULACEAE /

TARLASARMAŞIĞİLLER (3/6)

Calystegia sepium (L) R.Br. subsp. **sepium** "çit sarmaşığı", (1), 09/05/1986, BY7273. **Convolvulus arvensis** L. "tarla sarmaşığı", (1), 27/07/1986, EA158. (8), 11/06/2011, BM11445. **C. betonicifolius** Mill. subsp. **betonicifolius** "büyük yayılan", (1), 09/05/1986, BY7273!; (9), 16/09/2011, BM11632. **C. galaticus** Rost. ex Choisy. (23), observed by BM, (End., (LR(Ic))). **C. reticulatus** Choisy subsp. **reticulatus** "dolaşgan", (9), 16/10/2011, BM11637, (Ir.-Tur.). **Cuscuta planiflora** Ten. "göktenyağan", (6), 04/06/2011, BM11334.

ELAEAGNACEAE / İĞDEKİLLER (1/1)

***Eleagnus angustifolia** L. "iğde", (13), observed by BM.

EUPHORBIACEAE / SÜTLEĞENGİLLER (2/10)

Chrozophora tinctoria (L.) A.Juss. "siğilotu", (1), 09/05/1986, BY7247b; (9), 16/10/2011, BM11650. **Euphorbia cheiradenia** Boiss. & Hohen. "sirken", (1), 28/06/1986, EA178, (Ir.-Tur.). **E. falcata** L. subsp. **falcata** var. **falcata** "eğri sütleğen", (1), 14/06/1986, BY7643. **E. glareosa** Pall ex M.Bieb. "kirim sütleğeni", (9), 16/10/2011, BM11646. ***E. maculata** L. "benli sütleğen", (9), 24/07/2012, BM11633. **E. peplus** L. var. **peplus** "bahçe sütleğeni", (9), 01/04/2013, BM11672. **E. petiolata** Banks & Sol. "ayaklı sütleğen", (1), 11/04/1986, EA247, (Ir.-Tur.). **E. phymatosperma** Boiss. & Gaill. subsp. **phymatosperma** "sahra sütleğeni", (6), 04/06/2011, BM11345, (Ir.-Tur.). **E. physocaulos** Mouterde "dicle sütleğeni", (8), 11/06/2011, BM11444, (VU). **E. taurinensis** All. "tilki sütleğeni", (1), 14/06/1986, BY7642.

FABACEAE / BAKLAGİLLER (19/57)

Astragalus decurrens Boiss. "kulaklı geven", (1), 16/06/1986, BY7697, (Ir.-Tur.), (End., LR(cd)). **A. gummifer** Lab. "sakızlı geven", (10), 18/06/2011, BM11562, (Ir.-Tur.). **A. guttatus** Banks & Sol. "benli geven", (1), 09/05/1986, BY7270. (1), 11/05/1994, BY11378, (Ir.-Tur.). **A. hamosus** L. "koç boynuzu", (1), BY7627. **A. macrocephalus** Willd. subsp. **finitimus** (Bunge) Chamberlain "topaç geven", (1), 15/05/1991, BY8823, (Ir.-Tur.). **A. melitenensis** Boiss. "akça geven", (1), 09/05/1986, BY7251!; (6), 04/06/2011, BM11331; (10), 18/06/2011, BM11539, (Ir.-Tur.), (End., LR(cd)). **A. tigridis** Boiss. "dicle geveni", (10), 18/06/2011, BM11541. (5), 04/6/2011, BM11242, (Ir.-Tur.). ***Caragana arborescens** Lam. "karagana", (10), observed by BM. ***Cercis siliquastrum** L. "erguvan", (8), 11/06/2011, BM11461. **C. bijugum** Rech.f. "pitrat nohut", (6), 04/06/2011, BM11407. **C. pinnatifidum** Jaub. & Spach "çakıl nohutu", (1), 26/06/1986, EA149. **Coronilla scorpioides** (L.) W.D.J.Koch "akrep burçağı", (1), 09/05/1986, BY7271; (10), 18/06/2011, BM11525. **Dorycnium hirsutum** (L.) Ser. "killi kaplanotu", (5), 04/6/2011, BM11241; (6), 04/06/2011, BM11333. (Medit.). ***Gleditschia triacanthos** L. "gladiçya", (6), 04/06/2011, BM11364. ***Laburnum anagyroides** (Medit.). "sarı saltım", (20), 25/04/2013, BM11689-90. **Lathyrus cicera** L. "colban", (1), 11/05/1987, İE1041. **L. sativus** L. "mürdümük", (6), 04/06/2011, BM11357. **Lotus gebelia** Vent. var. **ebelia** "gül

"gazalboynuzu", (1), 04/05/1986, BY7616, EA119. ***Medicago biflora*** (Griseb.) E.Small "ikizyonca", (3), 15/05/1990, BY8799, (Ir.-Tur.). ***M. lupilina*** L. "bitçikotu", (1), BY7685b. ***M. noeana*** Boiss. "çevrince", (1), BY7685a, Ir.-Tur?. ***M. minima*** (L.) Bart. var. ***minima*** "gurnik", (8), 11/06/2011, BM11478. ***M. monantha*** (C.A.Meyer) Trautv. subsp. ***monantha*** "dağ gurniği", (1), 09/05/1986, BY7264, (Ir.-Tur.). ***M. monantha*** (C.A.Meyer) Trautv. subsp. ***noeana*** (Boiss.) Hub.-Mor. "dağ gurniği", (1), 11/05/1986, İE1040; (7), 07/06/2011, BM11425, (Ir.-Tur.). ***M. monspeliaca*** (L.) Trautv. "bayır gurniği", (5), 04/6/2011, BM11250. (Medit.). ***M. orthoceras*** (Kar. & Kir.) Trautv. "şerit yonca", (1), 14/06/1986, BY7645, (Ir.-Tur.). ***M. radiata*** L. "hilal yonca", (6), 04/06/2011, BM11338, (Ir.-Tur.). ***M. rigidula*** (L.) All. var. ***agrestris*** Burniat "kaba yonca", (5), 04/6/2011, BM11248. ***M. rigidula*** (L.) All. var. ***rigidula*** "kaba yonca", (5), 04/6/2011, BM11249. ***M. sativa*** L. subsp. ***sativa*** "karayonca", (7), 07/06/2011, BM11430. ***Melilotus officinalis*** (L.) Desr. "kokulu yonca", (7), 09/06/2011, BM11441. ***Onobrychis argyrea*** Boiss. subsp. ***argyrea*** "gümüş korunga", (1), BY7631, (Ir.-Tur.), (End., LR(Ic)). ***O. cappadocica*** Boiss. "athelvası", (10), 18/06/2011, BM11528, (Ir.-Tur.), (End., LR(Ic)). ***O. fallax*** Freyn & Sint. ex Freyn var. ***fallax*** "yalancı korunga", (1), BY7655, (Ir.-Tur.), (End., LR(Ic)). ***O. hypergyrea*** Boiss. "merkep korungası", (8), 11/06/2011, BM11447. ***O. kotschyana*** Fenzl "halep korungası", (5), 04/6/2011, BM11261; (10), 18/06/2011, BM11531. ***Pisum sativum*** L. subsp. ***elatius*** (Bieb.) Aschers. & Graebn var. ***pumilio*** Meikle "bezelye", (1), 04/05/1987, GT1019a; (9), 04/06/2011, BM11400. (Medit.). ****Robinia pseudoacacia*** L. "yalancı akasya", (8), 11/06/2011, BM11459. ****R. pseudoacacia*** L cv. ***umbraculifera*** "top akasya" (25) observed by BM. ***Sophora alopecuroides*** L. var. ***alopecuroides*** "acimeyan", (6), 04/06/2011, BM11402. ****S. japonica*** L. "Japon soforası", (8), 11/06/2011, BM11479. ***Trifolium nigrescens*** Viv. subsp. ***petrisavii*** (Clementi) Holmboe "yel üçgülü", (1), 22/04/1989, BY8415. ***T. campestre*** Schreb. subsp. ***campestre*** var. ***campestre*** "üçgül", (1), 22/04/1989, BY8413. ***T. coelesyriaca*** Boiss. "hendekok", (1), 04/05/1987, İE1023, (Ir.-Tur.). ***T. filipes*** Boiss. "inceboyotu", (1), 14/06/1986, BY7646; (7), 07/06/2011, BM11428, (Ir.-Tur.). ***T. resupinatum*** L. var. ***resupinatum*** "anadolu üçgülü", (1), 22/04/1989, BY8414.

