

## Microfungi Isolated from Plants in Kahramanmaraş Province, Turkey

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Received: 01.08.2005

Accepted: 04.08.2006

**Abstract:** Herein, 146 microfungi species and their hosts recorded in Kahramanmaraş province are given with their localities. The research was carried out between 2000 and 2004. Approximately 1821 vascular plant specimens infected and uninfected with microfungi were collected from the area. In total, 146 microfungi species were identified on the collected host specimens. These species belong to 36 genera and 17 families; 43 species belong to *Ascomycota*, 94 to *Basidiomycota*, 1 to *Oomycota*, and 8 to Mitosporic Fungi (*Deuteromycota*). Five microfungi are given at the generic level, 16 species are new records for Turkey, and 4 new hosts were recorded for 4 microfungi species.

**Key Words:** Microfungi, new records, parasite, Kahramanmaraş, Turkey

### Kahramanmaraş Yöresi Bitkilerinden İzole Edilen Mikrofunguslar

**Özet:** Kahramanmaraş il sınırları içerisinde tespit edilen 146 mikrofungus türü ve konakçıları, lokaliteleri ile birlikte verilmiştir. Araştırma 2000-2004 yılları arasında yapılmıştır. Alandan mikrofungusla enfekte olmuş ve enfekte olmamış yaklaşık 1821 vasküler bitki örneği toplanmıştır. Toplanan konakçı örnekler üzerinde bulunan parazitik mikrofunguslar teşhis edilmiş 146 tür saptanmıştır. Bu türler 36 genus ve 17 familya ya dahildir. 43 tür *Ascomycota*, 94 tür *Basidiomycota*, 1 tür *Oomycota*, 8 tür Mitosporik Fungi (*Deuteromycota*) divizyonuna dahildir. Beş mikrofungus örneği genus düzeyinde verilmiştir. 16 tür Türkiye için yeni kayıttır ve dört mikrofungus için dört yeni konakçı tür bulunmuştur.

**Anahtar Sözcükler:** Mikrofungus, yeni kayıt, parazit, Kahramanmaraş, Türkiye

### Introduction

The microfungi flora of Turkey is not yet completely known and so regional research must be conducted. Some research on the Turkish microfungi flora has been performed (Bahcecioglu & Isiloglu, 1995; Bahçecioğlu & Yıldız, 1996, 2001, 2005; Bahcecioglu, 1997, 1998, 2001; Bahcecioglu & Gjærum, 2003, 2004; Kabaktepe & Bahcecioglu, 2005; Bahcecioglu et al., 2005), but a lot of work remains to be done.

This study was carried out on parasitic microfungi growing in Kahramanmaraş province between 2000 and 2004. The province is situated along the transitional belt of the Irano-Turanian and Mediterranean phytogeographical regions, and south of the Anatolian Diagonal, which is one of the main endemic centres of

Turkey. According to the grid square system adopted by Davis in *Flora of Turkey*, Kahramanmaraş is located in the squares B6 and C6 (Figure). Pazarcık, Türkoğlu, and Andırın districts are located in the Mediterranean phytogeographical region, and Elbistan, Afşin, and Göksun districts are in the Irano-Turanian phytogeographical region.

The study area is mountainous, and elevations range from 500 to 3200 m. There are some valleys and plains between the mountains, as well as some rivers in the province. According to previous research, Kahramanmaraş has a rich vascular plant flora (Yıldız, 2001). It is known that richness of host species is an important factor in the diversity of microfungi. For this reason Kahramanmaraş province was selected as the research area.

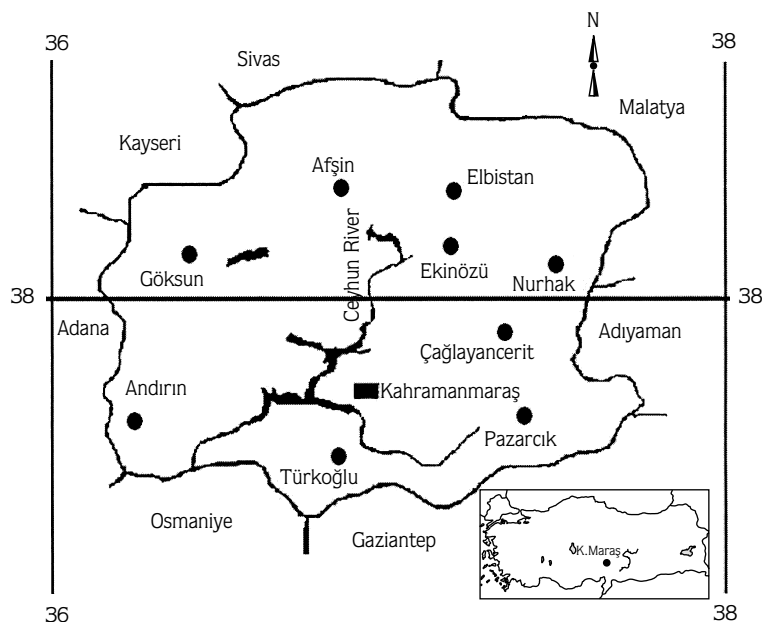


Figure. Geographic map of Kahramanmaraş province.

## Materials and Methods

Field studies were carried out in May-September between 2000 and 2004. In total, 1821 vascular plant specimens were collected. The specimens were prepared according to herbarium techniques. *The Flora of Turkey* (Davis, 1965-1985; Davis et al., 1988) was the main source used for the identification of the host specimens. Some doubtful identifications were checked using *Flora Europaea* (Tutin et al., 1964-1980), *Flora of Iraq* (Townsend & Guest, 1966-1988), and *Flora Iranica* (Rechinger, 1967-1988).

The fungal specimens were isolated from plant material by scraping, or thin sections were obtained by razor. These were then mounted in lactophenol and identified using the relevant literature (Grove, 1935, 1967; Wilson & Henderson, 1966; Kubreviç & Uliyanisev 1975; Uliyanisev, 1978; Tomilin, 1979; Azbukina, 1984; Mordue & Ainsworth, 1984; Uliyanisev et al., 1985; Braun, 1987; Vanky, 1987, 1994; Denchev, 1995; Cummins & Hiratsuka, 2003). After identification of the fungi, the specimens were deposited in the herbarium of İnönü University.

The taxa are listed in the Appendix. The data include:

- i. The legitimate name (in bold) and the author of the microfungus species.

- ii. The location (2 or 4) of specimens collected from the area. The localities are described with as much detail as possible. The grid squares used in the Flora of Turkey are given for each locality. The name of the collectors, Zeliha Bahçecioğlu, Şanlı Kabaktepe, Bayram Yıldız, are abbreviated as ZB, ŞK, BY, respectively
- iii. New records are marked with an asterisk.
- iv. New hosts are marked with 2 asterisks.

## Results and Discussion

After studying the 1821 infected and uninfected host specimens collected from the study area, 40 families, 166 genera, and 239 host species were identified. Due to inadequate materials, some host specimens were not identified at the specific level. Some large host families, in terms of species numbers, are given in Table 1.

As seen from Table 1, 6 families, namely *Asteraceae*, *Fabaceae*, *Poaceae*, *Rosaceae*, *Lamiaceae*, and *Apiaceae* contain 102 (61.45%) out of 166 genera and 154 (64.43%) out of 239 host species. These 6 families are also common in Sivas province (Bahçecioğlu & Yıldız, 2005).

The reason for the dominance of the species of these 6 families in Kahramanmaraş is habitat diversity, species richness of the families, and worldwide distribution (Davis, 1965-1988).

Table 1. Host genera and species totals of the major families.

Families	Number of Genera	Spp. number	Families	Number of Genera	Spp. number
Asteraceae	38	62	Dipsacaceae	4	8
Fabaceae	16	28	Polygonaceae	3	14
Poaceae	14	14	Euphorbiaceae	3	6
Rosaceae	13	17	Caryophyllaceae	3	4
Lamiaceae	11	21	Other families	44	45
Apiaceae	10	12	TOTAL	166	239
Brassicaceae	7	8			

In the second phase of the study, the parasitic microfungi species found on the hosts were named. At the end of this period, 17 families, 32 genera, and 146 species belonging to 4 divisions, namely *Ascomycota*, *Basidiomycota*, *Oomycota*, and Mitosporic Fungi were identified. In addition, microfungi samples belonging to 5 genera were collected in the study area, but due to insufficient literature these genera were not identified at the specific level. If each of these genera is regarded as a species, the number of genera and species comes to 36 and 151, respectively. These genera are given in the Appendix. The genera and the species belonging to the divisions are given in Table 2. The numbers of genera that were not identified at the species level are given in parentheses.

The main reason for the substantial presence of species belonging to the division Basidiomycota is that it includes such genera as *Puccinia* Pers. and *Uromyces* (Link) Unger, which have many species distributed worldwide. Of the 146 microfungi species 9 are saprophytes. Saprophyte species and their 2 divisions are given in Table 3.

The parasitic microfungi species identified in the research area belong to 17 families and are listed in Table 4. The genera and species numbers of these families are shown in the same table.

Table 2. The number of genera and species of the divisions.

Divisions	Number of genera	Number of species
Basidiomycota	12	94
Ascomycota	13 + (3)	43
Deuteromycota	6 + (1)	8
Oomycota	1	1
TOTAL	32 + (4)	146

Table 3. Saprophyte species, 2 genera, and their divisions.

Species/Genera	Division
<i>Cladosporium</i>	Ascomycota
<i>Lewia scrophulariae</i>	Ascomycota
<i>Mycosphaerella mori</i>	Ascomycota
<i>Mycosphaerella populi</i>	Ascomycota
<i>Mycosphaerella pyri</i>	Ascomycota
<i>Paraphaeosphaeria glaucopunctata</i>	Ascomycota
<i>Pleospora</i>	Ascomycota
<i>Pleospora herbarum</i>	Ascomycota
<i>Phoma herbarum</i>	Mitosporic Fungi

As seen from Table 4, 2 families, namely Pucciniaceae and Erysiphaceae, include 107 species. In other words, 73.28% of the parasitic microfungi flora of Kahramanmaraş province belong to 2 families. The other 15 families contain 39 (26.72%) species. Pucciniaceae and Erysiphaceae are also as common in Sivas province as in Kahramanmaraş (Bahcecioglu & Yildiz, 2005) because the species belonging to these families are widespread throughout the world.

According to number of species, the largest genera in the research area are *Puccinia* (51 species), *Erysiphe* R.Hedw. ex DC. (20 species), and *Uromyces* (19 species). These 3 genera contain 90 (61.64%) species, and most of the species belonging to these genera are common throughout the world (Table 5).

The genera that contain the 118 species given in Table 5 constitute 81% of the microfungi flora of Kahramanmaraş. The other 26 genera are represented by 1 or 2 species in the area.

Table 4. Genera and species totals of the families found in the study area.

Families	Number of genera	Number of species
Pucciniaceae (Basidiomycota)	3	73
Erysiphaceae (Ascomycota)	7	34
Mitosporic Fungi	7	8 + (1)
Ustilaginaceae (Basidiomycota)	3	9
Phragmidiaceae (Basidiomycota)	1	6
Mycosphaerellaceae (Ascomycota)	2	3 + (1)
Melampsoraceae (Basidiomycota)	1	3
Pleosporaceae (Ascomycota)	2	1 + (2)
Phylachoraceae (Ascomycota)	2	2
Cucurbitariaceae (Ascomycota)	1	(1)
Uropyxidaceae (Basidiomycota)	1	1
Coleosporaceae (Basidiomycota)	1	1
Pileolariaceae (Basidiomycota)	1	1
Venturiaceae (Ascomycota)	1	1
Albuginaceae (Oomycota)	1	1
Phaeosphaeriaceae (Ascomycota)	1	1
Pucciniastraceae (Basidiomycota)	1	1
<b>TOTAL</b>	<b>36</b>	<b>146 + (5)</b>

Table 5. Species totals of the large genera in the study area and percentages of total species number.

