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Plant diversity and distribution in the lower Tersakan Valley (Amasya-Turkey)

Abstract

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This research was carried out in Amasya (Turkey) province between September 2001 and September 2004 and about 1000 plant specimens were collected from the area during this period. Identification of the specimens revealed the presence of 457 taxa belonging to 301 genera in 74 families. All of the 457 taxa belong to *Spermatophyta*. Of these 4 taxa belong to *Coniferophyta*, the remaining 453 taxa belong to *Magnoliophyta*. Some 57 taxa of *Magnoliophyta* are classified within the *Liliopsida* and remaining 396 taxa within the *Magnoliopsida*. A total of 50 taxa determined in the research area (10.94%) are endemic for Turkey. Eleven taxa are new records for square A5. The scattering ratios of the taxa for the phytogeographic regions are as follows: Irano-Turanian elements 77 (16.8%), Euro-Siberian elements 39 (8.5%), Mediterranean elements 35 (7.6%), Widespread and unknown scatteries 306 (66.9%). The largest five families according to taxon numbers are as follows: *Asteraceae* 56, *Fabaceae* 42, *Lamiaceae* 35, *Poaceae* 33, *Brassicaceae* 33. The largest five genera and number of species included are as follows: *Astragalus* L. 7 species., *Alyssum* L. 7 species, *Vicia* L. 6 species, *Salvia* L. 6 species, *Centaurea* L. 5 species.

Introduction

Lower Tersakan Valley is located in the north of Amasya province. Lower Tersakan Valley was selected as a research area which is under-studied and has some interesting characteristics in terms of both flora and phytogeography. There had been no detailed study of the flora of this area before the research was undertaken.

The research area is approximately 10 km long and lies approximately at 40° 39' 24" - 40° 43' 55" N, 35° 50' 03" - 35° 46' 24" E (Fig. 1). According to the grid system, the area falls within the A5 square. The altitude of the study area varies between 390 m and 1000 m.

The climate of the research area was examined using data from the Meteorology Directorate office of Amasya. Dominant bioclimatic level is semi-arid Mediterranean climate. The Mediterranean climate is characterized by hot and dry summers and also cold winters (Akman and Daget 1971). Rainfall is lower from the north to the south of the valley (Anonymous 1984) (Table 1).

Table 1 shows the average rainfall of the area. The mean annual average temperature is 13.6 °C and precipitation is 430.4 mm. It can be seen that heavy rainfall is in November to April, while the dry period extends from the beginning of June until the end of October. The seasonal precipitation is Spring, Winter, Autumn and Summer. The ombrothermic diagram shows dry and rainy period (Fig. 2.).

The geological structure of the research area mostly consists of calcareous rock which precipitate on the paleozoic old basic rocks (Eser 1983). There are five large soil groups in the study area: brown forest soil, chestnut colour, brown soil, alluvial and colluvial soil.

Material and Methods

This paper is based on a Master thesis. The research material consists of about 1000 plant specimens collected from the area between 2001 and 2004. Efforts were made to collect both flowering and fruiting specimens. The specimens were prepared according to established herbarium techniques. The Flora of Turkey (Davis 1965-1985; Davis & al. 1988; Güner & al. 2000) and other related floras (Evan&Townsend 1968; Heywood&Tutin 1964-1981) were utilized in the identification of the specimens. Experts were consulted in some controversial cases. All of the plant specimens are kept at the Middle East Technical University.

The plant taxa of Lower Tersakan Valley are listed in the appendix. The sequence of families, genera and species in the plant list is alphabetical. The list gives the localities of the taxa first (the research area entirely located within “A5: Amasya; Lower Tersakan Valley”), followed by habitats, altitudes, collection dates, collector names, numbers, endemism, their phytogeographical regions, and threat category for each taxon. Threatened categories are proposed for endemic taxa according to IUCN risk categories (Ekim 2000; IUCN 2001). The authors of the plant names were checked (Brummit&Powell 1992). An asterisk in front of a plant name indicates a new record for the A5 grid square.

Abbreviations used in the text and appendix are as follows:

E: East	Ir-Tur.: Irano-Turanian
El.: Element	Medit.: Mediterranean
End: Endemic	N.: North
Euro-Sib.: Euro-Siberian	W.: West
Eux: Euxine	Approx.: Approximately

Results and Discussion

At the end of the study, about 1000 vascular plant specimens collected from Lower Tersakan Valley and its vicinity, 325 species (457 taxa) and 301 genera, belonging to 74

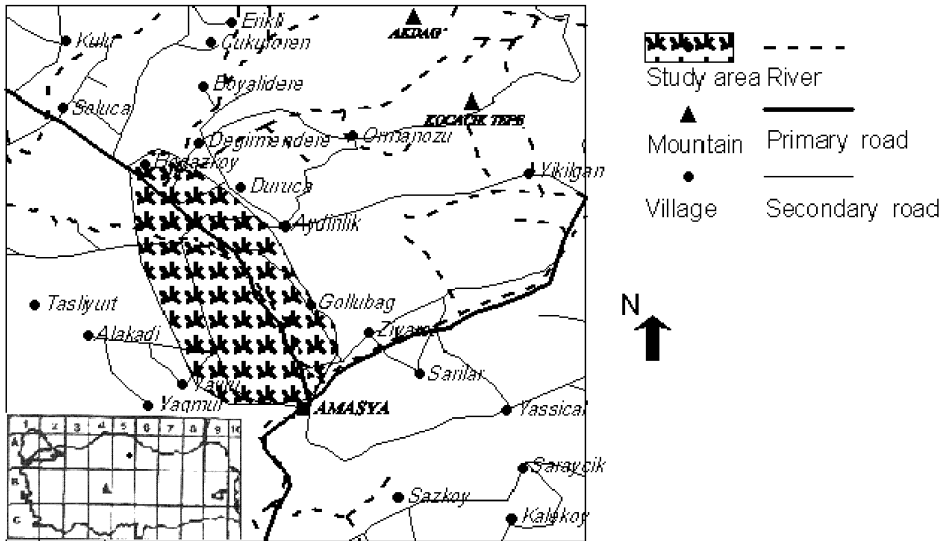


Fig. 1. Location of the study area.

families were established. Four taxa belong to *Gymnospermae*, while the other 453 were Angiosperms. A summary of the numerical data is presented in Table 2.

The distribution of taxa according to phytogeographical regions are as follows: Irano-Turanian elements 77 (16.8%), Euro-Siberian elements 39 (8.5%), Mediterranean elements 35 (7.6%), Widespread and unknown scatteries 306 (66.9%). Ir-Tur. and Medit. elements were generally distributed in open and steppe areas whereas Euro-Sib. elements were found in humid shadowy areas, around damp springs and in meadows at high altitudes. The results of the studies conducted in close and similar areas, along with phytogeographical distribution, are presented in Table 3.