Trigonella kotschyana Fenzl "akboyotu", (1), 09/05/1986, BY7268, (End., LR(Ic)). ***T. spicata*** Sibth. & Sm. "başak boyutu", (1), 04/06/1986, BY7613; (7), 07/06/2011, BM11427. ***T. spruneriana*** Boiss. var. ***spruneriana*** "koç boyotu", (1), 09/05/1986, BY7265; (5), 04/6/2011, BM11294, (Ir.-Tur.). ***T. velutina*** Boiss. "ipek boyotu", (1), 09/05/1986, BY7249; (6), 04/06/2011, BM11380; (8), 11/06/2011, BM11462, (Ir.-Tur.). ***Vicia cassia*** Boiss. "morbakla", (1), 27/06/1986, EA161, (E.Med.). ***V. ervilia*** (L.) Wild. "küşne", (7), 07/06/2011, BM11435. (Medit.). ***V. galilaea*** Plitmann & Zohary "deliculban", (1), 11/05/1987, HEs.n. ***V. narbonensis*** L. var. ***narbonensis*** "kocafığ", (9), 04/06/2011, BM11368. ***V. noeana*** Boiss. & Reut. ex Boiss. var. ***noeana*** "salkım bakla", (7), 07/06/2011, BM11429, (Ir.-Tur.). ***V. peregrina*** L. "kavlı", (1), 09/05/1986, BY7257; (6), 04/06/2011, BM11408. ***V. sativa*** L. subsp. ***sativa*** "eşek gülü", (1), 09/05/1986, BY7286. ***V. sativa*** L. subsp. ***nigra*** (L.) Ehrh. var. ***sagetalis*** (Thuill.) Ser. ex DC. "eşek gülü", (1), 04/05/1987, HEs.n. ***V. sativa*** L. subsp. ***nigra*** (L.) Ehrh. var. ***nigra*** "eşek gülü", (7), 07/06/2011, BM11431. ***V. sericocarpa*** Fenzl var. ***sericocarpa*** "çiğfığı", (1), 04/05/1987, GT1020; (6), 04/06/2011, BM11356. ****Wisteria sinensis*** (Sims.) DC. "morsalkım", (17), observed by BM.

FAGACEAE / KAYINGİLLER (1/3)

Quercus infectoria Oliver subsp. ***infectoria*** "mazı meşesi", (6), 04/06/2011, BM11392. (Eur.-Sib.). ***Q. libani*** Oliver "Lübnan meşesi", (6), 04/06/2011, BM11354. ***Q. robur*** L. subsp. ***robur*** "saplı meşe", (9), 03/08/2013, BM11692. (Eur.-Sib.).

GENTIANACEAE / GENTİYANGİLLER (1/1)

Centaurium erythraea Rafn. subsp. ***turicum*** (Velen.) Melderis "tukulotu", (1), 18/07/1986, EA217.

GERANIACEAE / TURNAGAGASIGİLLER (2/6)

Erodium acaule (L.) Becherer & Thell. "leylek gagası", (1), 27/04/1987, GT1006, (Medit.). ***E. cicutarium*** (L.) L'Herit. subsp. ***cicutarium*** "iğnelik", (1), 27/04/1987, GT1018. (8), 11/06/2011, BM11483. (5), 04/6/2011, BM11296. ***E. malacoides*** (L.) L' Herit. "dönbaba", (1), 27/04/1987, GT1008. (Medit.). ***Geranium lucidum*** L. "dakkaotu", (1), 27/04/1987, GT1015. ***G. pusillum*** Burm. f. "ince gelinçarşafi", (1), 22/04/1989, BY8416. ***G.***

tuberosum L. subsp. **tuberosum** "içakmuz", (1), 04/05/1987, EA319!, (Ir.-Tur.).

HYDRANGEACEAE / ORTANCAGİLLER (2/2)

***Philadelphus coronarius** L. "filbahri", (16), observed by BM. ***Hydrangea macrophylla** (Thunb.) Ser "ortanca", (13), observed by BM.

HYPERICACEAE / KANTARONGİLLER (1/6)

Hypericum amblysepalum Hochst. "kantülçiçeği", (1), EA116, (Ir.-Tur.). **H. capitatum** Choisy var. **capitatum** "bantof", (1), 26/06/1986, EA151; (9), 04/06/2011, BM11339, (Ir.-Tur.), (End., VU). **H. capitatum** Choisy var. **luteum** Robson. (6), 04/06/2011, BM11397, (Ir.-Tur.). **H. Iydioides** Boiss. "cayesancıyan", (10), 18/06/2011, BM11543. **H. thymifolium** Banks & Sol. "çamkantaroru", (3), 10/05/1990, BY8739, (E.Med.). **H. triquetrifolium** "pirpirotu", (9), 16/10/2011, BM11640. **H. uniglandulosum** Hausskh. ex Bornm. "Kemaliye kantaroru", (1), 27/07/1992, BY9759; (10) 18/06/2011, BM11534, (Ir.-Tur.), (End., LR(nt)).