Genera	Species totals	%
Puccinia (Basidiomycota)	51	35
Erysiphe (Ascomycota)	20	14
Uromyces (Basidiomycota)	19	13
Phragmidium (Basidiomycota)	6	4
Ustilago (Basidiomycota)	6	4
Leveillula (Ascomycota)	4	3
Melampsora (Basidiomycota)	3	2
Sphaerotheca (Ascomycota)	3	2
Microsphaera (Ascomycota)	3	2
Mycosphaerella (Ascomycota)	3	2
<b>TOTAL</b>	<b>118</b>	<b>81</b>
Other 26 Genera	28	19
<b>TOTAL</b>	<b>146</b>	<b>100</b>

Table 6. The numbers of microfungi species found on the host families.

Families of host species	Number of microfungi species	Families of host species	Number of microfungi species
Asteraceae	27	Apiaceae	7
Fabaceae	19	Dipsacaceae	6
Poaceae	17	Polygonaceae	4
Rosaceae	15	Brassicaceae	4
Lamiaceae	11	Rubiaceae	4
Caryophyllaceae	8	Euphorbiaceae	4

Table 7. Some fungi and the number of host species they were found on.

Microfungi species	Number of host species
<i>Leveillula taurica</i>	67
<i>Puccinia calcitrapae</i>	19
<i>Erysiphe cichoracearum</i>	16
<i>Puccinia graminis</i>	14

Table 8. New records of microfungi species and their hosts for Turkey.

Microfungi Species	Host species
<i>Erysiphe thesii</i>	<i>Thesium arvense</i>
<i>Erysiphe valerianae</i>	<i>Valeriana dioscoridis</i>
<i>Microsphaera abbreviata</i>	<i>Quercus</i>
<i>Microsphaera atraphaxis</i>	<i>Atraphaxis billardieri</i>
<i>Phyllachora graminis</i> var. <i>graminis</i>	<i>Cynodon dactylon</i>
<i>Puccinia aethionematis</i>	<i>Aethionema iberideum</i>
<i>Puccinia rubiae-tataricae</i>	<i>Rubia tinctoria</i>
<i>Puccinia thlaspeos</i>	<i>Thlaspi violascens</i>
<i>Uromyces helichrysi</i>	<i>Helichrysum plicatum</i> var. <i>plicatum</i> <i>Helichrysum plicatum</i> var. <i>polyphyllum</i>
<i>Uromyces silenes-ponticae</i>	<i>Silene rhynchocarpa</i> <i>Silene spergulifolia</i>
<i>Ustilago bulgarica</i>	<i>Sorghum</i>
<i>Ustilago lidii</i>	<i>Juncus</i>
<i>Albugo gomphrenae</i>	<i>Amaranthus</i>
<i>Dilophospora alopecuri</i>	<i>Poa</i>
<i>Phyllosticta helleboricola</i>	<i>Helleborus</i>
<i>Septoria septulata</i>	<i>Convolvulus</i>

The 12 host families, including most of the microfungi species, are listed in Table 6. These families are rich in species and are quite common.

These results show that parasitic fungi prefer the plants belonging to these families as hosts. Because the species belonging to these families are widespread, spores of fungi attach to them and germinate easily. Moreover, some of the host species probably are not resistant to the parasitic microfungi.

From the point of view of host preference, some species are very tolerant; *Leveillula taurica* (Lev.) G.Arnaud, for example, was found on 67 host species and *Puccinia calcitrapae* DC. was found on 19 (Table 7).

Of the 146 species identified from the study area, 16 (10.95%) are new records for Turkey. These new records and their hosts are given in Table 8.

In addition, 4 new host plants and 4 new microfungi species were found. New hosts of these species are given in Table 9. These records and new hosts show that additional study on the microflora of Turkey is needed.

Table 9. New hosts of some microfungi species.

Microfungi Species	Host genera
<i>Erysiphe heraclei</i>	<i>Zosima</i>
<i>Erysiphe lycopsidis</i>	<i>Alkanna</i>
<i>Erysiphe crucifearum</i>	<i>Diplotaxis</i>
<i>Leveillula taurica</i>	<i>Ebenus</i>

As a result of this study carried out in Kahramanmaraş Province, 16 new records of microfungi were established for Turkey and 4 new host plants were recorded for 4 microfungi. For future studies on microfungi, 1821 specimens were added to the herbaria.

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## APPENDIX

List of microfungi found in Kahramanmaraş province. The sequences of order, genera, and species in the following list are in alphabetical order. The taxa above order are given according to Hawksworth et al. (1995).

Kingdom: FUNGI

Division: ASCOMYCOTA

Dothideales

### 1. 1. Camarosporium Schulzer

C6 Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Astragalus*, 21.07.2004, ZB 3469.

### 2. 2. Cladosporium Link

B6 Kahramanmaraş: Göksun, Fındık village, Bostandere, 1600-1800 m, on *Artemisia abrotanum*, 23.07.2004, ZB 3619.

### 3. 3. Fusicladium Bonord.

C6 Kahramanmaraş: 10 km from Andırın to Kadirli, 800 m, on *Cephalaria*, 30.10.2004, ŞK 3770.

4. 4. *Lewia scrophulariae* (Desm.) M.E.Barr & E.G.Simmons

B6 Kahramanmaraş: 30 km from Göksun to Kahramanmaraş, 1300 m, on *Astragalus*, 22.07.2004, ZB 3549, BY.

5. 5. *Mycosphaerella mori* (Fuckel) F.A.Wolf

C6 Kahramanmaraş: Between Kahramanmaraş and Göksun, 700 m, on *Morus*, 13.06.2001, ZB 3082.

### 6. My. populi (Auersw.) J.Schröt.

B6 Kahramanmaraş: Göksun, Kanlıkavak village, 1300 m, on *Populus alba*, 07.10.2000, ZB 2993, BY.

### 7. My. pyri (Auersw.) Boerema

B6 Kahramanmaraş: Göksun, Ahmetcik Village, 1300 m, on *Pyrus communis*, 08.08.2001, ZB 317, BY. B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Pyrus communis*, 20.08.2004, ZB 3736, BY. B6 Kahramanmaraş: Göksun, Karlık hill, 1150 m, on *Pyrus communis* var. *sativa*, 03.08.2003, ŞK 2619. B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Pyrus communis* var. *sativa*, 23.07.2004, ZB 3597 BY. C6 Kahramanmaraş: Ahır Mountain, 1420 m, on *Pyrus communis* var. *sativa*, 21.08.2004, ZB 3858 BY. B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Pyrus elaeagnifolia*, 23.07.2004, ZB 3599, BY.

6. 8. *Paraphaeosphaeria glaucopunctata* (Grev.) Shoemaker & C.E.Babc.

C6 Kahramanmaraş: 10 km from Andırın to Kahramanmaraş, 900 m, on *Ruscus aculeatus*, 22.07.2004, ZB 3530, BY.

7. 9. *Pleospora* Rabenh. ex Ces. & De Not.

B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Artemisia abrotanum*, 23.07.2004, ZB 3619.

C6 Kahramanmaraş: 5 km from Kahramanmaraş to Türkoğlu, 540 m, on *Scabiosa*, 18.09.2003, ZB 3394, BY.

### 10. Pl. herbarum (Pers.) Rabenh.

B6 Kahramanmaraş: 30 km from Göksun to Kahramanmaraş, 1300 m, on *Astragalus*, 22.07.2004, ZB 3549, BY. B6 Kahramanmaraş: Göksun, between Keklikoluk and Doğankonak, 1650 m, on *Silene*, 20.07.2004, ZB 3408.

Erysiphales

### 8. 11. Blumeria graminis (DC.) Speer

C6 Kahramanmaraş: Ahır Mountain, 1000-1100 m, on *Aegilops*, 12.06.2001, ZB 3051. C6 Kahramanmaraş: 40 km from Kahramanmaraş to Göksun, 700 m, on *Avena barbata* subsp. *barbata*, 13.06.2001, ZB 3086, BY. C6 Kahramanmaraş: 32 km from Kahramanmaraş to Andırın, 500 m, on *Hordeum bulbosum* var. *bulbosum*, 13.06.2001, ZB 3107. C6 Kahramanmaraş: 45 km from Kahramanmaraş to Andırın, 900 m, on *Hordeum bulbosum* var. *bulbosum*, 14.06.2001, ZB 3126.

9. 12. *Erysiphe aquilegiae* var. *ranunculi* (Grev.) R.Y.Zheng & G.Q.Chen

B6 Kahramanmaraş: Göksun, Karlık hill, 1150 m, on *Ranunculus*, 03.08.2003, ŞK 2618. B6 Kahramanmaraş: 30 km from Göksun to Kahramanmaraş, Avratoluğu, 1300 m, on *Ranunculus*, 22.07.2004, ZB 3547. C6 Kahramanmaraş: Between Suçatı and Döngel, 900 m, on *Ranunculus*, 07.10.2000, ZB 3017. B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Thalictrum flavum*, 20.08.2004, ZB 3740, BY.

**13. E. betae** (Vanha) Weltzien

**C6** Kahramanmaraş: 20 km from Kahramanmaraş to Pazarlık, 1200 m, on *Beta vulgaris*, 14.09.2002, ŞK 1936. **B6** Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Beta vulgaris*, 18.08.2004, ZB 3646, BY.

**14. E. biocellata** Ehrenb.

**C6** Kahramanmaraş: 28 km from Kahramanmaraş to Andırın, Başkonak plateau, 1300 m, on *Prunella*, 22.07.2002, ZB 3544, BY. **C6** Kahramanmaraş: Andırın, Meyremçil Pass, Kayranlı Da., 2000-2200 m, on *Thymus fallax*, 20.08.2004, ZB 3805, BY. **B6** Kahramanmaraş: Göksun, Püren Pass, 1600-1700 m, on *Salvia verbenaca*, 07.10.2000, ZB 2999, BY.

**15. E. buhrii** U.Braun

**C6** Kahramanmaraş: Andırın, Meyremçil Pass, Kayranlı Da., 2000-2200 m, on *Gypsophila libanotica*, 20.08.2004, ZB 3793. **B6** Kahramanmaraş: Göksun, 1-2 km west of Keklikoluk Village, 1600 m, on *Silene spergulifolia*, 18.08.2004, ZB 3668.

**16. E. caulicola** (Petr.) U.Braun

**B6** Kahramanmaraş: Göksun, Hacimusa Village, 910 m, on *Astragalus odoratus*, 16.09.2003, ŞK 3130.

**17. E. cichoracearum** (DC.) Mérat var. *cichoracearum*

**B6** Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Achillea millefolium*, 16.09.2003, ŞK 3236. **B6** Kahramanmaraş: 25 km from Kahramanmaraş to Pazarlık, 580 m, on *Carduus pycnocephalus*, 05.08.2003, ŞK 2700. **C6** Kahramanmaraş: Üngüt Village, 650 m, on *Chondrilla juncea*, 18.09.2003, ŞK 3350. **C6** Kahramanmaraş: Andırın, Meyremçil beli, Kayranlı Da., 2000-2200 m, on *Cicerbita mulgedioides*, 20.08.2004, ZB 3795. **B6** Kahramanmaraş: Göksun, 1-2 km west of Keklikoluk Village, 1600 m, on *Cichorium intybus*, 18.08.2004, ZB 3657. **B6** Kahramanmaraş: Erçene Village, 1080 m, on *Circium arvense*, 15.09.2003, ŞK 3113. **B6** Kahramanmaraş: Göksun, Mehmetbey Village, stream side, 920 m, on *Circium arvense*, 16.09.2003, ŞK 3260. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Crepis*, 12.06.2001, ZB 3045, BY. **B6** Kahramanmaraş: 15 km from Elbistan to Ekinözü, 1800 m, on *Helichrysum plicatum*, 10.09.2002, ŞK 1694. **C6** Kahramanmaraş:

Andırın, Meyremçil beli, 1600 m, on *Inula montbretiana*, 20.08.2004, ZB 3780, BY. **B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Lactuca saligna*, 16.09.2003, ŞK 3270. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Picris*, 21.08.2004, ZB 3856, BY. **B6** Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Senecio*, 16.09.2003, ŞK 3243. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Solidago virgaurea*, 08.08.2001, ZB 3203. **B6** Kahramanmaraş: 26 km from Göksun to Andırın, 2100 m, on *Sonchus asper*, 12.09.2002, ŞK 1823. **B6** Kahramanmaraş: Erçene Village, 1080 m, on *Sonchus asper*, 15.09.2003, ŞK 3120. **B6** Kahramanmaraş: Göksun, Mehmetbey Village, 1300 m, on *Xeranthemum annuum*, 18.08.2004, ZB 3674.