Table 1. Climatic data of the meteorological stations (according to Akman and Daget 1971) h: altitude in m; P: mean annual precipitation in mm; M: mean maximum temperature (°C) for the hottest month; m: mean minimum temperature (°C) for the coldest month; Q: Emberger's pluviometric quotient: $200 P/M^2 - m^2$; PE: Summer rainfall; PE/M: Emberger's index of xericity; Sp: Spring; W: Winter; A: Autumn; Sm: Summer.

Station	h	P	M	m	Q	PE	PE/M	Precip.regime	Bioclimate
Amasya	390	430.4	38	-10.8	30.7	59.8	1.57	Sp.W.A.Sm	Semiarid very cold, Mediterranean climate

Fig. 2. Ombrothermic diagram of Amasya.

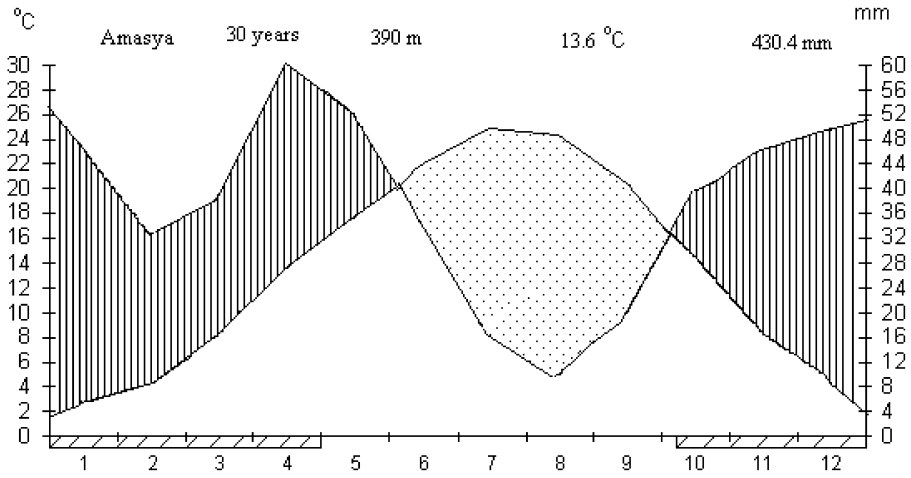


Table 2. Floristic properties of the research area.

	Gymno.	Dicots.	Monocots.	Total
Families	3	65	6	74
Genera	3	252	46	301
Species	3	278	44	325
Subspecies	1	63	9	73
Varieties		55	4	59
Endemic taxa		44	6	50
Medit.		32	3	35
Ir-Tur.		68	9	77
Euro.-Sib.		36	3	39
Others				306
EN		3		3
VU		1		1
NT		4	1	5
LC		36	5	41

Table 3. Phytogeographic spread of taxon from compared studies. 1.Flora of Lower Tersakan Valley; 2. Flora of Kelkit Valley (Karaer & Kılınc 2001); 3.The Flora of Eđerli Mountain (Cansaran 2002); 4. Flora of the Area between Amasya Castle and the Villages of Vermiş and Yuvacık (Cansaran & Aydođdu 1998); 5. Flora of Kazankaya Canyon (Duran & Hamzaođlu 2002).

Research area	1	2	3	4	5
Total Taxa	457	1316	650	412	308
Irano-Turanian elements %	16.8	14.75	15.69	15.71	16.9
Mediterranean elements %	7.6	11.40	7.07	9.52	13.3
Euro-Siberian elements %	8.5	12.69	14.92	7.38	3.6
Multiregional or unknown phytogeographic region %	66.9	62.16	62.32	67.39	66.2

Table 4. Largest families in the study area.

Family	Genera	specific & infra-specific taxa	(%) Taxa
<i>Asteraceae</i>	38	56	12.2
<i>Fabaceae</i>	18	42	9.2
<i>Lamiaceae</i>	20	35	7.6
<i>Brassicaceae</i>	23	33	7.2
<i>Poaceae</i>	27	33	7.2
<i>Apiaceae</i>	17	18	3.9
<i>Boraginaceae</i>	9	17	3.7
<i>Liliaceae</i>	11	16	3.5
<i>Caryophyllaceae</i>	8	16	3.5
<i>Scrophulariaceae</i>	7	15	3.2
Other families	123	176	39
Total	301	457	100

Families in terms of their taxon number rank as follows: *Asteraceae* (56 taxa), *Fabaceae* (42 taxa), *Lamiaceae* (35 taxa), *Brassicaceae* (33 taxa), *Poaceae* (33 taxa), *Apiaceae* (18 taxa), *Boraginaceae* (17 taxa), *Liliaceae* (16 taxa), *Caryophyllaceae* (16 taxa), *Scrophulariaceae* (15 taxa) (Table 4).

Higher representation of the families *Asteraceae*, *Fabaceae* and *Lamiaceae* is mainly related to the fact that these families are also represented in the same order in the Flora of Turkey. *Asteraceae* display greater ecological tolerance and break up their seeds easily (Davis 1975; Davis & al. 1988). It is the largest family represented by numerous species in the Flora of Turkey (1156 species, 1363 taxa). The *Fabaceae* and *Lamiaceae* are the second and the third largest family in accordance with Davis & al. (1988) for the Flora of Turkey (974 species, 1128 taxa and 546 species, 730 taxa; respectively) (Table 5).

The genera with the largest number of species in the study area are shown in Table 6. Five of the richest genera are *Astragalus* L. (7 species), *Alyssum* L. (7 species), *Vicia* L. (6 species), *Salvia* L. (6 species), *Centaurea* L. (5 species). Both *Astragalus* and *Alyssum* genera are the richest genera. *Astragalus* has total of ca. 2500 species in the world and it is one of the largest genera of flowering plants. The estimated number of species for Turkey is 434 (Maassomi 1998). Similarly, *Alyssum* is a big genus and contain 102 taxa in Turkey. Both *Salvia* and *Vicia* genera are the second richest genera. *Salvia* has 91 species and *Vicia* has 61 species in Turkey. *Centaurea* is the third largest genus in Turkey (178 species, 215 taxa; Davis & al. 1988) and in our study area (Table 6).

Table 5. Comparison of the richest families in the different areas (for abbreviations see table 3).

Research area	1	2	3	4	5
Total taxa	457	1316	650	412	308
<i>Compositae</i>	56	158	78	46	37
<i>Leguminosae</i>	39	148	77	33	17
<i>Labiatae</i>	35	89	40	38	24
<i>Gramineae</i>	32	73	42	28	23
<i>Cruciferae</i>	32	65	35	23	19
<i>Umbelliferae</i>	18	53	23	16	15
<i>Boraginaceae</i>	17	46	26	16	13
<i>Liliaceae</i>	16	32	8	13	5
<i>Caryophyllaceae</i>	16	60	32	12	21
<i>Scrophulariaceae</i>	15	56	25	13	13

Table 6. Richest genera in the study area

Genus	Number of taxa	(%) Taxa
<i>Astragalus</i>	7	1.53
<i>Alyssum</i>	7	1.53
<i>Vicia</i>	6	1.31
<i>Salvia</i>	6	1.31
<i>Centaurea</i>	5	1.09
<i>Verbascum</i>	4	0.87
<i>Veronica</i>	4	0.87
<i>Viola</i>	4	0.87
<i>Onobrychis</i>	4	0.87
<i>Trigonella</i>	4	0.87
<i>Onosma</i>	4	0.87
Other genera	402	87.9
Total taxon	457	100

There are five vegetation types in the study area: Forest vegetation, Steppe vegetation, Riparian vegetation, Rocky vegetation and Macchie vegetation.