JUGLANDACEAE / CEVİZGİLLER (1/1)

***Juglans regis** L. "ceviz", (15), observed by BM.

LAMIACEAE / BALLIBABAGİLLER (16/31)

Ajuga chamaepitys (L.) Schreber subsp. **chia** (Schreber) Arcangeli var. **chia** "acığıcı", (5), 04/6/2011, BM11288. **A. chamaepitys** (L.) Schreber subsp. **laevigata** (Banks & Sol.) P.H.Davis "kelmayasıl", (1), EA124, (Ir.-Tur.). **Clinopodium graveolens** (M.Bieb.) Kuntze subsp. **rotundifolius** (Pers.) Govaerts "filiskin", (2), 09/05/1986, BY7240. (6), 04/06/2011, BM11342. **Eremostachys moluccelloides** Bunge "benlisultan", (1), 15/05/1991, BY8826, (Ir.-Tur.). **Lamium amplexicaule** L. var. **aleppicum** (Boiss. & Hausskn. ex Boiss.) Bornm. "baltutan", (1), 27/04/1987, GT1011, (Ir.-Tur.). **L. macrodon** Boiss. & Huet "balbaşı", (1), ZAs.n., (Ir.-Tur.). **L. orientale** (Fisch. & C.A.Mey.) E.H.L.Krause "güzelce", (1), 24/04/1988, MD1049, (End., LR(Ic)). **Marrubium cuneatum** Banks & Sol. "elkurtaran", (1), 09/05/1986, BY7285; (8), 11/06/2011, BM11469, (Ir.-Tur.). **M. globosum** Montbret & Aucher ex Benth. subsp. **globosum** "bozcabogum", (1), 29/04/1989, BY84191!, (Ir.-Tur.), (End., LR(Ic)). **Mentha spicata** L. subsp. **spicata** "eşeknanesi", (1), 18/07/1986, EA231. **Phlomis sieheana** Rech. f. "kuduzadaçayı",

(6), 04/06/2011, BM11396, (Ir.-Tur.), (End., LR(Ic)).

P. sintenisii Rech. f. "yanıkçalba", (1), BY7669, (Ir.-Tur.), (End., VU). **P. oppositifolia** Boiss. & Hausskn.

"hasçalba", (10), 18/06/2011, BM11538, (Ir.-Tur.), (End., LR(Ic)). **Salvia absconditiflora** (Montbret & Aucher ex Benth.) Greuter & Burdet "kara şalba", (5), 04/6/2011, BM11325, (Ir.-Tur.), (End., LR(Ic)).

S. ceratophylla L. "tarla şalba", (1), observed by BM, (Ir.-Tur.). **S. euphratica** Montbret & Aucher var. **euphratica** "Fırat şalbası", (10), 18/06/2011, BM11510, (Ir.-Tur.), (End., LR(cd)). **S. multicaulis**

Vahl "kürt reyhani", (6), 04/06/2011, BM11409, (Ir.-Tur.). **S. palaestina** Benthem "sürmeli şalba", (1), 10/04/1989, BY8943. (10), 18/06/2011, BM11530, (Ir.-Tur.). **S. prathensis** L. "çayır adaçayı", (19), 15/05/2009, SKÖ33. **S. suffruticosa** Montbret & Aucher ex Benthem "kalın şalba", (1), 15/05/1991, BY8821, (Ir.-Tur.). **Satureja hortensis** L. "çibriska", (9), 16/07/2011, BM11631. **Scutellaria orientalis** L. subsp. **cretacea** (Boiss. & Hausskn.) J.R.Edm. "kulaklı kaside", (1), BY7618; (10), 18/06/2011, BM11540, (Ir.-Tur.), (EN). **Sideritis montana** L. subsp. **remota** (d'Urv.) P.W.Ball "mor karaçay", (10), 18/06/2011, BM11524, (E.Med.). **Stachys annua** (L.) L. subsp. **annua** var. **Iycaonica** R.Bhattacharjee "haciosmanotu", (1), 28/06/1986, EA175, (Ir.-Tur.). **S. cretica** L. subsp. **anatolica** Rech. f. "yağlıkara", (10), 18/06/2011, BM11535, (End., LR(Ic)). **S. ramosissima** Montbret & Aucher ex Benthem var. **ramosissima** "Harput deliçayı", (1), 25/06/1986, EA97!, (Ir.-Tur.), (End., LR(cd)).

Teucrium chamaedrys L. subsp. **syspirense** (K.Koch) Rech.f. "sicakotu", (3), 14/06/1995, BY12811, (Ir.-Tur.). **T. orientale** L. var. **puberulens** Ekim "kirveotu", (1), 17/06/1987, BY8404b, (Ir.-Tur.). **T. polium** L. "acı yavşan", (1), 16/07/1986, EA227. (10), 18/06/2011, BM11519. **Thymus sylvestris** Boiss. subsp. **rosulans** (Borbas) Jalas "sipil kekiği", (10), 18/06/2011, BM11533. **Ziziphora capitata** L. "anuk", (5), 04/6/2011, BM11299. **Z. taurica** M.Bieb. subsp. **taurica** "çöl reyhani", (5), 04/06/2011, BM11403.

LINACEAE / KETENGİLLER (1/1)

Linum nodiflorum L. "yaban keten", (1), 16/05/1986, BY7684; (10), 18/06/2011, BM11550, (Medit.).

LYTHRACEAE / AKLAROTUGİLLER (1/1)

***Punica granatum** L. "nar", (9), 17/06/2011, BM11502.

MAGNOLIACEAE / MANOLYAGİLLER (2/2)

**Magnolia grandiflora* L. "Lale ağacı" (23), 16/08/2013, BM11679. **Magnolia grandiflora* L. "manolya", (1), observed by BM.

MALVACEAE / EBEGÜMECİGİLLER (4/5)

Alcea hohenackevi (Boiss. & Huet) Boiss. "hevur", (8), 11/06/2011, BM11482, (Ir.-Tur.). **Hibiscus syriacus* L. "ağaçhatmi", (14), observed by BM. *Malva neglecta* Wallr. "çoban çöreği", (1), 26/06/1986, EA117. **Tilia plathyphyllos* Scop. "yaz ihlamuru", (7), 15/06/2011, BM11498. **T. argentea* Desf. "ihlamur", (7), 15/06/2011, BM11500.

MELIACEAE / TESBİHAĞACİGİLLER (1/1)

**Melia azedarach* L. "tesbih ağacı", (7), 14/06/2011, BM11493.

MORACEAE / DUTGİLLER (3/5)

**Ficus carica* L. subsp. *carica* "incir", (15) observed by BM. **Maclura pomifera* (Raf.) Schneid "ayıdutu", (7), 15/06/2011, BM11499. **Morus alba* L. "akdut", (15) observed by BM. **M. alba* L. cv. *pendula* Dippel "sarkık akdut", (15) observed by BM. **M. nigra* L. "karadut", (15) observed by BM. **M. rubra* L. "mordut", (7, 15) observed by BM.

NITRARIACEAE / ÜZERLİKGİLLER (1/1)

Peganum harmala L. "üzerlik", (7), 14/06/2011, BM11495.

OLEACEAE / ZEYTİNGİLLER (3/3)

**Fraxinus excelsior* L., "dişbudak", (7), observed by BM. **Forsythia x intermedia* Zab. "altınçanak", (7), observed by BM. **Syringa vulgaris* L. "leylak", (7), observed by BM.

OROBANCHACEAE / CANAVAROTUGİLLER (1/2)

Orobanche ramosa L. "narin canavarotu", (10), 18/06/2011, observed by BM. *O. sintenisii* Beck ex Bornm. "Fırat canavarotu", (10), 18/06/2011, BM11518, (Ir.-Tur.), (VU).