**18. E. convolvuli** DC. var. *convolvuli*

**B6** Kahramanmaraş: Elbistan, Türkveren Village, 1150 m, on *Convolvulus arvensis*, 10.09.2002, ŞK 1674. **C6** Kahramanmaraş: 20 km from Kahramanmaraş to Gaziantep, Karacasu Village, 650 m, on *Convolvulus arvensis*, 13.09.2002, ŞK 1900. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Convolvulus arvensis*, 12.06.2001, ZB 3046. **B6** Kahramanmaraş: 5 km from Elbistan to Afşin, 1100 m, on *Convolvulus galaticus*, 11.09.2002, ŞK 1705. **B6** Kahramanmaraş: Erçene Village, 1080 m, on *Convolvulus galaticus*, 15.09.2003, ŞK 3117. **B6** Kahramanmaraş: Elbistan, Erçene Village, 1080 m, on *Convolvulus lanatus*, 15.09.2003, ŞK 3111. **B6** Kahramanmaraş: Elbistan, Karaelbistan Village, 1120 m, on *Convolvulus scammonia*, 15.09.2003, ŞK 3086.

**19. E. cruciferarum** Opiz ex L.Junell

**C6** Kahramanmaraş: Between Narlı and Çiğli, 650 m, on *Alyssum minus*, 22.08.2004, ZB 3874. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Alyssum szovitsianum*, 12.06.2001, ZB 3050. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Alyssum trichocarpum*, 12.06.2001, ZB 3049. **B6** Kahramanmaraş: Elbistan, Darıca Village, 1100 m, on *Diploaxis*, 14.09.2003, ŞK 3058. **C6** Kahramanmaraş: 32 km from Kahramanmaraş to Andırın, 500 m, on *Lepidium sativum*, 13.06.2001, ZB 3119. **C6** Kahramanmaraş: Andırın, 2-3 km from

Çokak to Çiğşar, 680 m, on *Papaver*, 20.08.2004, ZB 3826, BY. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Peltaria angustifolia*, 13.06.2001, ZB 3052. **C6** Kahramanmaraş: 20 km from Pazarlık to Gölbaşı, 900 m, on *Sinapsis alba*, 14.09.2002, ŞK 1935. **C6** Kahramanmaraş: Üngüt Village, 650 m, on *Sinapsis arvensis*, 18.09.2003, ŞK 3341. **C6** Kahramanmaraş: 5 km from Kahramanmaraş to Türkoğlu, 540 m, on *Sinapsis arvensis*, 18.09.2003, ŞK 3381.

**20. E. depressa** (Wallr.) Schtdl.

**B6** Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Arctium minus* subsp. *minus*, 16.09.2003, ŞK 3234. **C6** Kahramanmaraş: Andırın, Çokak Village, 1200 m, on *Arctium minus* subsp. *minus*, 12.09.2002, ŞK 1846. **C6** Kahramanmaraş: Andırın, Çokak Village, 1150 m, on *Xanthium strumarium*, 12.09.2002, ŞK 1842.

**21. E. galeopsidis** DC.

**B6** Kahramanmaraş: Göksun, Yazıköy Village, 670 m, on *Marrubium vulgare*, 11.09.2002, ŞK 1755. **B6** Kahramanmaraş: Göksun, Mehmetbey, edge of Törbizek Stream, 1300 m, on *Stachys setifera*, 18.08.2004, ZB 3683.

**22. E. galii** var. *riedliana* (Speer) U.Braun

**B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Galium*, 08.08.2001, ZB 3192, BY.

**23. E. heraclei** DC.

**B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Eryngium kotschyi*, 08.08.2001, ZB 3190. **B6** Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Falcaria vulgaris*, 18.08.2004, ZB 3644. **B6** Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Heracleum pastinacifolium*, 16.09.2003, ŞK 3243. **C6** Kahramanmaraş: 8-10 km from Andırın to Kadirli, 610 m, on *Scandix*, 21.08.2004, ŞK 3853. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Scandix pecten-veneris*, 20.08.2004, ZB 3784, BY. **C6** Kahramanmaraş: Between Kahramanmaraş and Göksun, 700 m, on *Turgenia latifolia*, 13.06.2001, ZB 3095. **C6** Kahramanmaraş:

Ahır Mountain, south slope, 1000 m, on *\*\*Zosima*, 13.06.2001, ZB 3058.

**24. E. lycopsidis** R.Y.Zheng & G.Q.Chen  
**B6** Kahramanmaraş: 5 km from Elbistan to Afşin, 1100 m, on *\*\*Alkanna*, 11.09.2002, ŞK 1708. **B6** Kahramanmaraş: Afşin, Esabikeyf, 1400 m, on *\*\*Alkanna*, 11.09.2002, ŞK 1725.

**25. E. pisi** var. *cruchetiana* (S.Blumer) U.Braun

**B6** Kahramanmaraş: Göksun, Taşoluk Village, 1450 m, on *Ononis spinosa*, 12.09.2002, ŞK 1787. **B6** Kahramanmaraş: Göksun, Soğukpınar, 1800 m, on *Ononis spino*, 28.09.2004, ŞK 3757.

**26. E. pisi** DC. var. *pisi*

**B6** Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Astragalus odoratus* 16.09.2003, ŞK 3239a. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Astragalus odoratus*, 20.08.2004, ZB 3772. **B6** Kahramanmaraş: 35 km from Elbistan to Malatya, 1530 m, on *Astragalus oleifolius*, 10.09.2002, ŞK 1662. **B6** Kahramanmaraş: 54 km from Elbistan to Malatya, 1600 m, on *Medicago falcate*, 10.09.2002, ŞK 1639. **B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Medicago falcate*, 16.09.2003, ŞK 3284. **C6** Kahramanmaraş: Andırın, 5-7 km from Çokak to Geben, 1360-1420 m, on *Medicago falcate*, 20.08.2004, ZB 3821. **B6** Kahramanmaraş: Göksun, Yazıköy Village, 1250 m, on *Medicago x varia*, 11.09.2002, ŞK 1751. **B6** Kahramanmaraş: Between Elbistan and Malatya, Darıca Village, 1100 m, on *Medicago elegans*, 14.09.2003, ŞK 3036. **B6** Kahramanmaraş: Elbistan, around Karaelbistan Village, 1120 m, on *Sophora alopecuriodes*, 15.09.2003, ŞK 3097. **B6** Kahramanmaraş: Göksun, Acielma Village, 1800 m, on *Trifolium ochroleucum*, 23.07.2004, ZB 3628, BY. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Vicia cracca*, 07.10.2000, ZB 3197. **B6** Kahramanmaraş: 4 km from Göksun to Andırın, 1450 m, on *Vicia cracca*, 12.09.2002, ŞK 1801.

**27. E. polygona** DC.

**B6** Kahramanmaraş: 3 km from Elbistan to Afşin, 1200 m, on *Polygonum aviculare*, 10.09.2002, ŞK 1721. **C6** Kahramanmaraş: 25 km from Kahramanmaraş to Türkoğlu,

830 m, on *Polygonum bistorta*, 13.09.2002, ŞK 1902. **B6** Kahramanmaraş: Göksun, Kömürler Village, 980 m, on *Polygonum lapathifolium*, 16.09.2003, ŞK 3187. **C6** Kahramanmaraş: Around airport, 850 m, on *Polygonum lapathifolium*, 13.09.2002, ŞK 1893. **B6** Kahramanmaraş: Elbistan, 1150 m, on *Polygonum pulchellum*, 10.09.2002, ŞK 1682. **B6** Kahramanmaraş: 5 km from Elbistan to Ekinözü, 1100 m, on *Polygonum pulchellum*, 15.09.2003, ŞK 3081. **B 6** Kahramanmaraş: Göksun, Hacimusa Village, 910 m, on *Rumex angustifolius*, 16.09.2003, ŞK 3156. **B6** Kahramanmaraş: Göksun, Ahmetcik Village, 1300 m, on *Rumex crispus*, 08.08.2001, ZB 3188. **B6** Kahramanmaraş: 3 km from Elbistan to Malatya, 1100 m, on *Rumex obtusifolius* subsp. *subalpinus*, 02.08.2003, ŞK 2592. **B6** Kahramanmaraş: Göksun, Değirmendere, Çatal hill, 2000 m, on *Rumex patientia*, 12.09.2002, ŞK 1810. **B6** Kahramanmaraş: 2 km from Göksun to Taşoluk, 1120 m, on *Rumex patientia* 03.08.2003, ŞK 2670.

**28. E. sordida** L.Junell

**B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Plantago major*, 07.10.2000, ZB 2984.

**\*29. E. thesii** L.Junell

**B6** Kahramanmaraş: Göksun, Ahmetçik Village, 1300 m, on *Thesium arvense*, 08.08.2001, ZB 3175, BY.

**30. E. urticae** (Wallr.) S.Blumer

**B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Urtica dioica*, 16.09.2003, ŞK 3295.

**\*31. E. valerianae** (Jac.) S.Blumer

**B6** Kahramanmaraş: Göksun, Doğankonak, Binboga Mountain, 2200-2400 m, on *Valeriana dioscoridis*, 19.08.2004, ZB 3724.

**10. 32. Leveillula chrozophorae** U.Braun

**C6** Kahramanmaraş: 20 km from Kahramanmaraş to Gaziantep, Karacasu Village, 650 m, on *Chrozophora tinctoria*, 13.09.2002, ŞK 1901; **C6** Kahramanmaraş: Between Suçatı and Döngel, 900 m, on *Chrozophora tinctoria*, 07.10.2000, ZB 3005.

**33. L. duriaei** (Lév.) U.Braun

**B6** Kahramanmaraş: Afşin, Kepez Village, 2200 m, on *Phlomis pungens*, 11.09.2002, ŞK 1740. **B6** Kahramanmaraş: Göksun, Ziyaret Mountain, 2000 m, on *Phlomis pungens*, 11.09.2002, ŞK 1768. **C6** Kahramanmaraş: Andırın, Geben Village, 1250 m, on *Phlomis pungens*, 12.09.2002, ŞK 1837.