A total of 50 taxa are found to be endemic for Turkey and the ratio of endemism is 10.94 % (Table 7). These 50 taxa were evaluated according to IUCN risk categories (Ekim 2000; IUCN 2001). The results are summarized as follows: 3 taxa EN, 1 taxa VU, 5 taxa NT and 41 taxa LC

Eleven taxa have been defined as new records for the square A5 (Ilarslan 1994; Cansaran & Aydogdu 1998; Cansaran 2002) after evaluation of the Flora and new

Table 7. Rate of Endemism in the studies compared.

Research area	1	2	3	4	5
Total taxa	457	1316	650	412	308
Endemism %	10.94	10.03	12.30	11	7.8

publications on square A5 (Donner 1985,1987, 1990; Yıldırım 1997a, 1997b, 1999, 2000, 2001a and 2001b; Nydegger-Hügli 1999) and various floristic data which contribute to the flora of Turkey is provided throughout this study.

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Appendix

Plant List

AMARANTHACEAE

Amaranthus retroflexus L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 416

ANACARDIACEAE

Pistacia terebinthus subsp. *palaestina* (Boiss.) Engler

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 189, Medit. El.

Rhus coriaria L.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 575

APIACEAE

Artemisia squamata L.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 230

Bifora radians Bieb.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2004, *F.Celep* 738

Bunium microcarpum subsp. *bourgaei* (Boiss.) Hedge & Lamond

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 29.05.2002, *F.Celep* 810, Ir-Tur.El. ?

Bupleurum rotundifolium L.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 538

Caucalis platycarpus L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.05.2002, *F.Celep* 154

Conium maculatum L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 722

Daucus carota L. Grup C

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 372

Eryngium campestre var. *virens* Link

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m., 27.06.2002, *F.Celep* 288

Foeniculum vulgare Mill.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 388

Fuernrohrria setifolia C. Koch

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 398

Heracleum platytaenium Boiss.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, *F.Celep* 589, End., Euro-Sib. El., LC

Johrenia tortuosa (Fisch. & Mey.) Chamberlain

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2002, *F.Celep* 289

Malabaila secacul Banks & Sol. Grup A

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 96

Scandix pecten-veneris L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 28.04.2002, *F.Celep* 43

Tordylium syriacum L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 795, *Medit. El.*

Torilis arvensis subsp. *neglecta* (Sprengel) Thellung

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.5.2002, *F.Celep* 803

Torilis leptophylla (L.) Rchb.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 537

Turgenia latifolia (L.) Hoffm.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.05.2002, *F.Celep* 815

ARACEAE

Arum euxinum R. Mill

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bagları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 587, *End.*, *Euxine El.*, *LC*

ARALIACEAE

Hedera helix L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 193

ARISTOLOCHIACEAE

Aristolochia maurorum L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 05.06.2003, *F.Celep* 657, *Ir-Tur.El.*

ASCLEPIADACEAE

Cionura erecta (L.) Griseb.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 418, *E.Medit.El.*

Cynanchum acutum L. subsp. *acutum*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 295

Periploca graeca var. *vestita* Rohlena

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 223, *E.Medit. El.*

Vincetoxicum fuscatum subsp. *boissieri* (Kusn.) Browicz

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 641, *End.*, *Ir-Tur.El.*, *LC*

Vincetoxicum scandens Somm& Lev.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 480

ASTERACEAE

Achillea biebersteinii Afan.

Surroundings Besgoz, vicinity of Gezirlik, W sides, steppe and macchie, 500-600 m, 23.07.2002, *F.Celep* 381, *Ir-Tur El.*

Achillea millefolium L. subsp. *millefolium*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 790, Euro-Sib. El.

Anthemis sintenisii Freyn

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 140, End., Ir-Tur El., LC

Anthemis tinctoria L. var. *tinctoria*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 794

Anthemis triumfettii (L.) All.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 546-a

* *Bidens tripartita* L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 399

Calendula arvensis L.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2004, *F.Celep* 827

Carduus nutans L. *nutans*

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 564-b

Carduus tmoleus Boiss.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 564-a

Carthamus dentatus Vahl.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 358

Centaurea consanguinea DC.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 577, End., Ir-Tur.El., LC

Centaurea solstitialis L. subsp. *solstitialis*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 374

Centaurea triumfettii All. Grup A

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 436

Centaurea urvillei subsp. *armata* Wagenitz

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2002, *F.Celep* 286-b, Medit. El.

Centaurea urvillei subsp. *steppeposa* Wagenitz

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2002, *F.Celep* 286, Ir-Tur.El.

Circium arvense subsp. *vestitum* (Wimmer & Grab.) Petrak

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, *F.Celep* 730

Cnicus benedictus L. var. *benedictus*

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 161, Det: F. Karaer

Cnicus benedictus var. *kotschyi* (Schultz-Bip.) Boiss.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 138, Det: F. Karaer

Chardinia orientalis (L.) O. Kuntze

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 201, Ir-Tur.El.

Chondrilla juncea L. var. *juncea*

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.09.2002, *F.Celep* 417

Cichorium intybus L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 376

Conyza canadensis (L.) Cronquist

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m. 05.05.2002, *F.Celep* 73

Crepis foetida subsp. *rhoeadifolia* (M. Bieb.) Celak

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 228

Crepis sancta (L.) Babcock

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 14.04.2002, *F.Celep* 6

Crupina crupinastrum (Moris) Vis.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m., 29.05.2002, *F.Celep* 802

Crupina vulgaris Cass.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 177

Echinops pungens Trautv. var. *pungens*

Surroundings Göllü Bagları, roadsides, steppe, 450-550 m, 23.07.2002, *F.Celep* 359, Ir-Tur.El.

**Inula anatolica* Boiss.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 638, End., LC

Inula aschersoniana Janka

Approximately 1.5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 16.06.2001, *F.Celep* 805

Inula ensifolia L.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 639

Jurinea consanguinea DC.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 524-b

Jurinea pontica Hausskn. & Freyn ex Hausskn.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 524-a, End., Ir-Tur El., LC

Lactuca serriola L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 367, Euro-Sib. El.

Lapsana communis subsp. *alpina* (Boiss. & Ball) P.D. Sell.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 01.08.2003, *F.Celep* 560, Euxine El.