OXALIDACEAE / EKİSYONCAGİLLER (1/1)

Oxalis corniculata L. "sarı ekşiyonca" (9), 01/04/2013, BM11673.

PAPAVERACEAE / HAŞHAŞGİLLER (5/11)

Fumaria officinalis L. subsp. *officinalis* "şahtere", (1), 09/05/1986, BY7275, (5), 04/6/2011, BM11265. *F. vaillantii* Loisel "güvercingöğüsü", (1), 04/04/1987, İE1029. *Glaucium corniculatum* (L.) Rudolph var. *corniculatum* "çömlekçatlatan", (1), GT1030, (Ir.-Tur.). *G. flavum* Crantz "gündürmelalesi", (6), 04/06/2011, BM11410. *Hypecoum imberbe* Sm. "hidirellezotu", (5), 04/6/2011, BM11283. *H. pendulum* L. "tarla düğmeciği", (1), 09/05/1986, BY7267. *Papaver argemone* L. subsp. *argemone* "kumhaşhaşı", (5), 04/6/2011, BM11282. *P. dubium* L. subsp. *dubium* "köpekyağı", (1), 09/05/1986, BY7276. *P. macrostomum* Boiss. & A.Huet "minimitçe", (5), 04/6/2011, BM11251, (Ir.-Tur.). *P. rhoeas* L. "gelincik", (5), 04/6/2011, BM11284. *Roemeria hybrida* (L.) DC. subsp. *hybrida* "pitpitotu", (1), 09/05/1986, BY7242; (5), 04/6/2011, BM11244.

PAULOWNIACEAE / ÇİNKAVAĞIGİLLER (1/1)

**Paulownia tomentosa* (Thunb.) Steud. "çin kavağı", (9), observed by BM

PHYLLANTHACEAE / DUVARNOHUTUGİLLER (1/1)

Andrachne telephiooides L. "duvarnohutu", (1), 09/05/1986, BY7247a

PITTOSPORACEAE / PARLAKÇALIOTUGİLLER (1/1)

**Pittosporum tobira* (Thunb.) W.T.Aiton "parlaklı", (13), observed by BM

PLANTAGINACEAE / SİNİROTUGİLLER (5/11)

Anarrhinum orientale Benth. "süpürgeotu", (1), 16/07/1986, BY7690; (10), 18/06/2011, BM11522, (Ir.-Tur.). *Kickxia spuria* (L.) Dumort. subsp. *integrifolia* (Brot.) R.Fernandes "sivri fukaraotu", (9), 16/10/2011, BM11644. *Linaria chalepensis* (L.) Miller var. *chalepensis* "Halep nevruzotu", (10), 18/06/2011, BM11523 (E.Med.). *L. iconia* Boiss. & Heldr. "Konya nevruzotu", (9), 04/06/2011, BM11353, (Ir.-Tur.), (End., LR(Ic)). *L. simplex* DC. "yalın nevruzotu", (6), 04/06/2011, BM11379. *Plantago euphratica* Decne. ex Barneoud "toklubaşı", (10), 18/06/2011, BM11564, (Ir.-Tur.), (End., LR(cd)). *P. lanceolata* L. "damarlıca", (7), 07/06/2011, BM11420. *P. major* L. subsp. *major* "sinirotu", (12), 07/07/2011, BM11621. *Veronica*

multifida L. "deve sabunu", (1), 28/04/1987, ZAs.n., (Ir.-Tur.), (End., LR(Ic)). **V. polita** Fries "mavişot", (1), 03/03/1987, EA257. **V. praecox** All. "çelebi maviş", (1), 24/04/1986, MD1062a.

PLATANACEAE / ÇINARGİLLER (1/1)

***Platanus orientalis** L. "çınar", (16), observed by BM

PLUMBAGINACEAE / KARDİKENİGİLLER (1/3)

Acantholimon armenum (Willd.) Boiss. subsp. **armenum** var. **armenum** "pişikkeveni", (10), 18/06/2011, BM11563, (Ir.-Tur.). **A. armenum** Boiss. & Huet. var. **balansae** Boiss. & Huet "kurreddikeni", (6), 04/06/2011, BM11419, (Ir.-Tur.). **A. caryophyllaceum** Boiss. subsp. **caryophyllaceum** "kirpidikeni", (10), 18/06/2011, BM11563, (Ir.-Tur.).

POLYGONACEAE / MADIMAKGİLLER (1/1)

Polygonum aviculare L. "köyotu", (1), 28/06/1991, BY8448b. (8), 11/06/2011, BM11471

PORTULACEAE / SEMİZOTUGİLLER (1/1)

***Portulaca oleracea** L. "semizotu", (9), observed by BM.

PRIMULACEAE / ÇUHAÇIÇEGİGİLLER (2/3)

Anagallis arvensis L. var. **arvensis** "farekulağı", (1), 04/07/1986, EA199. **A. foemina** Mill. "bağırsakotu", (10), 18/06/2011, BM11516. (Medit.). **Androsace maxima** L. "tavukkursağı", (5), 04/6/2011, BM11285.

RANUNCULACEAE / DÜĞÜNÇİÇEGİGİLLER (7/13)

Adonis aestivalis L. subsp. **aestivalis** "kandamlası", (1), 09/05/1986, BY7261; (8), 11/06/2011, BM11474. ***Aquilegia vulgaris** L. "hasekiküpesi", (7), 29/04/2014, ŞK4621. **Ceratocephala falcata** (L.) Pers. "yelotu", (1), 24/04/1986, MD1062b; (9), 03/04/2013, BM11676. **Consolida glandulosa** (Boiss. & Huet) Bornm. "yağlımahmuz", BY7633, (Ir.-Tur.), (End., LR(Ic)). **C. orientalis** (J.Gay) Schrödinger "morçicek", observed by BY. **Delphinium peregrinum** L. "telhezaren", (7), 15/07/2011, BM11626. (Medit.). **Nigella arvensis** L. var. **caudata** Boiss. "tarla çörekotu", (10), 18/06/2011, BM11529, (VU). **N. latisepta** P.H.Davis "ekin çörekotu", (5), 04/6/2011, BM11286, (Ir.-Tur.). **N. nigellastrum** (L.) Willk.

"cücem", (6), 04/06/2011, BM11387. **N. oxypetala**

Boiss. "Fırat çörekotu", (1), 09/05/1986, BY7282; (6), 04/06/2011, BM11359, (Ir.-Tur.). **Ranunculus arvensis** L. "Mustafa çiçeği", (9), 04/06/2011, BM11394. **R. cuneatus** Boiss. "körükotu", (1), 04/05/1987, HEs.n. **R. isthmicus** Boiss. subsp. **stepporum** P.H.Davis "kırköstebekotu", 04/05/1987, HE13-56.

RESEDACEAE / GERDANLIKGİLLER (1/1)

Reseda lutea L. var. **lutea** "muhabbet çiçeği", (1), 28/05/1988, GT1054c; (5), 04/6/2011, BM11320.

