

Check-list of additional taxa to the supplement Flora of Turkey V

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Abstract: The fifth check-list of the series entitled “Additional taxa to the Flora of Turkey” comprises a total of 249 taxa based on data given in 167 papers, which have been published up until the end of 2010. It provides details of taxa which have not been recorded either in the 11 volumes of *Flora of Turkey and the East Aegean Islands* or in the 4 previously published supplementary check-lists.

Key words: Turkish flora, new species, new records, additional taxa

Türkiye Florasına ilave edilen taksonların listesi V

Özet: “*Türkiye Florasına ilave taksonlar*” adlı seri halinde yayınlanmakta olan çalışmanın beşinciisi, 2010 yılı sonuna kadar yayınlanan 167 çalışmada verilen 249 taksondan oluşmaktadır. Bu çalışma, 11 cıltlik Türkiye Florasında ve bu seri çalışmanın ilk dördünden bulunmayan taksonları içermektedir.

Anahtar sözcükler: Türkiye flora, yeni türler, yeni kayıtlar, ilave taksonlar

Introduction

Flora of Turkey and the East Aegean Islands was published by P.H. Davis in 9 volumes during September 1965-December 1985 (Davis, 1965-1985). After its publication, Turkey's flora has received considerable attention from botanists, both in Turkey and abroad. The first Supplement published by Davis et al. (1988) includes accounts of an additional 472 numbered taxa at species rank or below together with accounts of some other imperfectly known taxa (Davis et al., 1988). Since the publication of the first Supplement (vol. 10), 2 check-lists had been

prepared by Özhatay and Kültür in 1994 and 1999, which included almost all the new findings relating to the Turkish flora (Özhatay et al., 1994, 1999). These check-lists provided a good starting point for the project of the second Supplement of it and it was published by Güner, Özhatay, Ekim, and Başer in 2000. It includes accounts of an additional 567 numbered taxa at species rank or below together with accounts of some other imperfectly known taxa (Güner et al., 2000).

Since 2000, 518 papers about additional taxa on the flora of Turkey have been published. In addition,

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3 check-lists (including this paper) have been prepared by Özhatay and Kültür in 2006, 2009, and 2011 (Özhatay & Kültür, 2006, Özhatay et al., 2009).

The aim of this paper is to present all published taxa added to the flora of Turkey during 2008 to 2010 with the missing records in earlier check-lists. The present list comprises a total of 249 taxa, of which 189 taxa were added as taxa new to science (comprising 158 species, 20 subspecies, 9 varieties, 1 form, and 1 hybrid), whilst a further 60 known taxa have previously been unrecorded from Turkey (53 species, 4 subspecies, and 3 varieties) (Table 1). Eleven genera were added: *Acalypha* L. (Euphorbiaceae), *Bornmuellerantha* Rothm. (Orobanchaceae), *Chamaespartium* Adans (Leguminosae), *Crassocephalum* Moench (Compositae), *Cymbogopogon* Spreng. (Gramineae), *Halothamnus* Jaub. & Spach (Chenopodiaceae), *Leiotulus* Ehrenb. (Umbelliferae), *Lophantus* Adans. (Labiatae), *Neocryptodiscus* Hedge & Lamond (Umbelliferae), *Pseudognaphalium* Kirp. (Compositae), and *Pseudosempervivum* (Boiss.) Grossh. (Cruciferae).

The remaining 19 taxa represent new combinations, new status indications for previously known taxa (8 comb. nov., 7 comb. et stat. nov., 2 stat. nov., 1 nom. et stat. nov., and 1 emendation), and 2 taxa represent cultivar forms.

The list of the additional taxa is arranged in alphabetical order within families, genera, and species under 3 main systematic groups: **Gymnospermae**, **Dicotyledonae**, and **Monocotyledonae**. Identical

format as given in Davis' *Supplement to the Flora of Turkey* (Davis et al., 1988) and references to original papers appear in brackets at the end of the taxon's scientific name. It is hoped that this list will be provide useful information for those currently studying Turkey's flora.

We have endeavoured to trace all additional taxa to the Flora published before the end of 2010. Nevertheless, we are sure that there are further unreported taxa either in Davis' *Flora of Turkey* or in our supplementary check-lists. Accordingly, we would welcome all additions or comments for future issues in the series.

The first check-list was published 16 years ago, and we were completely aware that subsequent to the publication of the first paper of the series further additions would be discovered to Turkey's exceptionally rich flora. Therefore, we realise that publishing the series of papers would become necessary, once every few years. Since 1994, 719 papers have been published in a wide range of journals as additional taxa to the Turkish flora and other publications have been reviewed by the authors. They are now stored as a collection in the library of ISTE (Herbarium of İstanbul University, Faculty of Pharmacy). We are planning to publish further additional taxa as an end of each year report in the e-bulletin of ISTE starting in 2011.