Lapsana communis subsp. *intermedia* (M. Bieb.) Hayek

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, *F.Celep* 489, Det: Fergan Karaer

Logfia arvensis (L.) Holvb

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 529-a

Logfia gallica (L.) Cosson & Germ.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 529-b

Matricaria chamomilla var. *recutita* (L) Grierson.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 490

Picnomon acarna (L.) Cass.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 588, *Medit. El.*

Picris hieracioides L.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 497, *Euro-Sib. El.*

Picris strigosa Bieb.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m., 29.07.2003, *F.Celep* 570, *Ir-Tur.El.*

Pilosella hoppeana subsp. *pilisquama* (Np.) Sell & West

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 07.07.2002, *F.Celep* 308

Psychrogeton nigromontanus (Boiss. & Buhse) Grierson

Surroundings Besgoz, vicinity of Gezirlik, W sides, steppe and macchie, 500-600 m, 06.10.2002, *F.Celep* 394, *Ir-Tur El.*

Pulicaria dysenterica (L.) Bernh.

Surroundings Besgoz, vicinity of Gezirlik, W sides, damp place, 500-600 m, 23.07.2002, *F.Celep* 383

Reichardia glauca Matthews

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 565, *Ir-Tur.El.*

Scariola orientalis (Boiss.) Sojak

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 582, *Ir-Tur.El.*

Scorzonera acuminata Boiss.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 536, *End., Ir-Tur El., LC*

Senecio aquaticus subsp. *erraticus* (Bertol.) Matthews

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, *F.Celep* 409, *Euro-Sib. El.*

Senecio vernalis Waldst. & Kit.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 93

Senecio vulgaris L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 787

Sonchus asper subsp. *glaucescens* (Jordan) Ball.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 375

Stypeporhamphus tuberosus (Jacq.) Grossh.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 494, *Det: F.Karaer*

Tanacetum poteriifolium (Ledeb.) Grierson

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, under Pinus, 400-650 m, 08.06.2003, *F.Celep* 546-b, *Euro-Sib. El.*

Tragopogon coloratus C. A. Meyer

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 105, *Ir-Tur.El.*

Tripleurospermum rosellum var. *album* E.Hossain

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 87, *End., VU*

Xeranthemum annuum L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 27.06.2002, *F.Celep* 285

BORAGINACEAE

Anchusa azurea Mill. var. *azurea*

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 14.04.2002, *F.Celep* 14

Anchusa pusilla Gusul.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 149

Asperugo procumbens L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 04.04.2002, *F.Celep* 13, Euro- Sib. El.

Buglossoides arvensis (L.) Johnston

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 14.04.2002, *F.Celep* 18

Cynoglossum creticum Mill.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 18.05.2003, *F.Celep* 469

Echium angustifolium Mill.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 226

Echium orientale L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 799, End., Euxine El., LC

Echium vulgare L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 360, Euro- Sib. El.

Heliotropium bovei Boiss.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 278, E.Medit. El.

* *Heliotropium lasiocarpum* Fisch. & Mey.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 378, Ir-Tur.El.

Lappula barbata (M. Bieb.) Gürke

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 530, Ir-Tur.El.

Lappula squarrosa (Retz.) Dumort.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 158

Onosma alba-roseum Fisch.& Mey. var. *alba-roseum*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 14.4.2002, *F.Celep* 17

**Onosma caerulescens* Boiss.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 545, Ir-Tur.El.

Onosma sericeum Willd.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 12.09.2003, *F.Celep* 614, Ir-Tur.El.

Onosma stenolobum Hausskn.ex H.Riedl

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 231, End., Ir-Tur.El., LC

Paracaryum ancyritanum Boiss.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 400-450 m, 28.4.2002, *F.Celep* 53, End., Ir-Tur.El., LC

BRASSICACEAE

Aethionema arabicum (L.) Andr. ex DC.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 132

Alyssum blepharocarpum Dudley & Hub.-Mor.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, *F.Celep* 151, End., Ir.-Tur. El., NT

Alyssum desertorum Stapf. var. *desertorum*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 14.04.2002, *F.Celep* 7

Alyssum linifolium Stepph. ex Willd. var. *linifolium*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 420- 450 m, 17.03.2002, *F.Celep* 3-a

Alyssum minus var. *micranthum* (Meyer) Dudley

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.03.2002, *F.Celep* 1-a

Alyssum minus (L.) Rothm. var. *minus*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.03.2002, *F.Celep* 1

Alyssum praecox Boiss. & Bal. var. *praecox*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 15.06.2002, *F.Celep* 264, End., LC

Alyssum sibiricum Willd.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 540-a

Arabis nova Vill.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 160

Arabis sagittata (Bertol.) DC.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 571

Barbarea plantaginea DC.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 10.04.1994, Cansaran 125

Calepina irregularis (Asso) Thellung

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 16.03.2002, *F.Celep* 23

Capsella bursa-pastoris (L.) Medik.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 84

Cardaria draba (L.) Desv. subsp. *draba*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 761

Clypeola jonthlaspi L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 14.04.2002, *F.Celep* 19

Conringia orientalis (L.) Andr.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 456

Descurainia sophia (L.) Webb ex Prantl

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 257

Draba rigida Willd. var. *rigida*

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 11.04.2002, *F.Celep* 630, End., LC

Erophila verna (L.) Chevall. subsp. *verna*

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 17.03.2002, *F.Celep* 33

Erysimum amasianum Hausskn. & Bornm.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 462, End., EN

Erysimum crassipes Fisch. & Mey.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 277

Fibigia eriocarpa (DC.) Boiss.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 169

Hirschfeldia incana (L.) Lag.-Foss.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 236

Lepidium latifolium L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2004, *F.Celep* 682

Malcolmia africana (L.) R.Br.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 268

Matthiola longipetala subsp. *bicornis* (Sibth. & Smith) P.W. Ball

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 11.06.2002, *F.Celep* 742

Raphanus raphanistrum L.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 212

Rorippa sylvestre (L.) Bess.

Tersakan Valley, Çetik !

Sinapis arvensis L.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 474

Sisymbrium altissimum L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 191

Sisymbrium loeselii L.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 544

Sisymbrium orientale L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 174

Thlaspi perfoliatum L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 16.03.2002, *F.Celep* 27

CAMPANULACEAE

Asyneuma limonifolium (L.) Janchen subsp. *limonifolium*

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 519

Asyneuma limonifolium subsp. *pestalozzae* (Boiss.) Damboldt

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 642, End., LC

Campanula glomerata subsp. *hispidula* (Witasek) Hayek

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 648, Euro-Sib. El.

Campanula saxonorum Gandoger

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 705, End., Ir-Tur.El., LC

CAPRIFOLIACEAE

Lonicera etrusca Santi var. *etrusca*

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 256, Medit. El.

Lonicera etrusca var. *hispidula* Boiss.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 531, E. Medit.El.

Sambucus ebulus L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 713, Euro-Sib. El.