**34. L. taurica** (Lév.) G.Arnaud

**C6** Kahramanmaraş: Kahramanmaraş, Binevler, 600 m, on *Alcea apterocarpa*, 05.08.2003, ŞK 2709. **B6** Kahramanmaraş: 20 km from Pazarcık to Gölbaşı, 710 m, on *Alcea calvertii*, 14.09.2002, ŞK 1948. **B6** Kahramanmaraş: 5 km from Elbistan to Afşin, 1100 m, on *Alcea excubita*, 11.09.2002, ŞK 1702; **C6** Kahramanmaraş: 40 km from Andırın to Kahramanmaraş, 1350 m, on *Alcea excubita*, 13.09.2002, ŞK 1882. **C6** Kahramanmaraş: 5 km south of Süleymanlı, 900 m, on *Althaea*, 07.10.2000, ZB 3022, BY. **B6** Kahramanmaraş: Afşin, Esen Village, 1200 m, on *Andrachne telephioides*, 07.10.2000, ZB 2954; **C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Andrachne telephioides*, 21.08.2004, ZB 3852, BY. **B6** Kahramanmaraş: Göksun, Taşoluk Village, Çatal Hill, 1450 m, on *Artemisia*, 12.09.2002, ŞK 1796. **B6** Kahramanmaraş: Afşin, Esen Village, 1200 m, on *Artemisia*, 07.10.2000, ZB 2964. **B6** Kahramanmaraş: 54 km from Elbistan to Malatya, 1600 m, on *Astragalus lagurus*, 10.09.2002, ŞK 1646. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Asyneuma*, 20.08.2004, ZB 3747. **C6** Kahramanmaraş: 10 km from Andırın to Kadirli, 800 m, on *Asyneuma ekimianum*, 30.10.2004, ŞK 3764. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Asyneuma rigidum*, 08.08.2001, ZB 3194. **C6** Kahramanmaraş: 20 km from Türkoğlu to Pazarcık, 800 m, on *Capparis ovata*, 13.09.2002, ŞK 1908. **C6** Kahramanmaraş: 5 km from Kahramanmaraş to Türkoğlu, 540 m, on *Carlina involucrate*, 18.09.2003, ŞK 3394. **B6** Kahramanmaraş: 20 km from Pazarcık to Gölbaşı, 710 m, on *Carthamus lanatus*, 14.09.2002, ŞK 1945. **B6** Kahramanmaraş: Göksun, Taşoluk Village, Çatal Hill, 1450 m, on *Centaurea aggregate*, 12.09.2002, ŞK 1795. **B6** Kahramanmaraş: 5 km from Elbistan to Afşin, 1100 m, on *Centaurea solstitialis*, 11.09.2002, ŞK 1710;



**C6** Kahramanmaraş: Pazarcık, Karacasu Village, 570 m, on *Centaurea solstitialis*, 05.08.2003, ŞK 2735. **B6** Kahramanmaraş: Afşin, Esen Village, 1200 m, on *Centaurea virgata*, 07.10.2000, ZB 2963. **B6** Kahramanmaraş: Afşin, Esabıkeyf, 1400 m, on *Cerinthe minor* 11.09.2002, ŞK 1731. **B6** Kahramanmaraş: Afşin, Esen Village, 1200 m, on *Chondrilla juncea*, 07.10.2000, ZB 2956. **B6** Kahramanmaraş: 5 km from Elbistan to Ekinözü, 1100 m, on *Chondrilla juncea* 15.09.2003, ŞK 3071. **B6** Kahramanmaraş: 3 km from Afşin to Elbistan, 1200 m, on *Circium arvense*, 11.09.2002, ŞK 1719. **C6** Kahramanmaraş: 25 km from Pazarcık to Gölbaşı, 720 m, on *Coronilla varia*, 14.09.2002, ŞK 1955. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Cousinia foliosa*, 08.08.2001, ZB 3191. **B6** Kahramanmaraş: Göksun, Doğankonak, Binboğa Mountain, 2000-2400 m, on *Ebenus*, 19.08.2004, ZB 3726. **B6** Kahramanmaraş: Afşin, Esen Village, 1200 m, on *Echinophora chrysantha*, 07.10.2000, ZB 2959. **B6** Kahramanmaraş: 54 km from Elbistan to Malatya, 1600 m, on *Eryngium billardieri*, 10.09.2002, ŞK 1649. **B6** Kahramanmaraş: 29 km from Göksun to Elbistan, 1200-1300 m, on *Eryngium campestre*, 07.10.2000, ZB 2966. **C6** Kahramanmaraş: 20 km from Kahramanmaraş to Pazarcık, 1200 m, on *Eryngium campestre*, 14.09.2002, ŞK 1940. **C6** Kahramanmaraş: Narlı, Çiğli Village, 650 m, on *Eryngium campestre*, 22.08.2004, ZB 3878. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Geranium cinereum*, 08.08.2001, ZB 3193. **B6** Kahramanmaraş: 35 km from Elbistan to Malatya, 1530 m, on *Glaucium corniculatum*, 10.09.2002, ŞK 1661. **B6** Kahramanmaraş: Elbistan, Pınarbaşı, 1150 m, on *Glaucium flavum*, 10.09.2002, ŞK 1684. **B6** Kahramanmaraş: Afşin, Tekne Mountain, 1600 m, on *Glaucium grandiflorum*, 11.09.2002, ŞK 1736. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Gundelia tournefortii*, 08.08.2001, ZB 3189, BY. **B6** Kahramanmaraş: Göksun, Doğankonak, Binboğa Mountain, 2000-2400 m, on *Haplophyllum*, 19.08.2004, ZB 3708. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Helichrysum pallasii*, 20.08.2004, ZB 3739, BY. **B6** Kahramanmaraş: Göksun, around tunnel, 1450-1550 m, on *Inula*, 22.07.2004, ZB 3558, BY. **B6** Kahramanmaraş: 35 km from

Elbistan to Malatya, 1530 m, on *Isatis*, 10.09.2002, ŞK 1655. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Lactuca saligna*, 21.08.2004, ZB 3854, BY. **C6** Kahramanmaraş: 20 km from Kahramanmaraş to Gaziantep, Karacasu Village, 650 m, on *Lactuca scariola*, 13.09.2002, ŞK 1904. **C6** Kahramanmaraş: Between Kahramanmaraş and Türkoğlu, 540 m, on *Lactuca serriola*, 18.09.2003, ŞK 3392. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Linaria genistifolia*, 21.08.2004, ZB 3868. **B6** Kahramanmaraş: 3 km from Elbistan to Afşin, 1200 m, on *Linaria simplex*, 11.09.2002, ŞK 1718. **B6** Kahramanmaraş: Elbistan, Darica Village, 1100 m, on *Malva neglecta* 14.09.2003, ŞK 3062. **B6** Kahramanmaraş: Elbistan, 1150 m, on *Marrubium astracanicum*, 10.09.2002, ŞK 1679. **B6** Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Marrubium parviflorum* subsp. *parviflorum*, 18.08.2004, ZB 3645. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Medicago*  $\times$  *varia*, 07.10.2000, ZB 3000, BY. **B6** Kahramanmaraş: Elbistan, Pınarbaşı, 1150 m, on *Medicago*  $\times$  *varia*, 10.09.2002, ŞK 1686. **B6** Kahramanmaraş: Elbistan, Darica Village, 1100 m, on *Medicago falcate*, 14.09.2003, ŞK 3052. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Nepeta nuda*, 08.08.2001, ZB 3201. **B6** Kahramanmaraş: Afşin, Esen Village, 1200 m, on *Onobrychis galegifolia*, 07.10.2000, ZB 2965. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Onobrychis galegifolia*, 21.08.2004, ZB 3851, BY. **C6** Kahramanmaraş: 40 km from Andırın to Kahramanmaraş, 1350 m, on *Onobrychis galegifolia*, 13.09.2002, ŞK 1885. **B6** Kahramanmaraş: Afşin, Kepez Village, 2200 m, on *Ononis spinosa*, 11.09.2002, ŞK 1742. **B6** Kahramanmaraş: 29 km from Göksun to Elbistan, 1200-1300 m, on *Ononis spinosa*, 07.10.2000, ZB 2972. **B6** Kahramanmaraş: 25 km from Elbistan to Malatya, 1600 m, on *Picris*, 10.09.2002, ŞK 1635. **C6** Kahramanmaraş: Andırın, Meyremçil beli, Kayranlı Mountain, 2000-2200 m, on *Phlomis physocalyx*, 20.08.2004, ZB 3796. **C6** Kahramanmaraş: 40 km from Andırın to Kahramanmaraş, 1350 m, on *Plumbago europaea*, 13.09.2002, ŞK 1881. **B6** Kahramanmaraş: 54 km from Elbistan to Malatya, 1600 m, on *Scabiosa argentea*, 10.09.2002, ŞK 1644.

**B6** Kahramanmaraş: Göksun, Ziyaret Mountain, 2000 m, on *Scabiosa hispidula*, 11.09.2002, ŞK 1762. **B6** Kahramanmaraş: Göksun, Taşoluk Village, 1450 m, on *Scabiosa micrantha*, 12.09.2002, ŞK 1799. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Senecio*, 07.10.2000, ZB 2997. **B6** Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Teucrium chamaedrys*, 18.08.2004, ZB 3652. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Teucrium orientale* var. *glabrescens*, 20.08.2004, ZB 3763. **B6** Kahramanmaraş: Göksun, Taşoluk Village, Çatal Hill, 1450 m, on *Teucrium polium*, 12.09.2002, ŞK 1800. **B6** Kahramanmaraş: Göksun, Ziyaret Mountain, 2000 m, on *Vicia cracca*, 11.09.2002, ŞK 1767. **C6** Kahramanmaraş: Andırın, Meryençil beli, 1600 m, on *Vicia cracca*, 21.07.2004, ZB 3460.

### 35. *L. verbasci* (Jac.) Golovin

**B6** Kahramanmaraş: Afşin, Kepez Village, 2200 m, on *Verbascum*, 11.09.2002, ŞK 1749. **B6** Kahramanmaraş: 5 km from Elbistan to Ekinözü, 1100 m, on *Verbascum* 15.09.2003, ŞK 3080.

### \*11. 36. *Microsphaera abbreviata* Peck

**C6** Kahramanmaraş: Türkoğlu, Nurdağ Pass, 1000 m, on *Quercus*, 08.10.2002, ZB 3027.

### 37. *M. alphitoides* Griffon & Maubl. var. *alphitoides*

**B6** Kahramanmaraş: 29 km from Göksun to Elbistan, 1200-1300 m, on *Quercus*, 07.10.2000, ZB 2977.

### 38. *M. astragali* (DC.) Trevis.

**B6** Kahramanmaraş: 15 km from Elbistan to Ekinözü, 1800 m, on *Astragalus*, 10.09.2002, ŞK 1691. **C6** Kahramanmaraş: Andırın, around Azgırtan Castle, 1000 m, on *Astragalus* 21.07.2004, ZB 3483. **B6** Kahramanmaraş: Elbistan, Darica Village, 1100 m, on *Astragalus ovatus*, 14.09.2003, ŞK 3053.

### \*39. *M. atraphaxidis* Schmied.

**B6** Kahramanmaraş: Göksun, Dogankonak, Binboga Mountain, 2000-2400 m, on *Atraphaxis billardieri*, 19.08.2004, ZB 3727.

12. 40. *Phyllactinia guttata* (Wallr.) Lév.

C6 Kahramanmaraş: 10 km from Andırın to Kadirli, 800 m, on *Fagus orientalis*, 30.10.2004, ŞK 3769.

13. 41. *Podospaera tridactyla* (Walr.) de Bary var. *tridactyla*

B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Prunus*, 20.08.2004, ZB 3768.

14. 42. *Sphaerotheca aphanis* (Wallr.) U.Braun var. *aphanis*

B6 Kahramanmaraş: 10 km from Göksun to Kanlıkavak, 1300 m, on *Agrimonia eupatoria*, 07.10.2000, ZB 2985. C6 Kahramanmaraş: Between Suçatı and Döngel, 900 m, on *Agrimonia eupatoria*, 07.10.2000 ZB 3015.

43. *S. dipsacearum* (Tul. & Tul.) L.Junell

C6 Kahramanmaraş: Ahır Mountain, south slope, 1000 m, on *Cephalaria setosa*, 13.06.2001, ZB 3057. C6 Kahramanmaraş: Andırın, Meyremçil beli, Kayranlı Mountain, 2000-2200 m, on *Cephalaria speciosa*, 20.08.2004, ZB 3801. C6 Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Cephalaria syriaca*, 20.08.2004, ZB 3785. B6 Kahramanmaraş: 30 km from Göksun to Kahramanmaraş, Avratoluğu place, 1300 m, on *Pterocephalus plumosus*, 22.07.2004, ZB 3550. B6 Kahramanmaraş: Göksun, Kömürler Village, 980 m, on *Dipsacus laciniatus*, 16.09.2003, ŞK 3178. C6 Kahramanmaraş: 40 km from Andırın to Kahramanmaraş, 1350 m, on *Dipsacus laciniatus*, 13.09.2002, ŞK 1877.

44. *S. fusca* (Fr.) S.Blumer

B6 Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Taraxacum*, 16.09.2003, ŞK 3257. B6 Kahramanmaraş: Elbistan, Kara Elbistan Village, 1120 m, on *Xanthium strumarium*, 15.09.2003, ŞK 3092. C6 Kahramanmaraş: 5 km from Kahramanmaraş to Türkoğlu, 820 m, on *Xanthium strumarium*, 13.09.2002, ŞK 1910.