Table 2 shows a summary of statistical data of 5 check-lists published during 1994-2011; according to these data 2 periods can be recognised:

Period I (12 years): First Supplement (1988) to Second Supplement (2000).

Period II (11 years): Second Supplement (2000) to 2011.

The list of additional taxa

e = endemic species; * = new record for Turkish flora; ** = new taxon for science; ■ = new genus for Turkish flora.

GYMNOSPERMAE

CUPRESSACEAE (1: 76)

Juniperus L. (1: 78)

e***J. oxycedrus* f. *yaltirkiana* Avci & Ziel., in Phytologia Balcanica 14(1): 37-40 (2008).

Table 2. Statistical data of 5 check-lists.

		Taxa new to science	Taxa new to Turkey	Total	References
Period I	<i>Check-List of Additional Taxa to the Supplement Flora of Turkey I</i> (1994)	124 (1988-1994)	46 (1988-1994)	170	94
	<i>Check-List of Additional Taxa to the Supplement Flora of Turkey II</i> (1999)	109 (1995-1998)	51 (1995-1998)	160	107
Total of period I		233	97	330	201
<i>Flora of Turkey and the East Aegean Islands Supplement II (2000)</i>					
Period II	<i>Check-List of Additional Taxa to the Supplement Flora of Turkey III</i> (2006)	189 (2000-2004)	106 (2000-2004)	295	195
	<i>Check-List of Additional Taxa to the Supplement Flora of Turkey IV</i> (2009)	121 (2005-2007)	54 (2005-2007)	175	156
	<i>Check-List of Additional Taxa to the Supplement Flora of Turkey V</i>	189 (2008-2010)	60 (2008-2010)	249	167
Total of period II		499	220	719	518
TOTAL		732	317	1049	719

(Avcı & Zielinski, 2008)

Type: Turkey, E of Zonguldak, between Göbü and Türkali villages, 100-150 m, 17.viii.2007, leg. M.Avcı (holo. ISTO 32573, iso. ISTE 83922).

DICOTYLEDONES

AMARANTHACEAE (2: 340)

Halocnemum L. (2: 319)

eH. yurdakulolii** Yaprak, in Bot. J. Linn. Soc. 158: 716-721 (2008).

(Yaprak & Kadereit, 2008)

Type: Turkey, **C5** Mersin: Silifke, Göksu Delta, edge of the Paradeniz Lagoon, hypersaline flats in coastal lagoons, sea level, 4.xi.2004, A.E.Yaprak 2004-116 (holo. ANK, iso. GAZI, KAS, MJG).

ARISTOLOCHIACEAE (7: 551)

Aristolochia L. (7: 552)

eA. zonguldakense** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **A4** Zonguldak: Karabük, Beşbinevler üstü, nadashlı alanlar, 350-600 m, 27.iv.1985, Ş.Yıldırımlı 7765 (holo. Hb. Yıldırımlı, iso. HUB).

BORAGINACEAE (6: 237)

Anchusa L. (6: 388)

* **A. aegyptiaca** (L) DC., in Prodr. 10: 48 (1846). (Yıldırım & Gemici, 2010)

S. Anatolia, **C5** Mersin: Silifke, around Cennet-Cehennem caverns, opening area between limestone rocks, 36°26'32"N, 034°06'46"E, 53 m, 16.iv.2009, H.Yıldırım 1534 (EGE).

Heliotropium L. (6: 248)

e H. samoliflorum** Bunge subsp. **erzurumicum** Dönmez, in Ann. Bot. Fenn. 45: 396-399 (2008).

(Dönmez, 2008)

Type: Turkey, **A8** Erzurum: from Olur to Yusufeli,

15 km, around Buzluca village, metamorphic rocks, 40°46'009"N, 42°03'854"E, 930 m, 2.vii.2002 A.A.Dönmez 11067 (HUB).

e H. thermophilum** Kit Tan, A Çelik & Gemici, in Adv. Sci. Lett. 1(1): 132-139 (2008).

(Tan et al., 2008)

Type: Turkey, **C2** Aydın/Denizli: 20 km from Denizli to Buharkent, geothermal valley of Kızıldere Power Plant, damp and muddy places with ground temperatures of 55-65 °C, 220 m, 15.viii.2004, A.Çelik 4322 (holo. PAU, iso. AKDU, C, EGE, herb. Kit).

Paratypes: loc. ibid., 22.viii.2007, Y.Gemici 20,000 (EGE); loc. ibid., 17.ix.2007, H.Yıldırım 1392 (EGE).

Onosma L. (6: 326)

eO. beyazoglu** Kandemir & Türkmen, in Turk. J. Bot. 34: 277-282 (2010).