Viburnum orientale Pallas

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 481, Euro- Sib.El. Det: Z. Aytaç

CARYOPHYLLACEAE

Arenaria leptocladus (Rch.) Guss.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 145

Arenaria serpillifolia L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 83

Dianthus calocephalus Boiss.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 703

* *Dianthus crinitus* Sm. var. *crinitus*

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 15.06.2001, *F.Celep* 809

Dianthus zonatus var. *aristatus* (Boiss.) Reeve

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 298.

Holosteum umbellatum L. var. *umbellatum*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.04.2002, *F.Celep* 660

Minuartia erythrosepala var. *cappadocica* (Boiss.) McNeill

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 540-b, End., Ir.-Tur. El., LC

Minuartia corymbulosa (Boiss. & Bal.) McNeil. var. *corymbulosa*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 293, End., Ir-Tur.El., NT

Saponaria officinalis L.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 07.07.2002, *F.Celep* 305

Saponaria. orientalis L.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 706

Saponaria prostrata Willd. subsp. *prostrata*

Surroundings Besgoz, vicinity of Gezirlik, W sides, steppe and macchie, 500-600 m, 08.06.2003, *F.Celep* 553, End., Ir-Tur.El., LC

Silene italica (L.) Pers.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 651

Silene otites (L.) Wibel

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 282

Silene pratensis subsp. *divaricata* (Rchb.) McNeil & H.C.Prantice

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, *F.Celep* 58-a

Stellaria media (L.) Vill. subsp. *media*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.04.2003, *F.Celep* 633

Velezia fasciculata Boiss.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 688

CHENOPODIACEAE

Chenopodium botrys L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 271

Chenopodium murale L.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 233

Salsola ruthenica Iljin

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, roadsides, 29.09.2002, *F.Celep* 410

CISTACEAE

Cistus creticus L.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 521. Medit. El.

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

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 459

Helianthemum salicifolium (L.) Mill.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 28.04.2002, *F.Celep* 47

CONVOLVULACEAE

Calystegia sepium (L.) R.Br.

Surroundings Göllü Bağları, roadsides, edge of Tersakan river, 400-430 m, 05.05.2002, *F.Celep* 59

Calystegia silvatica (Kit.) Griseb.

Approximately 1,5-2,5 km from Amasya, edge of Tersakan river, 400-430 m, 29.09.2002, *F.Celep* 406

Convolvulus assyricus Griseb.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 468, End., Ir-Tur.El., LC

Convolvulus cantabrica L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 300

Convolvulus holosericeus M. Bieb. subsp. *holosericeus*

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 485

CORNACEAE

Cornus sanguinea subsp. *australis* (C.A. Mey.) Jav.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 171, Euro-Sib. El.

CORYLACEAE

Carpinus orientalis Mill.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 438

CRASSULACEAE

Sedum album L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 291

Sedum hispanicum L. var. *hispanicum*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 296

CUCURBITACEAE

Ecballium elaterium (L.) A. Rich.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 361, Medit.El.

CUPRESSACEAE

Juniperus foetidissima Willd.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 209

Juniperus oxycedrus L. subsp. *oxycedrus*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 454

CUSCUTACEAE

Cuscuta campestris Yuncker

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, above *Salvia* L., 400 m, 29.09.2002, *F.Celep* 404

Cuscuta epithimum (L.) L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m., above *Plantago* sp., 450-500 m, 23.07.2002, *F.Celep* 379

CYPERACEAE

**Carex muricata* L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 200, Euro-Sib. El.

Cyperus longus L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 710

Schoenoplectus lacustris subsp. *tabernaemontani* (C.C. Gmelin) A. Löve & D. Löve

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 718

Scirpoides holoschoenus (L.) Sojaç

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 74

DIPSACACEAE

Dipsacus laciniatus L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 721

Pterocephalus plumosus (L.) Coulter

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 520

Scabiosa argentea L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 15.06.2002, *F.Celep* 277-a

Scabiosa columbaria var. *ochroleuca* (L.) Coulter

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 277

Scabiosa micrantha Desf.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 202

ELAEAGNACEAE

Elaeagnus angustifolia L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 196

EPHEDRACEAE

Ephedra major Host

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 101

EUPHORBIACEAE

Andrachne telephoides L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 28.04.2002, *F.Celep* 49

Chrozophora tinctoria (L.) Raf.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 368

Euphorbia falcata L var. *falcata*

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 475

Euphorbia helioscopia L.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 476

Euphorbia rigida M. Bieb.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 28.04.2002, *F.Celep* 48, *Medit. El.*

Euphorbia szovitsii Fisch. & Mey. var. *szovitsii*

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 90, *Ir-Tur.El.*

Mercurialis annua L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 362

FABACEAE

**Astragalus campylorrhynchus* Fisch. & Mey.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 635, Ir-Tur.El.

Astragalus densifolius subsp. *amasiensis* (Freyn) Aytaç

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 507, Ir-Tur.El.

Astragalus dipsaceus Bunge

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 585, End., Ir-Tur.El.

Astragalus leucothrix Freyn & Bornm.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, Cansaran 325, End., Ir-Tur.El., LC

Astragalus lycius Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 186, End., LC

Astragalus microcephalus Willd.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 573, Ir-Tur.El.,

Astragalus squalidus Boiss. & Noe

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 448, End., LC

Cicer arietinum L.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 13.07.1994, Cansaran 602

Colutea cilicica Boiss. & Bal.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 188

Coronilla scorpioides (L.) Koch

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 460

Coronilla varia L. subsp. *varia*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2004, *F.Celep* 674

Genista albida Willd.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 644

Hedysarum pogonocarpum Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 28.05.2003, *F.Celep* 549, End., LC

Hippocrepis unisiliquosa L. subsp. *unisiliquosa*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 386

Lathyrus aphaca var. *floribundus* (Vel.) K. Maly

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 772

Lathyrus setifolius L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 752, Medit. El.

Medicago × *varia* Martyn

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 06.10.2002, *F.Celep* 395

Medicago lupulina L.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 10.04.1994, Cansaran 122

Medicago minima (L.) Bart. var. *minima*

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 112

Medicago rigidula (L.) All. var. *rigidula*

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 89

Melilotus alba Desr.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 493

Onobrychis bornmuelleri Freyn

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 265, End., EN

Onobrychis caput-galli (L.) Lam.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.05.2002, *F.Celep* 745, Medit. El.

Onobrychis cappadocica Boiss.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 693, End., Ir-Tur.El., LC

Onobrychis oxyodontha Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 197

Pisum sativum var. *elatius* (M. Bieb.) Aschers. & Graebn.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 515, Medit.El. ?

Psoralea bituminosa L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 371

Robinia pseudoacacia L.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 446

Sophora alopecuroides L. var. *alopecuroides*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-500 m, 08.06.2003, *F.Celep* 508

Trifolium arvense L. var. *arvense*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 700

Trifolium. hirtum All.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 685, Medit.El.