ROSACEAE / GÜLGİLLER (15/29)

Amygdalus orientalis Miller "payam", (20), observed by BM, (Ir.-Tur.). **A. trichamygdalus** (Hand.-Mazz.) Worronow var. **trichamygdalus** "haşmet bademi", (20), observed by BM, (Ir.-Tur.). ***Cerasus avium** (L.) Moench "kiraz", (20), observed by BM, ***C. mahaleb** (L.) Miller var. mahaleb "mahlep", (20), observed by BM. **C. prostrata** (Lab.) Ser. var. **prostrata** "taşkirazı", (20), observed by BM. ***C. vulgaris** Mill. "vişne", (20), observed by BM. ***Chaenomeles speciosus** (Sweet) Nakai "süs ayvası", (7) observed by ŞK. ***C. japonica** (Thunb.) Lindl. ex Spach "Japon ayvası" (20), observed by BM. **Cotoneaster franchetii** Boiss. "yabani müşmula" (20), observed by BM. ***C. melanocarpus** (Bunge) Fischer "karamuşmula", (20), observed by BM. **Crataegus azarolus** L. var. **azarolus** "müzmüldek", (8), 11/06/2011, BM11491. ***C. laevigata** "alıç", (20), observed by BM. ***C. monogyna** Jacq subsp. **monogyna** "yemişen", (10), 18/06/2011, BM11561; (8), 11/06/2011, BM11485. **C. orientalis** Pall. ex M.Bieb. var. **orientalis** "alıç", (1), 03/03/1987, EA 264. ***C. persimilis** cv. **prunifolia** "alıç", (20), observed by BM. ***Cydonia oblonga** Mill. "ayva", (20), observed by BM. ***Malus floribunda** Siebold ex Van Houtte "Japon çiçek elması" (13), 16/09/2011, BM11636.***M. x purpurea** Rehd. "süs elması" (7) observed by BM. ***Persica vulgaris** Mill. "şeftali", (9), observed by BM, (Ir.-Tur.). ***Armeniaca vulgaris** Lam. "kayısı", (20), observed by BM. **Potentilla recta** L. "su parmakotu", (7), 09/06/2011, BM11439. ***Prunus cerasifera** Ehrh. "kirmızı erik". (20), observed by BM. ***P. laurocerasus** L. "karayemiş", (22), 13/04/2015, BM11732. ***P. subhirtella** Miq. cv. **snofozam** "kar çeşmesi ağlayan kiraz", (26) observed by BM. ***Pyracantha coccinea** M.Roem.

"ateş diken", (20), observed by BM, (Eur.-Sib.).
Rosa canina L. "kuşburnu". ***R. foetida** J.Herrm.
 "acem sarısı", (20), observed by BM, (Ir.-Tur.).
Sanguisorba minor Scop. subsp. **lasiocarpa**
 (Boiss. & Hausskn.) Nordborg "karagönderme",
 (6), 04/06/2011, BM11367. ***Spirea x vanhouttei**
 (Briot) Carrière "ispirya", (7), observed by BM.

RUBIACEAE / KÖKBOYAGİLLER (4/9)

Asperula arvensis L. "tarlabelumotu", (1),
 04/04/1987, İE1026. **A. glomerata** (Bieb.)
 Griseb. subsp. **glomerata** "yum yumotu", (1),
 09/05/1986, BY7278; (6), 04/06/2011, BM11360;
 (10), 18/06/2011, BM11513. **A. stricta** Boiss.
 subsp. **stricta** "yurt belumotu", (1), 16/07/1986,
 BY7674. (E.Med.). **A. stricta** Boiss. subsp.
latibracteata (Boiss.) Ehrend. "berit belumotu",
 (10), 18/06/2011 BM11560. **Callipeltis cucullaria**
 (L.) Steven "nermik", (5), 04/6/2011, BM11266,
 (Ir.-Tur.). **Cruciata articulata** (L.) Ehrend.
 "kulaklı sarılıkotu", (1), 09/05/1986, BY7254;
 (5), 04/06/2011, BM11298, (Ir.-Tur.). **Galium**
floribundum Sm. subsp. **floribundum** "kırıkk
 iplikcik", (6), 04/06/2011, BM11340. **G. setaceum**
 Lam. "seyrek iplikcik", (5), 04/6/2011, BM11281. **G.**
tenuissimum Bieb. f. **trichophorum** "yaz iplikcik",
 (10), 18/06/2011, BM11547. **G. tricornutum** Dandy
 "havotu", (1), 16/06/1986, BY7647. (6), 04/06/2011,
 BM11347, (Ir.-Tur.).

RUTACEAE / TURUNÇGİLLER (1/1)

Haplophyllum cappadocicum Spach "peri
 sedosu", (1), 16/06/1986, BY7692; (10), 18/06/2011,
 BM11521, (Ir.-Tur.), (End., LR(nt)).

SALICACEAE / SÖĞÜTGİLLER (2/4)

***Populus nigra** L. subsp. **caudina** (Ten.) Bugala
 "karakavak", (7) observed by BM. ***P. alba**
 L. "akkavak". (7) observed by BM. ***Salix alba**
 L. "aksögüt", (7) observed by BM. ***S. cinerea** L.
 "bozsögüt", (7) observed by BM.

SANTALACEAE / GÜVELEKGİLLER (2/2)

Chrysanthesum stellaroides (Jaub & Spach)
 Hendrych "anagüveleği", (10), 18/06/2011, BM11511.
Thesium macranthum Fenzl. "kocagüvelek", (10),
 18/06/2011, BM11549.

SAPINDACEAE / AKÇAAĞACİLLER (3/4)

***Acer negundo** L. "isfenden", (7), observed by BM.
***A. negundo** L. cv. flamingo "pembe isfenden", (7),

observed by BM. ***Aesculus hippocastanum** L.
 "atkestanesi" (21), observed by BM. ***Koelreuteria**
paniculata Laxm. "güvey kandili", (7), 15/07/2011,
 BM11622.

SCROPHULARIACEAE / SIRACAOTUGİLLER (3/6)

***Buddleja davidii** Franch. "kelebek çalısı", (11),
 07/07/2011, BM11620. **Scrophularia xanthoglossa**
 Boiss. var. **decipiens** (Boiss. & Kotschy)
 Boiss. "serkele", (1), 09/05/1986, BY7250; (6),
 04/06/2011, BM11355, (Ir.-Tur.). **Verbascum**
euphraticum Bentham "Fırat sığırkuyruğu", (10),
 18/06/2011, BM11552. (End., VU). **V. splendidum**
 Boiss. "rana sığırkuyruğu", (1), EA171. (E.Med.),
 (End., LR(Ic)).

SIMAROUBACEAE / KOKARAĞACİLLER (1/1)

***Ailanthus altissima** (Mill.) Swingle "kokarağaç",
 (15) observed by BM.

SOLONACEAE / PATLICANGİLLER (2/2)

Hyoscyamus niger L. "banotu", (8), 11/06/2011,
 BM11442, (Ir.-Tur.). **Solanum dulcamara** L. "sofur",
 (9), 16/07/2011, BM11634. (Eur.-Sib.).