(Kandemir & Türkmen, 2010)

Type: Turkey, **B7** Erzincan: 100 km from Erzincan to İliç, 28.v.2008, 39°34'244"N, 38°37'268"E, 1020 m, Kandemir 9087 (holo. KTUB, iso. ANK, GAZI, ISTE).

CAMPANULACEAE (6: 2)

Michauxia L. (6: 81)

***M. nuda** A.DC., in Prodr. 7: 457 (1838).

(Aslan et al., 2010)

S.E. Anatolia. **C8** Siirt: between Siirt and Eruh, gorge of Botan river, 37°50'37"N, 41°52'37"E, 09.vi.2009, 425 m, on limestone slopes, S.Aslan 3802 & B.Şahin (GAZI); ibid., 37°53'4.42"N, 41°53'20"E, 19.v.2009, 700 m, roadsides, S.Aslan 3650 et al. (GAZI).

CARYOPHYLLACEAE (2: 15)

Dianthus L. (2: 99)

e D. aytachii** C.Vural, in Bot. J. Linn. Soc. 158: 55-61 (2008).

(Vural, 2008)

Type: Turkey, **B5** Kayseri: Mount Erciyes, mountain steppe, volcanic stony slope, 38°32.032'N, 035°30.089'E, 2500-2700 m, 7.ix.2005, C.Vural 3767 (holo. ERCIYES Hb., iso. ANK, GAZI, HUB).

Saponaria L. (2: 138)

***S. suffruticosa** Nábělek in Publ. Fac. Sc. Univ. Masaryk, Brno No.35, 41 (1923).

(Dönmez, 2009)

S.E. Anatolia. **C9** Siirt: 5 km from Siirt to Eruh, Görendoruk region, on limestone crevices, 37°42'658"N 042°15'712"E, 1202 m, 29. v. 2002, A.A.Dönmez 10744 & B.Mutlu; ibid., 18.vi.2003, A.A.Dönmez 11200 & B.Mutlu ibid., 18.vi.2003, A.A.Dönmez 11839. **C9** Şırnak: 12.5 km, from Uludere road junction to Beytüssebap, 37°23'353"N, 042°54'026"E, 1070 m, 18.vi.2003, A.A.Dönmez 11233 & B.Mutlu; Beytüssebap, below Başaran village, 18.vi.2003, A.A.Dönmez 11260 & B.Mutlu; Uludere, 500 m from Dağdibi village to main road, limestone crevices, 37°22'320"N, 043°07'784"E, 1124 m, 26.v.2004, A.A.Dönmez 11919; Eruh, above Gölgelikonak village, *Quercus brantii* opening, limestone crevices. 37°45'114"E, 390 m, 19.vi.2005, A.A.Dönmez 12118, I.Al-Shehbaz & M.Menke.

Silene L. (2: 179)

eS. aydopensis** K.Yıldız & Erik, in Ann. Bot. Fenn. 47: 151-155 (2010).

(Yıldız & Erik, 2010)

Type: Turkey, **C5** Konya: Ereğli, Aydos mountain, Aktoprak, damaged *Quercus*, *Pinus* forest, 1700 m, 28.viii.1973, S.Erik 2614 (HUB 3630).

Paratype: Turkey, **C2** Muğla: between Köyceğiz and Ağla villages, 1400 m, 3.ix.1992, A.Güner 10890 (ANK).

eS. bayburtensis** Hamzaoğlu & Aksoy, in Turk. J. Bot. 34: 47-50 (2010).

(Hamzaoğlu et al., 2010a)

Type: Turkey, **A8** Bayburt: between Çayıryolu and Kitre villages, 1700 m, rocky slopes on calcareous steppe, 13.vi.2007, Hamzaoğlu 4587, Aksoy & Budak (holo. BOZOK Hb., iso. ANK, BOZOK Hb., GAZI, HUB).

eS. bitlisensis** Tugay & Ertugrul, in Bot. J. Linn. Soc. 156: 463-466 (2008).

(Tugay & Ertuğrul, 2008)

Type: Turkey, **B9** Bitlis: Green Line Afforestation Zone, 1680 m, 38°26.370'N, 42°08.620'E, 4.vii.2003, Ertugrul 2927 & O.Tugay (holo. KNYA, iso. ANK, GAZI, K).

eS. cirkicii** K.Yıldız & Dadandı, in Ann. Bot. Fenn. 46: 464-468 (2009).

(Yıldız & Dadandı, 2009)

Type: Turkey, **A5** Amasya: Akdağ, near the radio link station, 1800-1900 m, 40°46'783"N, 35°55'624"E, 25.vii.2005, *K.Yıldız* 041-1 & *M.Y.Dadandı* (holo. MUFE 12096, iso. Herbaria of Celal Bayar University Department of Biology, ERCIYES Hb.).