Phyllachorales

\*15. 45. *Phyllachora graminis* (Pers.) Fuckel var. *graminis*

C6 Kahramanmaraş: 10 km from Andırın to Kadirli, 670 m, on *Cynodon dactylon*, 04.08.2003, ŞK 2684.

16. 46. *Polystigma rubrum* (Pers.) DC. subsp. *rubrum*

B6 Kahramanmaraş: Göksun, Ahmetcik Village, 1300 m, on *Amygdalus*, 08.08.2002, ZB 3186. B6 Kahramanmaraş: Elbistan, Pınarbaşı, 1150 m, on *Malus sylvestris*, 10.09.2002, ŞK 1683. B6 Kahramanmaraş: Göksun, Yazıköy Village, 730 m, on *Prunus*, ŞK 1756. B6 Kahramanmaraş: Göksun, Taşoluk Village, Çatal Hill, 1450 m, on *Prunus*, 12.09.2002, ŞK 1804. C6 Kahramanmaraş: Suçatı-Döngel, 900 m, on *Prunus*, 07.10.2000, ZB 3006.

Division: BASIDIOMYCOTA

Uredinales

17. 46. *Coleosporium tussilaginis* (Pers.) Kleb.

C6 Kahramanmaraş: Andırın, 2-3 km from Çokak to Çiğşar, 1120 m, on *Campanula*, 20.08.2004, ZB 3838. C6 Kahramanmaraş: Ahır Mountain, south slope, 1000 m, on *Michauxia campanuloides*, 13.06.2001, ZB 3064. B6 Kahramanmaraş: Göksun, Acielma Village 1800 m, on *Michauxia tchihatchewii*, 23.07.2004, ZB 3634, BY. B6 Kahramanmaraş: Göksun, Keklikoluk Village, 1600 m, on *Michauxia tchihatchewii*, 18.08.2004, ZB 3672, BY. C6 Kahramanmaraş: Göksun, around tunnel, 1450-1550 m, on *Michauxia tchihatchewii*, 22.07.2004, ZB 3562. C6 Kahramanmaraş: Andırın, 2-3 km from Çokak to Çiğşar, 1120 m, on *Tussilago farfara*, 20.08.2004, ZB 3829, BY.

18. 48. *Gymnosporangium clavariiforme* (Jacq.) DC.

B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Amelanchier rotundifolia*, 20.08.2004, ZB 3745. B6 Kahramanmaraş: 32 km from Kahramanmaraş to Andırın, 500 m, on *Crataegus aronia*, 13.06.2001, ZB 3111. B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Crataegus orientalis*, 20.08.2004, ZB 3748. B6 Kahramanmaraş: Göksun, Mehmetbey Village, Törbizek stream side, 1300 m, on *Malus sylvestris*, 18.08.2004, ZB 3703. C6 Kahramanmaraş: Andırın, 2-3 km from Çokak to Çiğşar, 1300 m, on *Malus sylvestris*, 20.08.2004, ZB 3841. B6 Kahramanmaraş: Göksun, Taşoluk Village, Çataltepe 1450 m, on *Pyrus syriaca*, 12.09.2002, ŞK 1790.

49. *G. confusum* Plowr.

B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Cotaneaster*, 23.07.2004, ZB 3607.

50. *G. fuscum* Oerst.

B6 Kahramanmaraş: Göksun, Hacımusa Village, 910 m, on *Pyrus communis*, 16.09.2003, ŞK 3150. B6 Kahramanmaraş: Göksun, Ortatepe Village, 880 m, on *Pyrus communis* var. *sativa*, 16.09.2003, ŞK 3207.

19. 51. *Melampsora allii-populina* Kleb.

B6 Kahramanmaraş: 5 km from Elbistan to Afşin, 1100 m, on *Populus alba*, 11.09.2002, ŞK 1709; B6 Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Populus alba*, 16.09.2003, ŞK 3263. B6 Kahramanmaraş: Göksun, Mehmetbey Village, around of Törbizek Stream, 1300 m, on *Populus nigra*, 18.08.2004, ZB 3682. C6 Kahramanmaraş: 40 km from Andırın to Kahramanmaraş, 1350 m, on *Populus nigra*, 13.09.2002, ŞK 1879.

52. *M. euphorbiae* (C.Schub.) Castagne

C6 Kahramanmaraş: Andırın, Geben Village, 1250 m, on *Euphorbia altissima*, 12.09.2002, ŞK 1832. B6 Kahramanmaraş: Afşin, Tekne Mountain, 1600 m, on *Euphorbia falcata*, 11.09.2002, ŞK 1737. C6 Kahramanmaraş: 45 km from Kahramanmaraş to Andırın, 900 m, on *Euphorbia helioscopia*, 14.06.2001, ZB 3125. B6 Kahramanmaraş: Afşin, Kepez Village, 2200 m, on *Euphorbia virgata*, 11.09.2002, ŞK 1743. B6 Kahramanmaraş: Göksun, Değirmendere Village, Çatal Hill, 2000-2400 m, on *Euphorbia virgata*, 12.09.2002, ŞK 1814.

53. *M. salicis-albae* Kleb.

B6 Kahramanmaraş: Göksun, Koccağız Village, 1800 m, on *Salix alba*, 23.07.2004, ZB 3639, BY. C6 Kahramanmaraş: Between Suçatı and Döngel, 900 m, on *Salix alba*, 07.10.2000, ZB 3010. C6 Kahramanmaraş: Andırın, Çokak Village, 1200 m, on *Salix babylonica*, 12.09.2002, ŞK 1848. B6 Kahramanmaraş: Göksun, Hacımusa Village, 910 m, on *Salix cinerea*, 16.09.2003, ŞK 3157. C6 Kahramanmaraş: 49 km from Kahramanmaraş to Andırın, 1300 m, on *Salix caprea*, 13.06.2001, ZB 3129.

20. 54. *Phragmidium fragariae*  
G.Winter

C6 Kahramanmaraş: Between Andırın and Çokak, Çınarlıgeçit, 1000 m, on *Fragaria vesca*, 14.06.2001, ZB 3142. C6 Kahramanmaraş: Andırın, Meyremçil beli, Kayranlı Mountain, 2000-2200 m, on *Fragaria vesca* 20.08.2004, ZB 3808.

55. *Ph. mucronatum* (Pers.) Schldt.

B6 Kahramanmaraş: Göksun, Ahmetçik Village, 1300 m, on *Rosa canina*, 08.08.2001, ZB 3179, BY. C6 Kahramanmaraş: Andırın, around Azgırtın Castle, 1000 m, on *Rosa pimpinellifolia*, 21.07.2004, ZB 3490; C6 Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Rosa pimpinellifolia*, 20.08.2004, ZB 3789. C6 Kahramanmaraş: 2 km from Göksun to Andırın, 1120 m, on *Rosa horrida*, 03.08.2003, ŞK 2649

56. *Ph. potentillae* (Pers.) P.Karst.

B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Potentilla erecta*, 20.08.2004, ZB 3766; C6 Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Potentilla erecta*, 20.08.2004, ZB 3773.

57. *Ph. sanguisorbae* (DC.) J.Schröt.

B6 Kahramanmaraş: Göksun, Tahirbey Village, 1400 m, on *Sanguisorba minor*, 20.07.2004, ZB 3430. C6 Kahramanmaraş: Ahır Mountain, south slope, 1000 m, on *Sanguisorba minor*, 13.06.2001, ZB 3063.

58. *Ph. tuberculatum* Jul.Müll.

B6 Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Rosa*, 18.08.2004, ZB 3655. C6 Kahramanmaraş: Andırın, Çığsar Village, 1200 m, on *Rosa*, 12.09.2002, ŞK 1850.

59. *Ph. violaceum* (Schultz) G.Winter

C6 Kahramanmaraş: 55 km from Andırın to Kahramanmaraş, 2000 m, on *Rubus canescens*, 13.09.2002, ŞK 1865; C6 Kahramanmaraş: Between Suçatı and Döngel, 900 m, on *Rubus canescens*, 07.10.2000, ZB 3004. C6 Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Rubus discolor*, 17.09.2003, ŞK 3329. C6 Kahramanmaraş: Andırın, Çokak Village, 1150 m, on *Rubus sanctus*, 12.09.2002, ŞK 1841.

21. 60. *Pileolaria terebinthi* (DC.)  
Castagne

C6 Kahramanmaraş: 5 km south of Süleymanlı, 900 m, on *Pistacia*, 07.10.2000, ZB 3020.

22. 61. *Puccinia acetosae* (Schumach.)  
Körn.

B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Rumex acetocella*, 23.07.2004, ZB 3592.

62. *P. achillaeae* Cooke

B6 Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Achillea gonioccephala*, 18.08.2004, ZB 3641. B6 Kahramanmaraş: 3 km from Elbistan to Malatya, 1100 m, on *Achillea wilhelmsii*, 02.08.2003, ŞK 2585. B6 Kahramanmaraş: 5 km from Elbistan to Ekinözü, 1100 m, on *Achillea wilhelmsii*, 15.09.2003, ŞK 3065.

\* 63. *P. aethionematis* Koshk.

B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800, on *Aethionema iberideum*, 23.07.2004, ZB 3620, BY.

64. *P. allii* Castagne

B6 Kahramanmaraş: 15 km from Elbistan to Ekinözü, 1800 m, on *Allium sativum*, 10.09.2002, ŞK 1696.

65. *P. annularis* (F.Strauss) G.Winter

B6 Kahramanmaraş: Göksun, 2 km from Salyan to Ahmetcik Village, 1300m, on *Teucrium chamaedrys*, 15.06.2001, ZB 3169. B6 Kahramanmaraş: Afşin, Kepez Village, 2200 m, on *Teucrium polium*, 11.09.2002, ŞK 1748. C6 Kahramanmaraş: 8-10 km from Andırın to Kadirli, 610 m, on *Teucrium polium*, 21.08.2004, ZB 3870, BY.

66. *P. apii* Desm.

C6 Kahramanmaraş: Andırın, Between Çokak and Çığsar, Çampınarı, 1300 m, on *Apium graveolens*, 14.06.2001, ZB 3146.

67. *P. arenariae* (Schumach.) J.Schröt.

B6 Kahramanmaraş: Göksun, Between Keklikoluk and Dogankonak, 1650 m, on *Silene rhynhocarpa*, 20.07.2004, ZB 3400.

68. *P. balsamitae* (F.Strauss) Rabenh.

B6 Kahramanmaraş: Göksun, Koccağız Village, 1800 m, on *Tanacetum balsamitoides*, 23.07.2004, ZB 3630. B6

Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Tanacetum balsamitoides*, 20.08.2004, ZB 3758. C6 Kahramanmaraş: Andırın, 2-3 km from Çokak to Çığsar, 1300 m, on *Tanacetum cilicium*, 20.08.2004, ZB 3823.

69. *P. behenis* G.H.Ott

C6 Kahramanmaraş: Andırın, Geben, Meyremçil beli, 1600 m, on *Silene*, 15.06.2001, ZB 3158.

70. *P. betonicae* (Alb. & Schwein.) DC.

B6 Kahramanmaraş: Göksun, Between Keklikoluk and Doğankonak, 1650 m, on *Stachys*, 20.07.2004, ZB 3391.

71. *P. calcitrapae* DC.