TAMARIXACEAE / ILGINGİLLER (1/1)

***Tamarix gallica** L. "ilgin", (8), 11/06/2011, BM11472.

ULMACEAE / KARAAĞACİLLER (1/1)

***Ulmus glabra** Huds. "dağ karaağacı", (7)
 observed by BM.

VERBENACEAE / MİNEÇİÇEĞİLLER (1/1)

Verbena officinalis L. "mine çiçeği", (7),
 15/07/2011, BM11625; (9), 16/07/2011, BM11630.

VIOLACEAE / MENEKŞEGİLLER (1/1)

Viola kitaibeliana Roem. & Schult. "yabani
 menekşe", (1), 24/06/1988, HC1008; (7),
 07/06/2011, BM11422.

VITACEAE / ASMAGİLLER (1/1)

Vitis vinifera L. "asma", (9) observed by BM.

ZYGOPHYLLACEAE/ ÇOBANÇÖKERTENGİLLER (1/1)

Tribulus terrestris L. "çoban çökerten", (1),
 04/05/1987, GT1019c.

5. LILIOPSIDA / SÜMBÜL SINIFI (10/49/78)

AMARYLLIDACEAE / NERGİSGİLLER (2/7)

Allium atroviolaceum Boiss. "liflikörmen", (1), 14/06/1986, BY7638; (8), 11/06/2011, BM11467.

A. calidictyon C.A.Meyer ex Kunth "kaya soğanı", (10), 18/06/2011, BM11504, (Ir.-Tur.). **A. dictyoprasum** C.A.Mey. ex Kunth "topsoğan", (2), 22/06/1993, BY10559, (Ir.-Tur.). **A. flavum** L. subsp. **tauricum** (Besser ex Reichb.) Steven var. **tauricum** "sarisoğan", (10), 18/06/2011, BM11504b; (6), 04/06/2011, BM11389. **A. kharputense** Freyn & Sint. "Harput soğanı", (1), 24/04/1988, MD1058, (Ir.-Tur.). **A. scabriflorum** Boiss. "tuz körmeni", (1), 04/06/1986, BY7682; (6), 11/05/1994, BM11378; (10), 18/06/2011, BM11507, (Ir.-Tur.), (End., LR(Ic)).

Sternbergia clusiana (Ker-Gawl.) Ker-Gawl. ex Sprengel "vargetgülü", (18), 14/10/2006, BM10170.

ARACEAE / YILANYASTIĞİLLER (1/2)

Eminium rauwolffii (Blume) Schott var. **rauwolffii** "yılanbacağı", (1), 10/04/1989, BY8411.

E. spiculatum (Blume) Schott var. **spiculatum** "zillikarababa", (1), 10/04/1989, BY8412, (Ir.-Tur.).

ASPARAGACEAE / KUŞKONMAZGİLLER (4/7)

Bellevalia longipes Post "saçak sümbülü", (6), 04/06/2011, BM11418. **Muscari armeniacum** Leichtlin ex Baker "gavurbaşı", (1), 24/04/1989, HÇ1033. **M. comosum** (L.) Mill. "morbaş", (1), 09/05/1986, BY7274. (Medi.). **M. longipes** Boiss. "buğulusümbül", (2), BY7274a; (5), 04/6/2011, BM11247, (Ir.-Tur.). **Ornithogalum orthophyllum** Ten. "bayırıyıldı", (1), 27/04/1987, GT1013. **O. sphaerocarpum** Kerner "salkım sakarca", (2), 23/05/1994, BY11427a. **Scilla melaina** Stepa "narın sümbül", (2), 23/05/1994, BY11427b, (E.Med.).

COLCHICACEAE / ACIÇIĞDEMİLGİLLER (1/1)

Colchicum szovitsii Fisch. & Mey. subsp. **szowitsii** "katırçığdemi", (2), 09/05/1986, BY7274b; (2), 03/03/1987, EA260, (Ir.-Tur.).

CYPERACEAE / HASIROTUGİLLER (1/1)

Carex distans L. subsp. **distans** "sinaayakotu", (14), 05/05/2012, BM11654. (Eur.-Sib.).

IRIDACEAE / SÜSENGİLLER (3/6)

Crocus biflorus Miller subsp. **tauri** (Maw) Mathew "ikizçiğdem", (1), 24/04/1988, HÇ1010, (Ir.-Tur.). **C.**

cancellatus Horberd subsp. **damescenus** (Herb.)

Mathew "pivok", (18), 14/10/2006, BM10168.

(9), 16/10/2011, BM11651, (Ir.-Tur.). **C. pallasii**

Goldb. subsp. **turcicus** B.Mathew "güzçimi", (1), 24/04/1988, AD1031. (18), 14/10/2006, BM10169.

Gladiolus atroviolaceus Boiss. "kıraç süseni",

(1), 04/05/1987, HES.n., SK35, (Ir.-Tur.). ***Iris germanica** L. "göksüsen" (13) observed by BM.

I. persica L. "buzola", (1), 14/05/1994, BY11418b!, (Ir.-Tur.).

IXOLIRIACEAE / KÖPEKOTUGİLLER (1/1)

Ixiolirion tataricum (Pallas) Herbert var.

tataricum "köpekotu", (2), 03/05/1991, BY9101b. (6), 04/06/2011, BM11384, (Ir.-Tur.).

LILIACEAE / ZAMBAKGİLLER (2/3)

***Fritillaria imperialis** L. "ağlayangelin", (13), observed by BM, (Ir.-Tur.), (VU). **Gagea bulbifera** (Pall.) Salisb. "dügmeli yıldız", (10), 04/04/2006, BM10193. (Eur.-Sib.). **G. fibrosa** (Desf.) Schultes & Schultes f. "tellisari", (1), 24/04/1998, MD1032.

POACEAE / BUĞDAYGİLLER (32/47)

Aegilops biuncialis Vis. "ikikılçık", (2), 09/05/1986, BY7284b; (5), 04/6/2011, BM11308. **A. columnaris**

Zhukovsky "kıl buğday", (6), 04/06/2011, BM11365, (Ir.-Tur.). **A. cylindrica** Host "kirpikli ot", (8), 11/06/2011, BM11486, (Ir.-Tur.). **A. geniculata** Roth

"konbaş", (2), 11/05/1987, GT1070; (5), 04/6/2011, BM11313. **A. speltoides** Tausch var. **speltoides**

"akbuğdayanası", (3), 10/05/1990, BY8747. **A. speltoides** Tausch var. **ligistica** (Savignone)

Bornm. "akbuğdayanası", (3), 10/05/1990, BY8771. **A. triuncialis** L. subsp. **triuncialis** "Üç kılçık", (8), 11/06/2011, BM11457; (8), 11/06/2011, BM11488.

A. umbellulata Zhuk. subsp. **umbellulata** "hanım buğdayı", (9), observed by BM, (Ir.-Tur.).

Amblyopyrum muticum (Boiss.) Eig var. **muticum** "narın buğday", (1), 16/06/1987, BY7687. **Avena eriantha** Durieu "koru yulaf", (6), 04/06/2011, BM11374. ***A. sativa** L. "yulaf", (6), 04/06/2011, BM11350. **Bothriochloa ischaemum** (L.) Keng. "sakalotu", (7), 15/07/2011, BM11624. **Bromus danthoniae** Trin. subsp. **danthoniae** "ibubukotu", (8), 11/06/2011, BM11453; (6), 04/06/2011, BM11412.