Paratypes: **A5** Amasya: Akdağ, near radio link station, 1800-1900 m, 21.viii.2006, *K.Yıldız* 0178-1 & *M.Y.Dadandı* (MUFE 12386). **A5** Amasya: Akdağ, above Eğribük village, Sivrikaya, 14.viii.1977, 1600 m, *K.Alpinar* (ISTE 38485).

eS. demirizii** K.Yıldız & Çırpıcı, in Nord. J. Bot. 28: 332-340 (2010).

(Yıldız et al., 2010)

Type: Turkey, **B7** Erzincan: Refahiye to Erzincan 21 km, steppe, between natural gas pipe line and road, south slopes, 40°06'123"N, 29°07'577"E, 1850-2000 m a.s.l., 27.vii.2005, *K.Yıldız* & *M.Y.Dadandı* (holo. MUFE 12110, iso. Herbaria of Celal Bayar University, ERCIYES Hb.).

Paratypes: Turkey, **B7** Erzincan: Refahiye to Erzincan 32 km, steppe, north-east slopes, 40°16'125"N, 38°17'508"E, 2000 m a.s.l., 27.vii.2005, *K.Yıldız*, *M.Y.Dadandı*, MUFE 12112; **A9** Kars: Kağızman Mountain, Akçay to Cumaçay ca 20 km, sloping meadows, 2200 m a.s.l., 11.viii.1966, *Davis* 47728 (ISTO 12738).

e S. dumanii** Kandemir, G.Ecevit Genç & İ.Genç, in Ann. Bot. Fenn. 46: 71-74 (2009).

(Kandemir et al., 2009)

Type: Turkey, **B7** Erzincan: Keşiş Mountain, Yedigöller, 210 m, 29.vi.2002 *A.Kandemir* (holo. ISTE 83460, iso. ANK, GAZI).

Paratypes: Turkey, **B7** Erzincan: Keşiş Mountain, Yedigöller, 2595 m, 15.viii.2004, *A.Kandemir* (ISTE 83761); ibid., 2759 m, 11.ix.2005, *A.Kandemir* (ISTE 83766).

eS. duralii** Bağcı, in Turk. J. Bot. 32: 11-15 (2008).

(Bağcı, 2008)

Type: Turkey, **C4** Karaman: Ermenek-Kazancı, Sarıova Plateau, opposite Kartal Kaya, (Salur

Mountain), mountain steppe, 1750-1770 m, 36°28.546'N, 32°43.904'E, 16.vi.2006, *Y.Bağcı* 3476 (holo. KNYA, iso. GAZI, HUB, Hb. Yıldırımli).

eS. erciyesdagensis** Aksoy & Hamzaoğlu, in Bot. J. Linn. Soc. 158: 730-733 (2008). (Aksoy et al., 2008a)

Type: Turkey, **B5** Kayseri: Erciyes Mountain, from Sarıgöl high plateau towards summit, 2900-3200 m, igneous rocky slopes, 04.viii.2006, *Hamzaoğlu* 4435, *Aksoy* & *Budak* (holo. BOZOK Hb., iso. ANK, BOZOK Hb., ERCIYES Hb., GAZI, HUB).

eS. kucukodukii** Bağcı & Uysal, in Nord. J. Bot. 25: 306-310 (2007).

(Bağcı et al., 2007)

Type: Turkey, **C4** Konya: Hadim to Dedemli 10 km from Hadim, deeply red soils, depraved *Juniperus* openings, slopes, steppe, at 1500-1600 m, 38°59'917"N, 32°15'626"E, 15.vi.2006, *Ertuğrul* 3694, *Bağcı*, *Uysal* & *Demirelma* (holo. KNYA, iso. GAZI).

eS. marschallii** C.A.Meyer subsp. **anamasi** K.Yıldız & Dadandı, in Nord. J. Bot. 28: 332-340 (2010).

(Yıldız et al., 2010)

Type: Turkey, **C3** Konya: Above Dedegüldağ (Anamas), 'Forest observatory station' (Isparta-Konya border), 37°40'510"N, 31°19'781"E, 2100-2250 m a.s.l., 16.vii.2006, *K.Yıldız* & *M.Y.Dadandı* (holo. MUFE 12360, iso. Herbaria of Celal Bayar University, ERCIYES Hb.).

Paratypes: Turkey, **C3** Konya: Dedegüldağ, side of National Park, rocks, 1800 m a.s.l., 13.vii.1995, *H.Özçelik* 7186 (GAZI).

e S. ozyurtii** Aksoy & Hamzaoğlu, in Ann. Bot. Fenn. 46: 431-434 (2009).