Trifolium pallidum Waldst.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 758

Trigonella coerulescens (M. Bieb.) Hal.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 103, Ir-Tur.El.

Trigonella lunata Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 134, Ir-Tur.El.

Trigonella monantha subsp. *monantha* C. A. Meyer

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, *F.Celep* 461, Ir-Tur.El.

Trigonella spruneriana Boiss. var. *spruneriana*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 144, Ir-Tur.El.

**Vicia cappadocica* Boiss. & Bal.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 505

Vicia cracca L. subsp. *cracca*

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 523, Euro-Sib.El.

Vicia cracca subsp. *stenophylla* Vel.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2004, *F.Celep* 724

Vicia narbonensis L. var. *narbonensis*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 183

Vicia sativa subsp. *nigra* var. *segetalis* (Thuill.) Ser.ex DC.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 260

Vicia villosa Roth. subsp. *villosa*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 163

FAGACEAE

Quercus cerris L. var. *cerris*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, scrubs, 700-850 m, 29.07.2003, *F.Celep* 579, Medit. El.

Quercus pubescens Willd.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 535

Quercus robur L. subsp. *robur*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 208, Euro-Sib. El.

GENTIANACEAE

Blackstonia perfoliata (L.) Huds. subsp. *perfoliata*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 64

GERANIACEAE

Erodium ciconium (L.) L'Her.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 14.04.2002, *F.Celep* 10

Geranium rotundifolium L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 719

Geranium tuberosum L. subsp. *tuberosum*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 179

GLOBULARIACEAE

Globularia trichosantha Fish. & Mey.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 479

HYPERICACEAE

Hypericum organifolium Willd.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 94

Hypericum perforatum L.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 07.07.2002, *F.Celep* 355

Hypericum tetrapterum Fries

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 215

ILLECEBRACEAE

Herniaria hirsuta L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 28.06.2003, *F.Celep* 551

* *Paronychia kurdica* var. *fragilis* Chaudhri

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 114

Paronychia kurdica var. *kurdica* Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 281

Scleranthus annuus L. subsp. *annuus*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 133

Scleranthus uncinatus Schur

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 133

IRIDACEAE

Crocus ancyrensis (Herbert) Maw

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 12.01.2003, *F.Celep* 431, End., Ir-Tur.El., LC

Iris galatica Siehe

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 16.03.2002, *F.Celep* 26, End., Ir-Tur.El., LC

LAMIACEAE

Acinos rotundifolius Pers.

Around Boğazköy-Ziyaret town road, vicinity of Yukarı Göllü Bağları, mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 689

Ajuga chamaepitys subsp. *chia* (Schreber) Arcangeli

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 137

Ballota nigra subsp. *nigra* P.H. Davis

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2004, *F.Celep* 684, Euro-Sib. El.

Clinopodium vulgare subsp. *arundanum* (Boiss.) Nym.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 373

Lamium amplexicaule L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 150. Euro-Sib. El.

Lamium ponticum Boiss. & Bal. ex Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 14.04. 2002, *F.Celep* 28, End., Ir-Tur.El., LC

Lamium purpureum L. var. *purpureum*

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 16.03.2002, *F.Celep* 24-a, Euro-Sib. El.

Marrubium vulgare L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 712

Mentha longifolia (L.) Huds. subsp. *longifolia*

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, *F.Celep* 715, Euxine El.

Micromeria myrtifolia Boiss. & Hohen.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 512, Medit El.

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

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 492

Phlomis armeniaca Willd.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 09.06.2002, *F.Celep* 741, End., Ir-Tur.El., LC

Prunella vulgaris L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 711, Euro-Sib. El.

Salvia cyanescens Boiss & Bal.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, *F.Celep* 829. Ir-Tur.El., End., LC.

Salvia sclarea L.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 491

Salvia tomentosa Mill.

K irklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 22.05.1994, Cansaran 320. Ir-Tur.El.

Salvia verticillata subsp. *amasiaca* (Freyn & Bornm.) Bornm.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 514

Salvia virgata Jacq.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 14.04.2002, *F.Celep* 15, Ir-Tur.El., Det: Z.Aytaç

Salvia viridis L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 28.04.2002, *F.Celep* 44, Medit. El.

Satureja hortensis L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 413

Scutellaria orientalis subsp. *pinnatifida* Edmondson

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 91

Scutellaria salviifolia Benth.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.05.2002, *F.Celep* 755, End., LC

Sideritis amasiaca Bornm.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 566, End., NT

Sideritis montana subsp. *remota* (d'Urv.) P.W. Ball ex Heywood

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, *F.Celep*764, Medit. El.

Stachys annua (L.) L. var. *annua*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 447

Stachys byzantina C. Koch

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 503, Euro- Sib. El.

Stachys iberica subsp. *stenostachya* (Boiss.) Rchb.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 649, Ir-Tur.El.

Stachys lavandulifolia Vahl. var. *lavandulifolia*

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 22.05.1994, Cansaran 319, Ir-Tur.El.

Teucrium polium L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 62

Teucrium orientale var. *puberulens* T. Ekim

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 694, Ir-Tur.El.

Teucrium chamaedrys subsp. *syspirense* (C. Koch) Rchb. f.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, *F.Celep* 387, Ir-Tur.El.

Thymus sipyleus subsp. *rosulans* (Borbás) Jalas

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 650 m, 08.06.2003, *F.Celep* 496

Wiedemannia orientalis Fisch. & Mey.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 16.03.2002, *F.Celep* 24-c, End., Ir-Tur.El., LC

Ziziphora capitata L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.05.2002, *F.Celep* 747, Ir-Tur.El.

Ziziphora taurica M. Bieb. subsp. *taurica*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 130, Ir-Tur.El.

LILLACEAE

Allium pseudoflavum Vved.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 653

Allium atroviolaceum Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2004, *F.Celep* 735

Allium cappadocicum Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2004, *F.Celep* 734, End., Ir-Tur.El., LC

Asparagus verticillatus L.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 543

Bellevalia gracilis Feinbrun

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 28.04.2002, *F.Celep* 12, End., Ir-Tur. El., LC

Bellevalia sarmatica (Pallas ex Georgi) Woronow

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 120

Colchicum falcifolium Stapf

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 12.01.2003, *F.Celep* 430, Ir-Tur.El.