B. japonicus Thunb. subsp. **japonicus** "iye otu", (2), 16/06/1986, BY7688. **B. japonicus** Thunb. subsp. **anatolicus** (Boiss. & Heldr) Penzes "iye otu", (6), 04/06/2011, BM11415. **B. sterilis** L. "sağır ilcan", (3), 15/05/1990, BY8770. **B. tectorum**

L. subsp. **tectorum** "kir bromu", (2), 11/05/1987, İE1043; (5), 04/6/2011, BM11312. **Briza humilis** M.Bieb. "kadındılı", (1), 16/07/1986, BY7680-8794, 10/05/1990, EA10041. **Chrysopogon gryllus** (L.) Trin. subsp. **gryllus**. "buzağıotu", (1), 28/06/1994, BY11653; (5), 04/6/2011, BM11317; (7), 07/06/2011, BM11436; (10), 18/06/2011, BM11509. **Crithopsis delileana** (Schult.) Roshev. "süslü arpa", (1), 09/05/1986, BY7239, (VU). **Cynodon dactylon** (L.) Pers. var. **villosus** Regel "köpek dişi", (8), 11/06/2011, BM11464. **Echinaria capitata** (L.) Desf. "dikenbaotu", (5), 04/6/2011, BM11311; (6), 04/06/2011, BM11413. **Echinochloa colona** (L.) Link. "cinek", (4), 15/10/2000, TA1177. **E. crus-galli** (L.) P.Beauv. "darıcan", (4), 15/10/2000, TA1176. **Elymus lazicus** (Boiss.) Melderis "yayla buğdayı", (10), 18/06/2011, BM11512, (End., LR(Ic)). **Eremopya altaica** (Trin.) Roshev "dağ salkımı", (2), 10/05/1990, BY8772. **Festuca anatolica** Markgr.-Dann. subsp. **anatolica** "yurt yumağı", (5), 04/6/2011, BM11291, (End., LR(Ic)). **Gaudiniopsis macra** (M.Bieb.) Eig subsp. **macra** "som yulaf", (5), 04/6/2011, BM11306. **Hordeum bulbosum** L. "boncuk arpa", (1), 28/06/1986, EA169. **H. murinum** L. subsp. **glaucum** (Steudel) Tzvelev "duvar sarmaşığı", (2), 04/05/1987, HEs.n. **H. murinum** L. subsp. **leporium** (Link) Arc. var. **leporium** "kilçık arpa", (6), 04/06/2011, BM11352, (Ir.-Tur.). **H. spontaneum** K.Koch "yabani arpa", (6), 04/06/2011, BM11351, (Ir.-Tur.). **Loliolum subulatum** (Banks & Sol.) Eig "köseçim", (5), 04/6/2011, BM11309, (Ir.-Tur.). **Melica persica** Kunth subsp. **persica** "acem inciotu", (3), 10/05/1990, BY8778. **Parapholis incurva** (L.) C.E.Hubb. "eğri kiremitotu", (1), 14/06/1986, BY7696. **Pennisetum orientale** Rich. "fiskiyeotu", (2), 15/05/1991, BY8825, (Ir.-Tur.). **Phleum boissieri** Bornm. "yayla itkuyruğu", (1), 06/06/2001, TA1216; (6), 04/06/2011, BM11399, (Ir.-Tur.). **Phragmites australis** (Cav.) Trin. ex Steudel "kamış", (1), 15/08/2000, TA1172, (Eur.-Sib.). **Poa bulbosa** "yumrulu salkım", (1), 09/05/1986, BY7259. **Psilurus incurvus** (Govan) Schinz & Thell. "eğri kuyrukotu", (5), 04/06/2011, BM11310. **Rostraria cristata** (L.) Tzvelev var. **cristata** "gagaotu", (5), 04/6/2011, BM11307. **Setaria glauca** (L.) P.Beauv. "sıçansaçı", (7), 15/07/2011, BM11623. **S. viridis** (L.) P.Beauv. "yeşil sıçansaçı", (1), 14/06/2000, TA1169. **Sorghum halepense**

(L.) Pers. var. **halepense** "ekin süpürgesi", (1), 14/06/2000, TA1145. **S. halepense** (L.) Pers. var. **muticum** (Heckel) Grossh. "ekin süpürgesi", (7), 15/07/2011, BM11627, (Ir.-Tur.). **Stipa arabica** Trin. & Rupr. "buzağılık", (5), 04/6/2011, BM11316. **S. holosericea** Trin. "dirgen kilaç", (1), 09/05/1986, BY7260. **Taeniatherum caput-medusae** (L.) Nevski subsp. **crinitum** (Schreber) Melderis "kilçık arpası", (3), BY8768; (5), 04/6/2011, BM11303, (Ir.-Tur.). **Triticum baeoticum** Boiss. "yabani siyez", (1), 27/06/1986, EA139. **T. durum** Desf. "makarnalık buğday", (8), 11/06/2011, BM11470. **Vulpia ciliata** Dumort subsp. **ciliata** "kirpikliçim", (6), 04/06/2011, BM11416. **V. persica** (Boiss. & Buhse) V.Krecz. & Bobrov "acem kirpikliçimi", (5), 04/6/2011, BM11566.

XANTHORRHOEACEAE / ÇİRİŞGİLLER (2/2)

Asphodeline damascena (Boiss.) Baker subsp. **damascena** "çekiçlik", (3), 10/05/1990, BY8786!; (5), 04/6/2011, BM11322, (Ir.-Tur.). **A. damascena** (Boiss.) Baker subsp. **rugosa** "çekiçlik", (1), 09/05/1986, BY7279. (E.Med.), (End., LR(Ic)). ***Hemerocallis fulva** (L.) L. "güngüzel", (15), 20/06/2012 BM11657.

ACKNOWLEDGEMENTS

The authors would like to thank Assoc. Prof. Dr. Turan Arabacı, Assist. Prof. Dr. Narin Sadıkoğlu, Msc. Erkan Doğan and Msc. Serkan Köstekçi for description of some plants.

References

1. O. Ünal, Akdeniz Kampüsünün Bitki Sosyolojisi ve Ekolojisi Yönünden Bir Botanik Bahçesi Kurulması Amacına Yönelik Olarak İncelenmesi ve Haritalanması, Yüksek Lisans Tezi, Akdeniz Üniversitesi, 1998.
2. C. Türe, H. Böcük, The Flora of the Anadolu University Campus (Eskişehir-Turkey). Anadolu Un. J. Sci and Tech., 2 (2001) 83-95.
3. B. Sanön, F. Özén, Balıkesir Üniversitesi Çağış Kampüsü ve Çevresinin Florası, Ot Sistematisk Botanik Dergisi, 8 (2001) 47-68.
4. D. Töre, S. Erik, The Flora of Bağlıca Campus of Başkent University (Ankara), Hacettepe J. Biol. & Chem., 40 (2012) 267-291.
5. E. Uğurlu, Celal Bayar Üniversitesi (Manisa) Kampus Alanı Florası, Yüksek Lisan Tezi, Celal Bayar Üniversitesi Dergisi 7 (1997) 55-82.