(Aksoy et al., 2009)

Type: Turkey, **C3** Konya: Derebucak, Çamlık town, Kızıldağ, Üçoluk, 37°21.2'N, 31°39.8'E, 1450 m, 25.vi.2005, *Aksoy* & *Hamzaoğlu* 3695 (holo. BOZOK Hb., iso. BOZOK Hb., ANK, HUB, GAZI).

Paratypes: Turkey, **C3** Konya: Derebucak, Çamlık town, Kızıldağ, Üçoluk, 37°21.2'N, 31°39.8'E, 1455 m, 30.v.2005, *Aksoy*, *Budak* & *Hamzaoğlu* 3651 (BOZOK Hb.); ibid., İncirli, Bayır, 37°22.6'N, 31°35.7'E, 1750 m, 25.vi.2005, *Aksoy* & *Hamzaoğlu*

3734 (ANK, BOZOK Hb., GAZI, HUB); **C3** Isparta: between Sütçüler and Eğridir, 60 km, 1200-1400 m, 22.vi.1996, Özçelik 7507 (GAZI).

CHENOPODIACEAE (2: 294)

Corispernum L. (2: 318)

eC. anatolicum** Sukhor., in Willdenowia 40:191 (2010).

(Sukhorukov, 2010)

Type: Turkey, Asia Minor, Lycaonia, 5 km a Karapinar opido ad meridiem versus (Konya prov., Karapinar distr.), 12.vii.1971, Andersen, Hansen, Jensen & Machholm 2138.

■ Halothamnus Jaub. & Spach

***H. hierochunticus** (Bornm.) Botsch., in Novosti Sist. Vyssh. Rast. 18: 156 (1981).

(Freitag et al., 2009)

S.E. Anatolia. **C7** Şanlıurfa: Akçakale, Öncül village, 350 m, 29.ix.2005, Atamov (ANK, GAZI, KAS, ISTE, Herb. Harran, and Rize Univ.); idem., some other places in southern Harran plain, 29.ix.2005 Atamov in obs.

Salicornia L. (2: 321)

eS. freitagi** Yaprak & Yurdakulol in Ann. Bot. Fenn. 45: 207-211 (2008).

(Yaprak & Yurdakulol, 2008)

Type: Turkey, **A5** Çorum: Sungurlu, Bahsili village, edge of small lake, 675 m, 29.viii.2004, A.E. Yaprak 2004-05 (holo. ANK, iso. GAZI, KAS, MJG).

COMPOSITAE (5: 1)

Achillea L. (5: 224)

eA. hamzaoglu** Arabaci & Budak in Ann. Bot. Fenn. 46: 459-463 (2009).

(Arabaci & Budak, 2009)

Type: Turkey, **B5** Kırşehir: Between Kırşehir and Mucur, junction of Bahçecik, Kervansaray Mountain, Hasanpaşa foothill, calcareous, 1400 m, 39°07'376"N, 34°16'829"E, 5.vi.2007, Arabaci 2222 & Budak (holo. INU, iso. ANK, BOZOK Hb., ERCIYES Hb., GAZI, HUB, ISTE).

Paratype: Turkey, **B5** Kırşehir: Kervansaray Mountain, Hasanpaşa foothill, Aydoğdu & Hamzaoglu 1077 (BOZOK Hb.).

eA. sivasica** Çelik & Akpulat, in Kew Bull. 63: 485-489 (2008).

(Çelik & Akpulat, 2008)

Type: Turkey, **B6** Sivas: Ulaş, Distr. of Kovalı, Ziyarettepe, serpentine steppe, 39°32'46"N, 37°01'18"E, 1350-1400 m, 26.vi.2005, Çelik 7135 & Akpulat (holo. CUFH, iso. ISTE).

Centaurea L. (5: 465)

e C. aksoyi** Hamzaoglu & Budak, in Nord. J. Bot. 27: 16-20 (2009).

(Hamzaoglu & Budak, 2009)

Type: Turkey, **B5** Yozgat: between Şefaatli and Yerköy, Karanlıkdere valley, Adatepe, 39°34'28"N, 34°40'23"E, 850 m a.s.l., serpentine rocks, 6.vii.2006, Hamzaoglu & Budak 4167 (holo. BOZOK Hb., iso. ANK, BOZOK Hb., ERCIYES Hb., GAZI, HUB).

***C. aziziana** Rech.f., Oesterr. Bot. Z. 97: 255 (1950).

(Armağan & Ünal, 2009)

E. Anatolia. **B9** Van: between Güzelsu (Hoşap) and Başkale, Güzeldere Pass, steppe and rocky places, 07.vii.2002, 38°08'48"N, 043°059'08"E, 2350 m, Metin 2736. Van: Başkale, north-west of Barış village, rocky slope, 09.vii.2007, 38°00'810"N, 43°59'223"E, 2205 m, M. Ünal 9911.

eC. cadmea** Boiss. subsp. **pontica** Wagenitz ex Köse et Ocak, in Nord. J. Bot. 28: 475-478 (2010).