B6 Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Arctium minus* subsp. *minus*, 16.09.2003, ŞK 3233. B6 Kahramanmaraş: Göksun, Mehmetbey Village, edge of Törbizek Brooke, 1300 m, on *Carduus nutans*, 18.08.2004, ZB 3695. C6 Kahramanmaraş: Andırın, around Azgırtın Castle, 1000 m, on *Carduus nutans*, 21.07.2004, ZB 3487. C6 Kahramanmaraş: 45 km from Kahramanmaraş to Andırın, 900 m, on *Carduus pycnocephalus* subsp. *albidus*, 14.06.2001, ZB 3123. C6 Kahramanmaraş: Binevler, 600 m, on *Carlina Biebersteinii* 05.08.2003, ŞK 2712b. B6 Kahramanmaraş: Göksun, Tahirbey Village, 1400 m, on *Carlina foliosa*, 20.07.2004, ZB 3439. B6 Kahramanmaraş: 3 km from Elbistan to Malatya, 1100 m, on *Carlina oligocephala*, 02.08.2003, ŞK 2596. C6 Kahramanmaraş: Üngüt Village, 610 m, on *Carlina oligocephala*, 05.08.2003, ŞK 2723. B6 Kahramanmaraş: 35 km from Kahramanmaraş to Göksun, 700 m, on *Centaurea cheirollopha*, 13.06.2001, ZB 3092. B6 Kahramanmaraş: 3 km from Elbistan to Malatya, 1100 m, on *Centaurea iberica*, 02.08.2003, ŞK 2594. C6 Kahramanmaraş: 4 km from Andırın to Kadirli, 680 m, on *Centaurea iberica*, 04.08.2003, ŞK 2679. B6 Kahramanmaraş: Göksun, Kanlıkavak Village, 1100 m, on *Centaurea solstitialis*, 03.08.2003, ŞK 2634. B6 Kahramanmaraş: Göksun, between Keklikoluk and Doğankonak, 1650 m, on *Centaurea urvillei*, 20.07.2004, ZB 3398. B6 Kahramanmaraş: Göksun, Ortatepe Village, 880 m, on *Cirsium arvense*, 16.09.2003, ŞK 3222. C6 Kahramanmaraş: Andırın, around Azgırtın Castle, 1000 m, on *Cirsium arvense*,

21.07.2004, ZB 3474. **C6** Kahramanmaraş: 49 km from Kahramanmaraş to Andırın 1300 m, on *Cirsium haussknechtii*, 14.06.2001, ZB 3127. **C6** Kahramanmaraş: Göksun, Püren Pass, 1600-1700 m, on *Cirsium lappaceum*, 07.10.2000, ZB 3001. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Echinops pungens*, 13.06.2001, ZB 3056. **B6** Kahramanmaraş: Elbistan, Akçıri Village, 1200 m, on *Echinops ritro*, 7.10.2000, ZB 2951. **C6** Kahramanmaraş: 4 km from Andırın to Kadirli, 680 m, on *Echinops ritro*, 04.08.2003, ŞK 2674. **C6** Kahramanmaraş: 5 km from Kahramanmaraş to Türkoğlu, 540 m, on *Notobasis syriaca*, 18.09.2003, ŞK 3389. **C6** Kahramanmaraş: 10 km from Pazarcık to Gölbaşı, 900 m, on *Picnomon acarna*, 14.09.2002, ŞK 1919. **B6** Kahramanmaraş: Göksun, Doğankonak, Binboga Mountain, 2000-2400 m, on *Taraxacum*, 19.08.2004, ZB 3704.

**72. P. caricina** DC. var. *caricina*

**B6** Kahramanmaraş: Göksun, Hacımusa Village, 910 m, on *Carex*, 16.09.2003, ŞK 3151; **B6** Kahramanmaraş: Göksun, Mehmetbey Village, around Törbizek Stream, 1300 m, on *Carex*, 18.08.2004, ZB 3681.

**73. P. carthami** (Hutzelm.) Corda

**C6** Kahramanmaraş: Üngüt Village, 610 m, on *Carthamus dentatus*, 05.08.2003, ŞK 2720.

**74. P. chondrillina** Bubák

**B6** Kahramanmaraş: Göksun, Püren Pass, 1600-1700 m, on *Chondrilla juncea* var. *juncea*, 22.07.2004, ZB 3570. **C6** Kahramanmaraş: 10 km from Çağlayancerit to Kahramanmaraş, 940 m, on *Chondrilla juncea* var. *juncea*, 22.08.2004, ZB 3880.

**75. P. cnici** G.Martin

**B6** Kahramanmaraş: Göksun, Mehmetbey Village, around Törbizek Stream, 1300 m, on *Cirsium arvense*, 18.08.2004, ZB 3693. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Cirsium arvense*, 20.08.2004, ZB 3777. **B6** Kahramanmaraş: Göksun, Karlık Hill, 1150 m, on *Cirsium haussknechtii*, 03.08.2003, ŞK 2621. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Cirsium lappaceum*, 23.07.2004, ZB 3602. **B6** Kahramanmaraş: Göksun, Mehmetbey Village, 920 m, on *Cirsium vulgare*, 16.09.2003, ŞK 3256.

**76. P. cnici-oleracei** Pers.

**B6** Kahramanmaraş: Göksun, Acielma Village, 1800 m, on *Achillea kotschyi*, 23.07.2004, ZB 3635, BY. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Achillea kotschyi*, 21.07.2004, ZB 3467

**77. P. constricta** (Lagerh.) Bubák

**C6** Kahramanmaraş: 10 km from Andırın to Kahramanmaraş, 900 m, on *Teucrium polium*, 13.06.2001, ZB 3132. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Teucrium orientale*, 23.07.2004, ZB 3603, BY.

**78. P. crepidicola** Syd. & P.Syd.

**B6** Kahramanmaraş: Göksun, Tahirbey Village, 1400 m, on *Crepis*, 20.07.2004, ZB 3440. **C6** Kahramanmaraş: Between Kahramanmaraş and Andırın, Kent Forest, 1300 m, on *Crepis*, 22.07.2004, ZB 3542. **B6** Kahramanmaraş: Göksun, Taşoluk Village, Çatal Hill, 1450 m, on *Crepis foetida*, 12.09.2002, ŞK 1786. **C6** Kahramanmaraş: Between Kahramanmaraş and Andırın, Kent Forest, 1300 m, on *Crepis foetida*, 22.07.2004, ZB 3536.

**79. P. cyani** Pass.

**B6** Kahramanmaraş: Göksun, 2 km from Salyan to Ahmetcik, 1300 m, on *Centaurea cheirolopha*, 15.06.2001, ZB 3163. **C6** Kahramanmaraş: 10 km from Kahramanmaraş to Andırın, 900 m, on *Centaurea cheirolopha*, 13.06.2001, ZB 3128. **B6** Kahramanmaraş: 3 km from Elbistan to Malatya, 1100 m, on *Centaurea iberica*, 02.08.2003, ŞK 2584. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Centaurea iberica*, 20.08.2004, ZB 3774, BY. **C6** Kahramanmaraş: 10 km from Andırın to Kahramanmaraş, 900 m, on *Centaurea lycopifolia*, 13.06.2001, ZB 3131. **C6** Kahramanmaraş: 25 km from Kahramanmaraş to Pazarcık, 580 m, on *Centaurea polyodiifolia*, 05.08.2003, ŞK 2701. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Centaurea urvillei*, 21.08.2004, ZB 3865.

**80. P. cynodontis** Delacr. ex Desm.

**C6** Kahramanmaraş: 20 km from Kahramanmaraş to Pazarcık, 1200 m, on *Cynodon dactylon*, 14.09.2002, ŞK 1931. **C6** Kahramanmaraş: Andırın, Çiğşar Village, 1200 m, on *Cynodon dactylon*, 12.09.2002, ŞK 1854.

**81. P. eryngii** DC.

**B6** Kahramanmaraş: Göksun, Between Keklikoluk and Doğankonak, 1650 m, on *Eryngium*, 20.07.2004, ZB 3425. **C6** Kahramanmaraş: Andırın, Meyremçil beli, Kayranlı Mountain, 2000-2200 m, on *Eryngium*, 20.08.2004, ZB 3707. **B6** Kahramanmaraş: 30 km from Göksun to Kahramanmaraş, 1300 m, on *Eryngium kotschyi*, 22.07.2004, ZB 3546.

**82. P. falcariae** (Pers.) Fucfel

**B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Falcaria*, 23.07.2004, ZB 3583, BY.

**83. P. galii-cruciatae** Duby

**B6** Kahramanmaraş: Göksun, Yağmurlu Village, 1100 m, on *Cruciata taurica*, 11.09.2002, ŞK 1781. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Cruciata taurica*, 21.07.2004, ZB 3447.

**84. P. graminis** Pers. subsp. *graminis*

**B6** Kahramanmaraş: Göksun, Keklikoluk Village, 1600 m, on *Berberis crataegina*, 23.07.2004, ZB 3670. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1700 m, on *Bromus japonicus*, 13.06.2001, ZB 3070. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1700 m, on *Bromus sterilis*, 13.06.2001, ZB 3068. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Dactylis glomerata*, 21.07.2004, ZB 3445. **B6** Kahramanmaraş: Göksun, Taşoluk Village, Çatal Hill, 1450 m, on *Elymus hispidus* subsp. *hispidus*, 12.09.2002, ŞK 1806. **B6** Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Elymus hispidus* subsp. *hispidus*, 18.08.2004, ZB 3661. **C6** Kahramanmaraş: 25 km from Kahramanmaraş to Türkoğlu, 830 m, on *Hordeum bulbosum*, 13.09.2002, ŞK 1906. **B6** Kahramanmaraş: Göksun, Between Keklikoluk and Dogankonak, 1650 m, on *Hordeum bulbosum*, 20.07.2004, ZB 3414. **B6** Kahramanmaraş: Göksun, Ziyaret Mountain, 2000 m, on *Lolium*, 11.09.2002, ŞK 1773. **B6** Kahramanmaraş: Göksun, Between Keklikoluk and Dogankonak, 1650 m, on *Secale cereale* var. *cereale*, 20.07.2004, ZB 3402, BY. **B6** Kahramanmaraş: Göksun, Karlık Hill, 1150 m, on *Triticum dicoccon*, 03.08.2003, ŞK 2620. **C6** Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Triticum dicoccon*, 17.09.2003, ŞK 3322. **B6**

Kahramanmaraş: 10 km from Elbistan to Malatya, 1150 m, on *Triticum turgidum*, 10.09.2002, ŞK 1671. **C6** Kahramanmaraş: Andırın, around Azgırtın Castle, 1000 m, on *Triticum turgidum*, 21.07.2004, ZB 3499. **B6** Kahramanmaraş: Göksun, Hacimusa Village, 910 m, on *Triticum vulgare*, 16.09.2003, ŞK 3136. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Triticum vulgare*, 20.08.2004, ZB 3775.

**85. P. gundeliae** Cooke

**B6** Kahramanmaraş: Afşın, Esen Village, 1200 m, on *Gundelia tournefortii* subsp. *tenuisecta*, 07.10.2000, ZB 2955. **B6** Kahramanmaraş: Göksun, Between Keklikoluk and Dogankonak, 1650 m, on *Gundelia tournefortii* subsp. *tenuisecta*, 20.07.2004, ZB 3421. **C6** Kahramanmaraş: Andırın, Meyremçil beli, 1600 m, on *Gundelia tournefortii* subsp. *tenuisecta*, 21.07.2004, ZB 3441.

**86. P. helianthi** Schwein.

**B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Helianthus annuus*, 07.10.2000, ZB 2988. **C6** Kahramanmaraş: 2 km from Göksun to Andırın, 1100 m, on *Helianthus annuus*, 03.08.2003, ŞK 2659.