Colchicum triphyllum G. Kunze

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 02.01.2004, *F.Celep* 616, *Medit. El.*

Gagea granatellii (Parl.) Parl.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 16.03.2002, *F.Celep* 621

**Hemerocallis fulva* (L.) L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 195

Hyacinthella micrantha (Boiss.) Chouard

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m. 01.03.2003, *F.Celep* 425, *End., Ir-Tur. El., NT*

Muscari neglectum Guss.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 238

Ornithogalum narbonense L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 28.04.2002, *F.Celep* 122, *Medit. El.*

Ornithogalum comosum L.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 146

Ruscus aculeatus var. *angustifolius* Boiss.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 637

Smilax excelsa L.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 173, *Euxine El.*

LINACEAE

Linum corymbulosum Rchb.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 384, *Medit. El.*

Linum nodiflorum L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 770, *Medit. El.*

LORANTHACEAE

Viscum album subsp. *austriacum* (Wiesb.) Vollman

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 500 m, 05.06.2003, *F.Celep* 656

LYTHRACEAE

Lythrum salicaria L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 709, *Euro-Sib. El.*

MALVACEAE

Alcea pallida Waldst. & Kit.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 411

Hibiscus trionum L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 01.02.2003, *F.Celep* 619

Lavatera punctata All.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 07.07.2002, *F.Celep* 306
Malva sylvestris L.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 509

MORACEAE

Ficus carica L. subsp. *carica*

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 27.06.2004, *F.Celep* 728

Morus alba L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, cultivated land, 05.06.2003, *F.Celep* 658

MORINACEAE

Morina persica L. var. *persica*

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep*562, Ir-Tur.El.

OLEACEAE

Fraxinus angustifolia Vahl. subsp. *angustifolia*

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 487

Jasminum fruticans L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.05.2002, *F.Celep* 154, Medit. El.

Phillyrea latifolia L.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 453, Medit. El.

ONAGRACEAE

Epilobium montanum L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 716, Euro-Sib. El.

OROBANCHACEAE

Orobanche minor Sm.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 14.04.2002, *F.Celep* 12

Orobanche oxyloba (Reuter) G. Beck

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 148

Orobanche ramosa L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 22.10.2003, *F.Celep* 617

PAPAVERACEAE

Fumaria asepala Boiss.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 141, Ir.-Tur.El.

Glaucium grandiflorum Boiss. & Huet var. *grandiflorum*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 28.5.2003, *F.Celep* 483, Ir-Tur.El.

Hypocoum procumbens L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 400-500 m, 05.05.2002, *F.Celep* 143, Medit.El.

Papaver commutatum Fisch. & Mey.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 07.04.20002, *F.Celep* 39 -a

Papaver lacerum Popov

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 07.04.20002, *F.Celep*39

Papaver rhoeas L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 27.06.2004, *F.Celep* 683

PINACEAE

Pinus brutia Ten.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m,17.05.2003, *F.Celep* 437

PLANTAGINACEAE

Plantago lanceolata L.

Approximately 1.5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 55

PLUMBAGINACEAE

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

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, *F.Celep* 280, Ir-Tur.El.

Plumbago europaea L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 421, Euro-Sib. El.

POACEAE

Aegilops biuncialis Vis.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 797

Agrostis stolonifera L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 70

Avena barbata Pott ex Link subsp. *barbata*

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 27.06.2004, *F.Celep* 679, Medit. El.

Bothriochloa ischaemum (L.) Keng

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 302

Briza media L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 826

Bromus diandrus Roth

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 244

Bromus japonicus Thunb. subsp. *japonicus*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 79

Bromus tectorum L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 796

Chrysopogon gryllus (L.) Trin.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 61

Cynodon dactylon (L.) Pers.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 366

Dactylis glomerata subsp. *hispanica* (Roth) Nym.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 218

Echinaria capitata (L.) Desf.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep*

Festuca valesiaca Schleicher ex Gaudin

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 499

Hordeum murinum subsp. *glaucum* (Steudel) Tzvelev

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 220

Koeleria cristata (L.) Pers.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 65

Lolium multiflorum Lam.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 791

Lolium rigidum Gaudin var. *rigidum*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2004, *F.Celep* 675

Melica ciliata L. subsp. *ciliata*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2002, *F.Celep* 299

Pennisetum orientale L. C. M. Richard

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 825, Ir-Tur.El.

Phragmites australis (Cav.) Trin. ex Steudel.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 717

Piptatherum coerulescens (Desf.) P. Beauv.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 29.07.2003, *F.Celep* 568

Poa bulbosa L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2004, *F.Celep* 732

Poa pratensis L.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 05.05.2002, *F.Celep* 71

Poa trivialis L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 777

Polypogon monspeliensis (L.) Desf.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2002, *F.Celep* 303

Rostraria cristata (L.) Tzvelev var. *cristata*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 28.06.2003, *F.Celep* 554

Setaria viridis (L.) P. Beauv.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 365

Sorghum halepense (L.) Pers. var. *halepense*

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 27.06.2004, *F.Celep* 678

Stipa arabica Trin & Rupr.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 782, Ir-Tur.El.

Stipa ehrenbergiana Trin.& Rupr.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 85, Ir-Tur.El.

Taeniatherum caput-medusae subsp. *asper* (Simonkai) Melderis

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, *F.Celep* 555

Triticum dicoccon Schrank

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2004, *F.Celep* 676

Vulpia ciliata Dumort subsp. *ciliata*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 63

POLYGALACEAE

Polygala vulgaris L.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 05.05.2002, *F.Celep* 99

POLYGONACEAE

Polygonium convolvulus L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.06.2002, *F.Celep* 279

Polygonium lapathifolium L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 714

**Polygonium pulchellum* Lois.

Kırklar Mountain, N slopes, Tekirdede Cemetery surroundings, 550 m, 12.05.2002, *F.Celep* 221

Rumex acetosella L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 400-500 m, 27.06.2004, *F.Celep* 677

Rumex obtusifolius subsp. *subalpinus* (Schur) Êelak

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 541

PORTULACACEAE

Portulaca oleracea L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 364

PRIMULACEAE

Anagallis arvensis var. *caerulea* (L.) Gouan

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 77

Anagallis foemina Mill.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 27.06.2004, *F.Celep* 737, Medit. El.

Androsace maxima L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 400-450 m, 14.04.2002, *F.Celep* 5

Cyclamen coum var. *caucasicum* (C. Koch) Meikle

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 02.03.2003, *F.Celep* 429

Cyclamen coum Mill. var. *coum*

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 26.03.2002, *F.Celep* 557

RANUNCULACEAE

Adonis aestivalis L. subsp. *aestivalis*

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 28.04.2002, *F.Celep* 126

Anemone blanda Schott & Kotschy

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 30.03.2002, *F.Celep* 40

Ceratocephalus falcatus (L.) Pers.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 17.03.2002, *F.Celep* 35

Clematis vitalba L.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 472

Consolida orientalis (Gay) Schröd.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 154

Consolida thirkeana (Boiss.) Schröd.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 391, End., LC

Delphinium venulosum Boiss.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 393, End., Ir.-Tur.El., LC

Nigella nigellastrum (L.) Willk.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 56

Nigella orientalis L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.05.2002, *F.Celep* 751

Ranunculus argyreus Boiss.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 20.04.2002, *F.Celep* 626

Ranunculus arvensis L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 763

Ranunculus constantinopolitanus (DC) d'Urv.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 172

Ranunculus isthmicus subsp. *steppeporum* Davis

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 14.04.2002, *F.Celep* 11

RESEDACEAE

Reseda lutea L. var. *lutea*

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 534

Reseda luteola L.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, 27.06.2004, *F.Celep* 720