(Köse et al., 2010)

Type: Turkey, **A3** Zonguldak: Devrek-Eğerci road, Yeşilöz village crossroads, rocky, 330 m a.s.l., 19.vi.2004, 41°05'42.4"N, 31°50'06.2"E, YBK 1524 (holo. ESSE, iso. Osmangazi Univ. Herb.).

e C. cassia** Boiss. subsp. **dumanii** Dinç, A.Duran & B.Bilgili, in Biologia 64(5): 898-901 (2009).

(Dinç et al., 2009)

Type: Turkey, **C6** Adana: Kozan, Göller Yaylası, *Abies cilicica* subsp. *cilicica* forest, 1400 m, 16.vii.2007, A.Duran 7575, M.Dinç & B.Bilgili (holo. KNYA, iso. GAZI, HUB, Hb. Yıldırımlı).

eC. dursunbeyensis** Uysal & Köse, in Turk J Bot 33: 41-46 (2009).

(Uysal & Köse, 2009)

Type: Turkey, **B2** Balıkesir: Dursunbey, Alaçam village, Eğrinceöz slopes, 10.vii.2005, 39°21'296"N, 28°37'400"E, YBK 1535 (holo. KNYA, iso. ESSE).

Paratype: Turkey, **B2** Balıkesir: Dursunbey, Alaçam village, Eğrinceöz slopes, 1390 m, open *Pinus brutia* Ten. forests on limestone, 30.vi.2004, T. Uysal 561 (KNYA).

eC. ertugruliana** Uysal, in Ann. Bot. Fenn. 45: 137-140 (2008).

(Uysal, 2008)

Type: Turkey, **A2** Bursa: Harmancık-Bursa arası, kayalar üzeri, 40°04'N, 28°55'E, 342 m, 4.vii.2004, T.Uysal 566 (holo. KNYA).

eC. kaynakiae** Daşkın & Yılmaz, in Ann. Bot. Fenn. 46: 474-478 (2009).

(Daşkın & Yılmaz, 2009)

Type: Turkey, **B2** Bursa: Uludağ, Keles, Sorgun-Boğazova, 5 km, 1024 m, 39°54'N, 29°20'E, 1024 m, 10.vii.2006, *Kaynak & Daşkın* 28079 (holo. BULU).

***C. macedonica** Boiss., in Diag. 1.VI.130.

(Wagenitz, 2010)

European Turkey, **A1** (E) Kırklareli: Between Pınarhisar and Demirköy, clearings of the woodland, 300 m, 09.vi.2006, *Budak et. al.* 2049, (BOZOG, KNYA; det. Wagenitz).

eC. nerimaniae** Kültür, in Nord. J. Bot. 28: 613-616 (2010).

(Kültür, 2010)

Type: Turkey, **C5** İçel: Arslanköy-Yeniköy, 24 km from Arslanköy, 1000 m a.s.l., 24.vi.2004, *N. and E. Özhata*, §. Kültür, ISTE 82 472 (holo. ISTE).

***C. ochrocephala** Wagenitz, in Flora Iranica, Compositae III, 139 b: 389 (1980).

(Uysal et al., 2007)

E. Anatolia. **A8** Hakkari: a Bajirgeh, 22 km versus Yüksekova, 1900 m, 23.vii.1974, *K.H.Rechinger* 49875 (Herb. Mus. Hist. Natur. Windop. No. 01098).

eC. serpentinica** A.Duran & B.Doğan, in Nord J Bot 27: 319-323 (2009).

(Doğan & Duran, 2009)

Type: Turkey, **C5** Kayseri: Yahyalı, between Kapuzbaşı and Aladağ, 15 km, 1080 m a.s.l., 18.vii.2008, *A.Duran* 8190 and *B.Doğan* (holo. KNYA, iso. ANK, GAZI, HUB).

eC. wagenitziana** Bancheva & Kit Tan, in Phytologia Balcanica 15(1):51-58 (2009).

(Tan et al., 2009)

European Turkey. (sub *Centaurea amplifolia*). **A2** (A) İstanbul: Kartal, Yakacık, NW ridge of Aydos Tepe, in macchie, 330 m 40°56'N, 29°14'E, 4.xi.1978, coll. *E.Tuzlaci* (ISTE 41710); loc. ibid., 2.vii.1974, coll. *E.Tuzlaci & Y.Doğantan* (ISTE 30115, E); loc. ibid., 31.vii.1952, coll. *A.Berk* 4150 (ISTE); Aydos Dağı, ann. 1993, coll. *N.Özhata* (ISTE 69760) Alemdar to Kurtköy, S slopes of Ömerli Baraj (Dam), SW of Paşaköy, rocky ridges, dry grassland, 11.vi.1995, coll. *A.J.Byfield & R.Fitzgerald* (ISTE 69639).

eC. yaltirikii** N. Aksoy, H. Duman & A.Efe, in Nord. J. Bot. 26: 53-56 (2008).