**87. P. hieracii** (Röhl.) H.Mart. var. *hieracii*

**B6** Kahramanmaraş: Elbistan, Karaelbistan Village, 1120 m, on *Acroptilon repens*, 15.09.2003, ŞK 3089. **C6** Kahramanmaraş: 8-10 km from Andırın to Kadirli, 610 m, on *Centaurea cheirollopha*, 21.08.2004, ZB 3846. **C6** Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Centaurea lycopifolia*, 17.09.2003, ŞK 3316. **C6** Kahramanmaraş: Andırın, around Azgırtın Castle, 1000 m, on *Centaurea lycopifolia*, 21.07.2004, ZB 3477, BY. **B6** Kahramanmaraş: Göksun, Doğankonak Village, Binboğa Mountain, 2000-2400 m, on *Centaurea mucronifera*, 19.08.2004, ZB 3710, BY. **B6** Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Centaurea solstitialis*, 18.08.2004, ZB 3656. **C6** Kahramanmaraş: 30 km from Kahramanmaraş to Göksun, 600 m, on *Cichorium intybus*, 13.06.2001, ZB 3077. **B6** Kahramanmaraş: Göksun, Doğankonak Village, Binboğa Mountain, 2000-2400 m, on *Hieracium pannosum*, 19.08.2004, ZB 3723, BY. **C6** Kahramanmaraş: Andırın, Meyremçil beli, Kayranlı Mountain, 2000-2200 m, on

*Hieracium pannosum*, 20.08.2004, ZB 3811. **C6** Kahramanmaraş: 2 km from Göksun to Andırın, 1100 m, on *Taraxacum*, 03.08.2003, ŞK 2664. **B6** Kahramanmaraş: Göksun, Hacimusa Village, 910 m, on *Taraxacum*, 16.09.2003, ŞK 3146. **B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Taraxacum assemanii*, 07.10.2000, ZB 2995. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Serratula oligocephala*, 13.06.2001, ZB 3048.

**88. P. hieracii** var. *piloselloidarum* (Probst) Jørst.

**C6** Kahramanmaraş: Andırın, Between Çokak and Çığsar, Çampınarı, 1300 m, on *Pilosella*, 14.06.2001, ZB 3147. **C6** Kahramanmaraş: Andırın, Geben, Meyremçilbeli, 1600 m, on *Pilosella*, 15.06.2001, ZB 3157. **B6** Kahramanmaraş: Göksun between Keklikoluk and Doğankonak, 1650 m, on *Pilosella x auriculoides*, 20.07.2004, ZB 3403.

**89. P. hordei** G.H.Otth

**C6** Kahramanmaraş: 5 km from Andırın to Çokak, 900 m, on *Hordeum*, 14.06.2001, ZB 3138. **C6** Kahramanmaraş: Andırın, Meyremçilbeli, 1600 m, on *Hordeum bulbosum*, 21.07.2004, ZB 3442.

**90. P. jasmmini** DC.

**C6** Kahramanmaraş: 10 km from Çağlayancerit to Kahramanmaraş, 940 m, on *Jasminum fruticans*, 22.08.2004, ZB 3881. **C6** Kahramanmaraş: 8-10 km from Andırın to Kadirli 610 m, on *Jasminum fruticans*, 21.08.2004, ZB 3863.

**91. P. lactucarum** Syd.

**B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Cephalorrhynchus tuberosus*, 20.08.2004, ZB 3756. **C6** Kahramanmaraş: Andırın, Meyremçilbeli, Kayranlı Mountain, 2000-2200 m, on *Lactuca*, 20.08.2004, ZB 3797. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Scariola*, 23.07.2004, ZB 3621.

**92. P. lapsanae** Focke

**B6** Kahramanmaraş: Göksun, Doğankonak, Binboğa Mountain, 2000-2400 m, on *Lapsana communis*, 19.08.2004, ZB 3718, BY.

**93. P. libani** Magnus

**B6** Kahramanmaraş: Göksun, Binboğa Mountain, 1800 m, on *Prangos*, 26.05.2004, B.Yıldız 15541.

**94. P. maculosa** Schwein.

**C6** Kahramanmaraş: Andırın, Meyremçil beli, Kayranlı Mountain, 2000-2200 m, on *Cicerbita*, 20.08.2004, ZB 3799. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1600-1800 m, on *Cicerbita brevirostris*, 23.07.2004, ZB 3582.

**95. P. malvacearum** Bertero ex Mont.

**B6** Kahramanmaraş: Elbistan 1120 m, on *Alcea apterocarpa*, 15.09.2003, ŞK 3098. **B6** Kahramanmaraş: 5 km from Elbistan to Malatya, 1100 m, on *Alcea hohenackeri*, 15.09.2003, ŞK 3066. **B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1100 m, on *Alcea striata*, 03.08.2003, ŞK 2643. **B6** Kahramanmaraş: 5 km from Elbistan to Ekinözü, 1100 m, on *Malva neglecta*, 15.09.2003, ŞK 3074. **C6** Kahramanmaraş: 45 km from Kahramanmaraş to Andırın, 900 m, on *Malva neglecta*, 14.06.2004, ZB 3121.

**96. P. menthae** Pers.

**C6** Kahramanmaraş: Andırın, Kayranlı Mountain, 2000-2200 m, on *Clinopodium vulgare*, 20.08.2004, ZB 3812. **B6** Kahramanmaraş: Göksun, Mehmetbey, around Törbizek Stream, 1300 m, on *Mentha spicata*, 18.08.2004, ZB 3684. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Mentha longifolia*, 20.08.2004, ZB 3752. **B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Origanum vulgare*, 20.08.2004, ZB 3741.

**97. P. nigrescens** Kirchn.

**C6** Kahramanmaraş: 30 km from Kahramanmaraş to Andırın, 1250 m, on *Salvia verticillata*, 12.09.2004, ŞK 1834.

**98. P. pimpinellae** (F.Strauss) Link

**C6** Kahramanmaraş: 30 km from Kahramanmaraş to Göksun, 600 m, on *Pimpinella corymbosa*, 13.06.2001, ZB 3076. **C6** Kahramanmaraş: 30 km from Kahramanmaraş to Andırın, 500 m, on *Pimpinella corymbosa*, 14.06.2001, ZB 3102. **B6** Kahramanmaraş: Göksun, Fındık

Village, Bostandere, 1600-1800 m, on *Pimpinella kotschyana*, 23.07.2004, ZB 3578.

**99. P. pulverulenta** Grev.

**B6** Kahramanmaraş: Göksun, Mehmetbey, around Törbizek Stream, 1300 m, on *Epilobium*, 18.08.2004, ZB 3688.

**100. P. punctata** Link.

**B6** Kahramanmaraş: Göksun, Kömürler Village, 980 m, on *Galium verum*, 16.09.2003, ŞK 3200; **C6** Kahramanmaraş: Andırın, 3-4 km from Çokak to Çiğsar, 1300 m, on *Galium verum*, 22.07.2004 ZB 3508.

**\*101. P. rubiae-tataricae** Syd. & P.Syd.

**B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Rubia tinctoria*, 20.08.2004, ZB 3754 BY.

**102. P. scorzonerae** (Schumach.) Jacky

**C6** Kahramanmaraş: Andırın, Meyremçilbeli, Kayranlı Mountain, 2000-2200 m, on *Scorzonera tomentosa*, 20.08.2004, ZB 3802.

**103. P. serpylli** Lindr.

**B6** Kahramanmaraş: Andırın, Meyremçilbeli, 1600 m, on *Thymus kotschyanus*, 21.07.2004, ZB 3453. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1700 m, on *Thymus kotschyanus*, 13.06.2001, ZB 3073.

**104. P. sorghi** Schwein.

**B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Zea mays*, 16.09.2003, ŞK 3283. **C6** Kahramanmaraş: 4 km from Süleymanlı to Ilica, 1000 m, on *Zea mays*, 07.10.2000, ZB 3024.

**105. P. stipina** Tranzschel

**B6** Kahramanmaraş: Göksun, 2 km from Salyan to Ahmetcik, 1300 m, on *Salvia cryptantha*, 15.06.2001, ZB 3164. **C6** Kahramanmaraş: Andırın, Geben, Meyremçilbeli, 1600 m, on *Salvia* 15.06.2001, ZB 3155. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1000 m, on *Salvia viridis*, 13.06.2001, ZB 3062. **C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Salvia multicaulis*, 21.08.2004, ZB 3866. **B6** Kahramanmaraş: Yazıköy-Kızılöz, 1600 m, on *Thymus fallax*, 15.06.2001, ZB 3168. **B6**

Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Thymus fallax*, 20.08.2004, ZB 3744.

**106. P. striiformis** Westend. var. **striiformis**

**C6** Kahramanmaraş: Andırın, around Azgırtın Castle, 1000 m, on *Hordeum*, 21.07.2004, ZB 3485.

**107. P. tanacetii** DC.

**B6** Kahramanmaraş: Göksun, Karlık hill, 1150 m, on *Artemisia campestris*, 03.08.2003, ŞK 2610. **B6** Kahramanmaraş: Göksun, Acielma Village 1800 m, on *Artemisia vulgaris*, 23.07.2004, ZB 3624.

**C6** Kahramanmaraş: Andırın, Meyremçilbeli, 1600 m, on *Tanacetum argenteum* subsp. *canum*, 20.08.2004, ZB 3781. **C6** Kahramanmaraş: Andırın, Çokak, 1500 m, on *Tanacetum cilicicum*, 22.07.2004, ZB 3526. **C6** Kahramanmaraş: Andırın, Çokak, 1500 m, on *Tanacetum cilicicum*, 22.08.2004, ZB 3883. **B6** Kahramanmaraş: Göksun, Doğanonak, Binboğa Mountain, 2000-2400 m, on *Tanacetum densum*, 19.08.2004, ZB 3713.

**108. P. tepperi** F.Ludw.

**B6** Kahramanmaraş: 5 km from Elbistan to Ekinözü, 1100 m, on *Phragmites australis*, 15.09.2003, ŞK 3068. **C6** Kahramanmaraş: 40 km from Andırın to Kahramanmaraş, 1350 m, on *Phragmites australis*, 13.09.2003, ŞK 1873.

**\*109. P. thlaspeos** C.Schub.

**C6** Kahramanmaraş: 10 km from Andırın to Geben, 1200 m, on *Thlaspi violascens*, 30.04.2004, ZB 3389.

**110. P. violae** (Schumach.) DC.

**B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Viola odorata*, 20.08.2004, ZB 3755. **C6** Kahramanmaraş: Andırın, Meyremçilbeli, Kayranlı Mountain, 2000-2200 m, on *Viola odorata*, 20.08.2004, ZB 3815.

**111. P. xanthii** Schwein.

**C6** Kahramanmaraş: 5 km south of Süleymanlı, 900 m, on *Xanthium spinosum*, 07.10.2000, ZB 3018. **C6** Kahramanmaraş: 25 km from Kahramanmaraş to Türkoğlu, 830 m, on *Xanthium spinosum*, 13.09.2002, ŞK 1907. **B6** Kahramanmaraş: Göksun,

Kömürler Village, 980 m, on *Xanthium strumarium*, 16.09.2003, ŞK 3191. **B6** Kahramanmaraş: Göksun, Ortatepe Village, 880 m, on *Xanthium strumarium*, 16.09.2003, ŞK 3227.

**23.112. Pucciniastrum agrimoniae** (DC.) Tranzschel

**C6** Kahramanmaraş: Andırın, 2-3 km from Çokak to Çiğsar, 1300 m, on *Agrimonia*, 20.08.2004, ZB 3840.

**24.113. Tranzschelia discolor** (Fuckel) Tranzschel & M.A.Litv.

**C6** Kahramanmaraş: 10 km from Andırın to Kadirli, 840 m, on *Prunus*, 17.09.2003; ŞK 3307. **C6** Kahramanmaraş: Andırın, 2-3 km from Çokak to Çiğsar, 1300 m, on *Prunus*, 20.08.2004, ZB 3839. **C6** Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Prunus divaricata*, 17.09.2003, ŞK 3331.

**25.114. Uromyces alsinis** Tranzschel

**C6** Kahramanmaraş: Ahır Mountain, south slope, 1420 m, on *Minuartia*, 21.08.2004, ZB 3869.

**115. U. anthyllidis** (Grev.) J.Schröt.

**B6** Kahramanmaraş: Göksun, Koccağız Village, 1800 m, on *Dorycnium graecum*, 23.07.2004, ZB 3637. **C6** Kahramanmaraş: Andırın, around Azgırtın Castle, 1000 m, on *Dorycnium pentaphyllum*, 21.07.2004, ZB 3494. **B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Lotus corniculatus*, 07.10.2000, ZB 2983. **C6** Kahramanmaraş: Andırın, Meyremçilbeli, 1600 m, on *Lotus corniculatus*, 20.08.2004, ZB 3770.