6. N. Çelik, B. Yıldız, Cumhuriyet Üniversitesi Kampüs Alanının Florası (Sivas), IX Ulusal Biyoloji Kongresi, 3 (1988) 241-246.
7. N. Türkmen, Çukurova Üniversitesi Kampus Alanının Doğal Bitkileri, Hayat Formları ve Habitatları, Yüksek Lisans Tezi, Çukurova Üniversitesi, 1987.
8. A.Tatlı, A.Z. Tel, S. Emre Dumlupınar Üniversitesi Merkez Kampüsü (Kütahya) Florası, Dumlupınar Üniversitesi Fen. Bil. Derg, 10, yıl özel sayısı, 2002.
9. E. Özuslu, Gaziantep Üniversitesi Kampüs Florası, Ekoloji, 53 (2004) 25-32.
10. S. Erik, Beytepe Kampüsü (Ankara) Florası, Hacettepe Fen ve Müh. Bil. Dergisi, 15 (1994) 49-105.
11. B. Mutlu, S. Erik & B. Tarıkahya, New Contributions to the Flora of Beytepe Campus (Ankara) and Floristic Comparison with Neighboring Floras and Other Campus Floras, Hacettepe J. Biol. & Chem., 36 (2008) 181-195.
12. A. Parmaksız, A. Atamov, M. Aslan The Flora of Osmanbey Campus of the Harran University, Journal of Biological Sciences, 6 (2006) 793-804.
13. I. Uğurlu, Y. Doğan, T. Kesercioğlu, The vascular plants of Buca Faculty of Education Campus (İzmir): Contribution to educational practices, Eurasia J Biosci, 6 (2012) 11-23.
14. T. Turgut, Flora of Abant İzzet Baysal Üniversitesi Izett Baysal Campus, Msc Thesis, Abant İzzet Baysal University, 1996.
15. N.Y. Mehmet, Kafkas Üniversitesi Kampüs Florası, Kafkas Üniversitesi, Fen Bilimleri Enstitüsü, Yüksek Lisans Tezi, 2012.
16. K. Coşkunçelebi, Karadeniz Teknik Üniversitesi, Kampüsünün Doğal Çiçekli Bitkileri, Yüksek Lisans Tezi, Karadeniz Teknik Üniversitesi, 1995.
17. Ö.Z. Nugay, A. Duran & B. Doğan, Kırıkkale Üniversitesi Kampüs Florası, Selçuk Üniv. Fen Ed. Fak., Fen. Derg., 30 (2007) 79-92.
18. O. Zeren, Y. İspirgil, Mersin Üniversitesi Kampüs Alanı Florasının Tespiti. Ekoloji, 10 (2001) 12-16.
19. O. Ceylan, Muğla Üniversitesi Yerleşke Florası, Muğla Üniversitesi, Fen Bilimleri Enstitüsü, Yüksek Lisans Tezi, 2007.
20. V. Altay, Mustafa Kemal Üniversitesi Tayfur Ata Sökmen Kampüsü (Hatay)'nın Süs Bitkileri, Karadeniz Fen Bilimleri Dergisi, 2 (2012) 11-26.
21. İ. Başköse, M.Y. Paksoy, A. Savran, The flora of Niğde University campus area and Akkaya dam lake environments (Niğde/Turkey). Bio. Div. and Cons., 5 (2012) 82-97.
22. Z. Bilge, Flora of Middle East Technical University Campus Flora (Ankara), Msc Thesis, Middle East Technical University, 2001.
23. M. Kılınç, F. Özen, Samsun Ondokuz Mayıs Üniversitesi Kampüs Alanı ve Çevresinin Florası, Ondokuz May. Üniv. Fen Dergisi, 1 (1988) 17-40.
24. M. Deveci, T.B. Özbuçak, G. Demirkol, Ordu Üniversitesi kampus alanı florasının tespiti, Akademik Ziraat Dergisi 1 (2012) 107-116.
25. A. Ocak, C. Türe, The Flora of the Meşelik Campus of the Osmangazi University (Eskişehir-Turkey), Ot Sistematisk Botanik Dergisi, 8 (2001) 19-46.
26. M. Kargioğlu, S.Ü. Alaeddin Keykubat Kampüsü (Konya) Alanı ve Çevresinin Florasına Katkılar, S.Ü.Fen Derg, 12 (1995) 1-21.
27. H. Fakir, A.A. Babalık, Y. Karatepe, Süleyman Demirel Üniversitesi Kampüsünün Doğal Bitki Türleri (Isparta-Türkiye), Süleyman Demirel Üniversitesi, Fen Bilimleri Enstitüsü Dergisi, 13 (2009) 33-39.
28. G. Tarımcılar, G. Kaynak, Uludağ Üniversitesi (Bursa) Kampüs Alanı Florası II, C. Ü. Fen Edb. Fak. Fen Bil. Derg., 17 (1994) 3-16.
29. G. Tarımcılar, G. Kaynak, Uludağ Üniversitesi (Bursa) Kampüs Alanı Florası, Ondokuz Mayıs Üniv. Fen Derg., 6 (1995) 21-45.
30. B. Yıldız, Z. Bahçecioğlu, T. Arabacı, Floristic Characteristics of Beydağı (Malatya), Turk J Bot, 28: 4 (2004) 391-419.
31. P.H. Davis (ed), Flora of Turkey and The East Aegean Islands, v: 1-9, Edinburgh: Edinburgh University Press, 1965-1985.
32. P.H. Davis, K. Tan, R.R. Mill (eds), Flora of Turkey and The East Aegean Islands, v: 10, Edinburgh: Edinburgh University Press, 1988.
33. A. Güner, N. Özhata, T. Ekim, & K.H.C. Baßer (eds), Flora of Turkey and The East Aegean Islands, v: 11, Edinburgh: Edinburgh University Press, 2000.
34. T.G. Tutin, V.H. Heywood, N.A. Burges, D.H. Valentine, S.M. Walters & D.A. Webb (eds), Flora Europaea. v: 1-5. Cambridge: Cambridge University Press, 1964-1980.
35. R.K. Brummitt & C.E. Powell (eds), Authors of Plant Names. Kew: Royal Botanic Gardens, 1992.
36. A. Güner, S. Aslan, T. Ekim, M. Vural, M.T. Babaç (eds), Türkiye Bitkileri Listesi (Damarlı Bitkiler). İstanbul, Turkey: Nezahat Gökyiğit Botanik Bahçesi ve Flora Araştırmaları Derneği Yayınevi. İstanbul. 2012.
37. T. Ekim, M. Koyuncu, M. Vural, H. Duman, Z. Aytaç, N. Adigüzel, Türkiye Bitkileri Kırmızı Kitabı (Pteridophyta ve Spermatophyta), Ankara: TTKD ve Van 100. Yıl Üniversitesi Yayınevi, 2000.