(Aksoy et al., 2008b)

Type: Turkey, **A3** Düzce: Gölyaka, Elmacık Dağı, upper side of Efteni Lake, the road of Güzledere waterfall, slopes of basalt rocks in maquis area, 568 m a.s.l., 19.vii.2003, *N.Aksoy* 5304 (ISTO 31050, iso. AIBU, GAZI).

Paratype: Turkey, **A3** Düzce: Elmacık Dağı, Konaş Ardi, Melkikderesi, serpentine rocks, 1085 m a.s.l., under and beside *Pinus sylvestris* forest, 9.vii.2006 (Düzce Univ. Herbarium).

e C. yaltirikii** N.Aksoy, H.Duman & A.Efe subsp. **dumanii** N.Aksoy & A.Efe, in Journal of Food, Agriculture & Environment 8(3-4): 1212-1215 (2010).

(Aksoy et al., 2010)

Type: Turkey, **A3** Kocaeli: Yuvacık Dam Area, Örnekköy, Örnekköy road's turnout, 431 m, maquis and rocky area, 40°39'311"N, 030°01'094"E, 18.v.2007, *N.Aksoy* 6656 and *N.Güneş* (holo. DUOF 1126, iso. GAZI, ISTF, ISTE).

Cirsium Mill. (5: 370)

***C. candelabrum** Griseb. Spic. Fl. Rumel. 2: 251(1846).

(Yıldız et al., 2009a)

European Turkey. **A1 (E)** Kırklareli: 15 km from Üsküp to Armutveren, 300 m, in mixed forest in the valley, 02.viii.2007, *Yıldız* (16525) & *Dirmenci* (ISTE 84835; EGE, GAZI).

eC. ekimianum** Yıldız & Dirmenci in Bot. J. Linn. Soc. 158: 669-673 (2008).

(Yıldız & Dirmenci, 2008)

Type: Turkey, **B8** Erzurum: 10 km from Aşkale to Bayburt, east of Kop Da., steppe, 1800-2000 m, 10.vii.2006, *B.Yıldız* (16270) & *T.Dirmenci* (holo. ISTE, iso. ANK, GAZI).

e C. handaniae** Yıldız, Dirmenci & Arabaci, in Ann. Bot. Fenn. 46: 239-243 (2009).

(Yıldız et al., 2009b)

Type: Turkey, **A9** Ardahan: Posof, 7 km from Posof to Türközü, 1800 m, 41°32'000"N, 42°47'500"E, 17.viii.2006, *B.Yıldız* (16333) & *T.Dirmenci* (holo. ISTE, iso. ANK, GAZI, INU).

Paratype: Turkey, **A9** Ardahan: Posof, 7 km from Posof to Türközü, 1800 m, 41°32'000"N, 42°47'500"E, 19.ix.2007, *B.Yıldız* (16731) & *T.Arabaci* (INU).

■ **Crassocephalum** Moench

***C. crepidioides** (Benth.) S.Moore, in J. Bot. Brit. For. 50: 211 (1912).

(Yıldırımlı, 2010)

N.E. Anatolia. **A9** Artvin: Borçka, Camili, Düzenli köyü, Gökinav çevresi, 625-675 m, 20.ix.2010, *S.Yıldırımlı* 37351 (Hb. Yıldırımlı, EGE, HUB).

Cyanus Mill. (5: 370)

e C. eflanensis** Kaya & Bancheva in Novon 19: 175-177 (2009).

(Kaya & Bancheva, 2009)

Type: Turkey, **A4** Karabük: 10 km W of Eflani town, on dry grassy places in open pine forest, 1020-1031 m, 40°20'25.7"N, 32°42'1.9"E, 6.vi.2007, *Z.Kaya* & *S.Bancheva* 84027 (holo. ISTE, iso. SOM).

Echinops L. (5: 609)

e E. dumanii** C.Vural, in Turk J Bot 34: 513-519 (2010).

(Vural et al., 2010)

Type: Turkey, **C5** Adana: Yumurtalık, 36°46.371'N, 035°45.420'E, 1-3 m sandy sea shore, 09.ix.2008, *C.Vural* 4744 (holo. ERCIYES Hb., iso. ANK, GAZI, HUB).

Helichrysum Gaertner (5: 80)

e H. yurterianum** Gemici, Kit Tan, Yıldırım & M.Gemici, in Ann. Bot. Fenn. 45: 223-228 (2008).