**116. U. appendiculatus** (Pers.) Unger

**B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Phaseolus vulgaris*, 07.10.2000, ZB 2987. **C6** Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Phaseolus vulgaris*, 17.09.2003, ŞK 3323.

**117. U. behenis** (DC.) Unger

**B6** Kahramanmaraş: Göksun, Between Keklikoluk and Doğanonak, 1650 m, on *Silene*, 20.07.2004, ZB 3428. **C6** Kahramanmaraş: Andırın, Çiğsar Village, 1200 m, on *Silene*, 12.09.2002, ŞK 1853.

118. *U. ciceris-arietini* (Grognot) Jacz. & Boyd

**C6** Kahramanmaraş: 10 km from Andırın to Kadirli, 670 m, on *Cicer arietinum*, 04.08.2003, ŞK 2694. **C6** Kahramanmaraş: Andırın, Meyremçilbeli, Kayranlı Mountain, 2000-2200 m, on *Cicer arietinum*, 20.08.2004, ZB 3810.

119. *U. geranii* Speg.

**B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Geranium*,

20.08.2004, ZB 3615.

120. *U. glycyrrhizae* (Rabenh.) Magnus

**C6** Kahramanmaraş: 32 km from Kahramanmaraş to Andırın, 500 m, on *Glycyrrhiza*, 13.06.2001, ZB 3109.

\*121. *U. helichrysi* Lagerh.

**B6** Kahramanmaraş: Göksun, Mehmetbey, around Törbizek Stream, 1300 m, on *Helichrysum plicatum* subsp. *plicatum*, 18.08.2004, ZB 3685. **B6** Kahramanmaraş: Göksun, Acielma Village, 1800 m, on *Helichrysum plicatum* subsp. *polyphyllum*, 23.07.2004, ZB 3627, BY.

122. *U. hymenocarpi* Jaap

**C6** Kahramanmaraş: 30 km from Kahramanmaraş to Andırın, 500 m, on *Hymenocarpus circinnatus*, 14.06.2001, ZB 3099.

123. *U. ononidis* Pass.

**B6** Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Ononis spinosa*, 20.08.2004, ZB 3735. BY. **C6** Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Ononis spinosa*, 17.09.2003, ŞK 3317.

124. *U. pisi* (DC.) G.H.Ott

**B6** Kahramanmaraş: 1-2 km from Göksun to Doğanonak, 1550 m, on *Astragalus gummifer*, 23.07.2004, ZB 3648. **C6** Kahramanmaraş: 32 km from Kahramanmaraş to Andırın, 500 m, on *Astragalus lagurus*, 13.06.2001, ZB 3116. **B6** Kahramanmaraş: Göksun, Mehmetbey, around Törbizek Stream, 1300 m, on *Lathyrus pratensis*, 18.08.2004, ZB 3691. **B6** Kahramanmaraş: Göksun, Ortatepe Village, 880 m, on *Lotus corniculatus* var. *alpinus*, 16.09.2003, ŞK 3216. **B6**

Kahramanmaraş: Between Malatya and Elbistan, Darıca, 1100 m, on *Medicago ¥ varia*, 14.09.2003, ŞK 3044. **B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1300 m, on *Medicago ¥ varia*, 16.09.2003, ŞK 3291. **B6** Kahramanmaraş: Göksun, Ortatepe Village, 880 m, on *Medicago falcate*, 16.09.2003, ŞK 3214. **C6** Kahramanmaraş: 5 km from Andırın to Çokak, 900 m, on *Medicago littoralis*, 14.06.2001, ZB 3136. **B6** Kahramanmaraş: Göksun, Kanlıkavak Village, 1100 m, on *Medicago lupulina*, 03.08.2003, ŞK 2629. **C6** Kahramanmaraş: 2 km from Göksun to Andırın, 1100 m, on *Trifolium pratense* var. *pratense*, 03.08.2003, ŞK 2656. **C6** Kahramanmaraş: 2 km from Geben to Andırın, 1470 m, on *Vicia*, 30.10.2004, ŞK 3775.

125. *U. polygoni-avicularis* (Pers.) P.Karst.

**B6** Kahramanmaraş: Göksun, Taşoluk Village, Çatal Hill, 1450 m, on *Polygonum polycnemoides*, 12.09.2002, ŞK 1783.

126. *U. rumicis* (Schumach.) G.Winter

**C6** Kahramanmaraş: Between Kahramanmaraş and Göksun, 700 m, on *Rumex conglomerates*, 13.06.2001, ZB 3091. **C6** Kahramanmaraş: 45 km from Kahramanmaraş to Andırın, 900 m, on *Rumex patientia*, 14.06.2001, ZB 3122. **B6** Kahramanmaraş: Elbistan, Erçene Village, 1080 m, on *Rumex pulcher*, 15.09.2003, ŞK 3122. **C6** Kahramanmaraş: Andırın, between Çokak and Çiğşar, Çampınarı, 1300 m, on *Rumex tuberosus*, 14.06.2001, ZB 3149.

\*127. *U. silenes-ponticae* Const.

**B6** Kahramanmaraş: Göksun, Between Keklikoluk and Doğanonak, 1650 m, on *Silene rhynchoarpa*, 20.07.2004, ZB 3400. **B6** Kahramanmaraş: Göksun, 1-2 km south of Doğanonak Village, 1550 m, on *Silene spergulifolia*, 18.08.2004, ZB 3654.

128. *U. scleranthi* Rostr.

**B6** Kahramanmaraş: Göksun, Püren Pass, 1700 m, on *Minuartia juniperina*, 08.08.2001, ZB 3202.

129. *U. striatus* J.Schröt.

**B6** Kahramanmaraş: Göksun, Kömürler Village, 980 m, on *Medicago ¥ varia*, 16.09.2003, ŞK 3197. **C6** Kahramanmaraş: 10 km from Andırın to Kahramanmaraş, 710

m, on *Medicago ¥ varia*, 13.09.2002, ŞK 1858. **C6** Kahramanmaraş: Andırın, Meyremçilbeli, 1600 m, on *Trifolium pratense*, 20.08.2004, ZB 3771.

130. *U. tinctoriicola* Magnus

**B6** Kahramanmaraş: Göksun, Doğanonak, Binboğa Mountain, 2000-2400 m, on *Euphorbia*, 19.08.2004, ZB 3721.

131. *U. trifolii* (R.Hedw.) Lév.

**B6** Kahramanmaraş: Elbistan, 1120 m, on *Trifolium fragiferum* 15.09.2003, ŞK 3090. **C6** Kahramanmaraş: Narlı, Çiğli Village, 650 m, on *Trifolium pratense* var. *pratense*, 22.08.2004, ZB 3873. **B6** Kahramanmaraş: 2 km from Göksun to Andırın 1120 m, on *Trifolium pratense* var. *pratense*, 03.08.2003 ŞK 2668. **B6** Kahramanmaraş: Between Elbistan and Göksun, Erçene Village, 1080 m, on *Trifolium pratense* var. *pratense*, 15.09.2003 ŞK 3123. **C6** Kahramanmaraş: 5 km from Andırın to Çokak, 900 m, on *Trifolium repens*, 14.06.2001, ZB 3140. **C6** Kahramanmaraş: 32 km from Kahramanmaraş to Andırın, 500 m, on *Trifolium resupinatum*, 13.06.2001; ZB 3120.

132. *U. viciae-fabae* (Pers.) J.Schröt. var. *viciae-fabae*

**B6** Kahramanmaraş: Göksun, Kömürler Village, 980 m, on *Vicia*, 16.09.2003, ŞK 3202.

Ustilaginales

26.133. *Anthracoidea caricis* (Pers.) Bref.

**C6** Kahramanmaraş: Andırın Meyremçilbeli 1600 m, on *Carex*, 21.07.2004 ZB 3462.

27.134. *Sporisorium cruentum* (J.G.Kühn) Vánky

**C6** Kahramanmaraş: 34-35 km from Kahramanmaraş to Andırın, 1300 m, on *Sorghum halepense*, 14.06.2001, ZB 3152.

135. *Sp. reilianum* (J.G.Kühn) Langdon & Full.

**C6** Kahramanmaraş: Between Kahramanmaraş and Pazarcık, Karacasu Village, 570 m, on *Sorghum*, 05.08.2003, ŞK 2730.

- \*28.136. Ustilago bulgarica** Bubák  
C6 Kahramanmaraş: Between Kahramanmaraş and Pazarcık, Karacasu Village, 650 m, on *Sorghum*, 13.09.2002, ŞK 1899. C6 Kahramanmaraş: 5 mm from Kahramanmaraş to Türkoğlu, 820 m, on *Sorghum*, 13.09.2002, ŞK 1909.
- 137. Us. bullata** Berk.  
B6 Kahramanmaraş: Göksun, Kepez Village, 2200 m, on *Bromus*, 11.09.2002, ŞK 1741. C6 Kahramanmaraş: Between Kahramanmaraş and Andırın, Başkonuş plateau, 1300 m, on *Bromus*, 22.07.2004, ZB 3535.
- 138. Us. cynodontis** Henn.  
C6 Kahramanmaraş: Türkoğlu, Çakıllı, 550 m, on *Cynodon dactylon*, 08.10.2000, ZB 3031.
- 139. Us. hypodytes** (Schltdl.) Fr.  
B6 Kahramanmaraş: Göksun, Fındık Village, Bostandere, 1400-1700 m, on *Lolium*, 20.08.2004, ZB 3762.
- \*140. Us. lidii** (Liro) Nannf.  
B6 Kahramanmaraş: 29 km from Göksun to Elbistan, 1200-1300 m, on *Juncus*, 07.10.2000, ZB 2970.
- 141. Us. maydis** (DC.) Corda  
B6 Kahramanmaraş: Göksun, Kömürler Village, 980 m, on *Zea mays*, 16.09.2003, ŞK 3170. C6 Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Zea mays*, 17.09.2003, ŞK 3325.
- Division: OOMYCOTA  
Peronosporales  
**\*29.142. Albugo gomphrenae** (Speg.) Cif. & Biga  
C6 Kahramanmaraş: 20 km from Andırın to Kahramanmaraş, 710 m, on *Amaranthus*, 17.09.2003, ŞK 3324.
- Division: MITOSPORIC FUNGI  
**30.143. Ascochyta graminicola** Sacc.  
B6 Kahramanmaraş: Göksun, 1-2 km south of Doğankonak Village, 1550 m, on *Hordeum*, 18.08.2004, ZB 3647.
- 144. A. viciae** Lib.  
C6 Kahramanmaraş: Ahır Mountain, south slope, 1000-1100 m, on *Vicia*, 12.06.2001, ZB 3044.
- \*31.145. Dilophospora alopecuri** (Fr.) Fr.  
B6 Kahramanmaraş: Göksun, Ziyaret Mountain, 2000 m, on *Poa*, 11.09.2002, ŞK 1765.
- 32.146. Hendersonia grossulariae** Oudem.  
B6 Kahramanmaraş: Göksun, Değirmendere Village, Çatal Mountain, 2000 m, on *Acantholimon*, 12.09.2004, ŞK 1813.
- 33.147. Phoma herbarum** Westend.  
B6 Kahramanmaraş: Göksun, Doğankonak, Binboğa Mountain, 2000-2400 m, on *Artemisia*, 19.08.2004, ZB 3709.
- \*34.148. Phyllosticta helleboricola** C.Massal.  
C6 Kahramanmaraş: Pazarcık, 800 m, on *Helleborus*, 08.10.2000, ZB 3034.
- 35.149. Selenophoma** Maire  
C6 Kahramanmaraş: 10 km from Andırın to Kadirli, 800 m, on *Cephalaria*, 30.10.2004, ŞK 3770.
- \*36. 150. Septoria septulata** Beach  
C6 Kahramanmaraş: Between Andırın and Çokak, 1500 m, on *Convolvulus*, 22.07.2004, ZB 3523.
- 151. S. scabiosicola** Desm.  
C6 Kahramanmaraş: Between Kahramanmaraş and Andırın, Başkonuş plateau, 1300 m, on *Scabiosa*, 22.07.2004, ZB 3533.