RHAMNACEAE

Paliurus spina-christi Mill.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 473

Rhamnus oleoides subsp. *graecus* (Boiss. & Reut.) Holmboe

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 18.05.2003, *F.Celep* 464, *Medit.El.*

ROSACEAE

Amelanchier rotundifolia subsp. *integrifolia* (Boiss. & Hohen.) Browicz

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 495

Amygdalus communis L.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 15.03.2004, *F.Celep* 828

Cotoneaster integerrimus Medik

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, *F.Celep* 650

Cotoneaster nummularia Fisch. & Mey.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 95

Crataegus microphylla C. Koch

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 402, *Hyrcano-Euxine El.*

Potentilla inclinata Vill.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 69

Potentilla recta L. Group B

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 15.05.2002, *F.Celep* 153

Rosa canina L.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 450-550 m, 20.05.2002, *F.Celep* 182

Rubus sanctus Schreber.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 27.06.2004, *F.Celep* 729

Sanguisorba minor subsp. *muricata* (Spach) Briq.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.05.2002, *F.Celep* 786

RUBIACEAE

Asperugo suavis Fisch. & Mey.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 690, *End.*, *Ir-Tur.El.*, *LC*

Asperula pestalozzae Boiss.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 640, *End.*, *Euro-Sib. El.*, *LC*

Crucianella angustifolia L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.05.2002, *F.Celep* 793, *Medit. El.*

Crucianella bithynica Boiss.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 516, *E. Medit. El.*

Cruciata taurica (Pallas ex Wiild.) Ehrend.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 10.05.2002, *F.Celep* 629, *Ir-Tur.El.*

Galium fissurense Ehrend. & Schönb.-Tem.

Approximately 6 km from Amasya, vicinity of Karasu, W sides, rock place and bushy, 450-650 m, 29.06.2003, *F.Celep* 652, *End., Euro-Sib. El., LC*

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

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 92. *Ir-Tur.El.*

Galium rivale (Sm.) Griseb.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 207, *Euro-Sib.El.*

Galium verum L subsp. *verum*

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 29.05.2002, *F.Celep* 754, *Euro-Sib. El.*

RUTACEAE

Haplophyllum armenum Spach

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 510, *End., LC*

Ruta montana (L.) L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.07.2003, *F.Celep* 574

SALICACEAE

Populus alba L.

From Boğazköy to Ziyaret town road, vicinity of Yukarı Göllü Bagları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 450, *Euro-Sib. El.*

Salix triandra subsp. *bornmuelleri* (Hauskn.) A. Skv.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, *F.Celep* 680, *Ir-Tur.El.*

SANTALANACEAE

Thesium divaricatum Jan. ex Mert. & Koch

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 102, *Euro-Sib. El.*

SCROPHULARIACEAE

Anarrhinum orientale Benth.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.07.2003, *F.Celep* 580, *Ir-Tur.El.*

Bellardia trixago (L.) All.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 08.06.2003, *F.Celep* 513

Digitalis lamarekii Ivan.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 697, End., Ir-Tur.El., LC

Linaria corifolia Desf.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 28.04.2002, *F.Celep* 54, End., Ir-Tur.El., LC

Linaria simplex (Willd.) DC.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 14.04.2002, *F.Celep* 4, Medit. El. ?

Scrophularia libanotica var. *pontica* R. Mill.

Around Boğazköy town, edge of Tersakan stream, damp places, 430-480 m, *F.Celep* 708, End., Ir-Tur.El., NT

Scrophularia xanthoglossa var. *decipens* (Boiss. & Kotschy) Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, *F.Celep*16, Ir-Tur.El.

Verbascum glomeratum Boiss.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 17.05.2003, *F.Celep* 441, Ir-Tur.El.

Verbascum cfr. *myrianthum* Boiss.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 27.06.2004, *F.Celep* 691, End., Euro-Sib. El., EN

Verbascum orientale (L.) All.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 28.04.2002, *F.Celep* 41, E.Medit.El.

Verbascum sinuatum L. var. *sinuatum*

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 382, Medit.El.

Veronica jacquinii Baumg.

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 435, Euro- Sib. El.

Veronica multifida L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 157-a, Ir-Tur.El.

Veronica persica Poir.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 142

Veronica triphyllos L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 02.03.2003, *F.Celep* 427

SIMAROUBACEAE

Ailanthus altissima (Mill.) Swingle

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 440

SOLANACEAE

Hyocyanus niger L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 20.05.2002, *F.Celep* 176

Physalis alkekengi L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 01.10.2003, *F.Celep* 631

Solanum dulcamara L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 401, Euro-Sib. El.

Solanum nigrum subsp. *schultesii* (Opiz) Wessely

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 05.06.2003, *F.Celep* 655

SPARGANIACEAE

Sparganium erectum subsp. *neglectum* (Beeby) K. Richter, Amasya-Boğazköy, Tersakan vadisi, Çetik 363

ULMACEAE

Celtis caucasica Willd.

Approximately 1 km from Amasya, W sides, vicinity of Uçgoz, steppe and rocky place, 400-650 m, 03.04.2003, *F.Celep* 659

URTICACEAE

Urtica dioica L.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m, 29.09.2002, *F.Celep* 396, Euro-Sib. El.

VALERIANACEAE

Valeriana dioscoridis Sm.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 192, Medit.El.

Valerianella coronata (L.) DC.

Surroundings Göllü Bagları, roadsides, steppe and scrubes, 450-550 m., 05.05.2002, *F.Celep* 135

Valerianella pumila (L.) DC.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 14.04.2002, *F.Celep* 42

VERBENACEAE

Verbena officinalis L.

Entrance of Tersakan Valley from Amasya, SE slopes, steppe and rock places, 400-550 m, 29.09.2002, *F.Celep* 408

VIOLACEAE

Viola kitaibeliana Roem. & Schult.

Approximately 1.5-2.5 km from Amasya, E sides, steppe and macchie, 450-600 m, 16.03.2002, *F.Celep* 22

Viola odorata L.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 17.03.2002, *F.Celep* 30

Viola suavis M. Bieb.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 20.05.2002, *F.Celep* 178

Viola tricolor L.

Approximately 1,5-2,5 km from Amasya, E sides, steppe and macchie, 450-600 m, 05.05.2002, *F.Celep* 88

*VITACEAE**Vitis sylvestris* Gmelin

From Boğazköy to Ziyaret town road , vicinity of Yukarı Göllü Bağları, around mountain road, steppe, 700-850 m, 17.05.2003, *F.Celep* 442

*ZYGOPHYLLACEAE**Peganum harmala* L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 05.05.2002, *F.Celep* 75

Tribulus terrestris L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 363

Zygophyllum fabago L.

Surroundings Göllü Bağları, roadsides, steppe and scrubes, 450-550 m, 23.07.2002, *F.Celep* 369, Ir-Tur.El.