(Gemici et al., 2008)

Type: Turkey, **B7** Gümüşhane/Erzincan: Otlukbeli Mountains, east-facing slope with 10% declivity, above radar station on way to Karadağ, mountain steppe and meadow overlying peridotite, 2000-2500 m, 20.vii.2001, Y.Gemici 11241 (holo. EGE, iso. herb. Kit).

Jurinea Cass. (5: 439)

eJ. cadmea** Boiss. subsp. **nifense** Yıldırım & Şenol, in Ot Sistematisk Botanik Dergisi 17(1): 1-8 (2010).

(Yıldırım & Şenol, 2010)

Type: Turkey, **B1** İzmir: Kemalpaşa, Nif dağı, summit slopes on calcareous soils, 1400 m, 09.vii.2009, *H.Yıldırım* 1406 (holo. EGE 40789, iso. Hb. Yıldırımlı).

Paratypes: **B1** İzmir: Kemalpaşa, Nif dağı, zirve yakını, 1500 m, 25.v.1971, Ö.Seçmen (EGE 8421); **B1** İzmir: Kemalpaşa, Nif dağı yanın kulesi, zirve, 1400-1500 m, 25.vii.1996, Ö.Seçmen 4902 (EGE); **B1** İzmir: Kemalpaşa, Nif dağı, alpinik zon, 27.vi.1980, Ö.Seçmen 2294 (EGE).

e J. tortumensis** A.Duran & B.Dogan, in Nord. J. Bot. 28: 479-483 (2010).

(Doğan et al., 2010a)

Type: Turkey, **A8** Erzurum: Tortum to Erzurum, 7 km, serpentine stony place, 1880 m a.s.l., 40°15.08'N, 41°31.59'E, 31.v.2003, *A.Duran* 6170 (holo. KNYA, iso. GAZI).

e J. turcica** B.Doğan & A.Duran, in Biologia 65(1): 28-32 (2010).

(Doğan et al., 2010b)

Type: Turkey, **A2(E)** Kırklareli: Kıyıköy, calcareous stony slopes, 5-10 m, 41°38.283'N, 028°05.661'E, 08.vii.2005, *B.Doğan* 1008 & *A.Duran* (holo. KNYA, iso. ANK, GAZI).

Lactuca L. (5: 776)

eL. kemaliya** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Erzincan: Kemaliye, Başpinar, Armağan köyü, Munzur dağları, harla (bahçe) araları, 1400 m, 21.viii.1980, §.Yıldırımlı 3958 (holo. Hb. Yıldırımlı, iso. HUB).

Lapsana L. (5: 785)

eL. communis** L. subsp. **intermedia** (Bieb.) Hayek var. **aurantia** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **A9** Artvin: Borçka, Camili, Düzenli köyü, Ukviyela çevresi, 1125-1175 m, 20.ix.2010, §.Yıldırımlı 37308 (holo. Hb. Yıldırımlı, iso. GAZI, HUB).

Paratype: Turkey, **A9** Artvin: Borçka, Camili, Düzenli köyü, Gökinav çevresi, 625-675 m, 20.ix.2010, §.Yıldırımlı 37350, 37356 (Hb. Yıldırımlı).

Psephellus L. (5: 466)

e P. coruhensis** A.Duran & M.Öztürk in Ozean J. Appl. Sci. 2(1): 103-111 (2009).

(Duran et al., 2009b)

Type: Turkey, **A8** Artvin: between Yusufeli and Sarıgül, 2 km, 630 m, 31.v.2003, stony slopes, 40°50.820'N, 41°32.39'E, A.Duran 6174 (holo. KNYA, iso. ANK, E, GAZI, HUB).

e P. erzincani** Wagenitz & Kandemir, in Willdenowia 38: 521-526 (2008).

(Wagenitz & Kandemir, 2008)

Type: Turkey, **B7** Erzincan: İlç, 117 km from Erzincan to Divriği, gypsum, 5.vi.2007, Kandemir 8001 (GAZI, iso. ANK, B, GOET, ISTE).

e P. recepii** Wagenitz & Kandemir, in Willdenowia 38: 521-526 (2008).

(Wagenitz & Kandemir, 2008)

Type: Turkey, **B7** Erzincan: Kemah, top of Kömür village, (UTM) 37 503131E, 43 88572N, 1189 m, gypsum, 9.vi.2007, Kandemir 8006 (ISTE, iso. B, GAZI, GOET).

e P. yusufeliensis** Tugay & Uysal, in Nord. J. Bot. 27:134-137 (2009).

(Tugay et al., 2009)

Type: Turkey, **B7** Artvin: Yusufeli, Kayalık yamaç, 790 m a.s.l., 40°57'N, 41°29'E, 8.viii.2007, O.Tugay 5175 & Uysal (holo. KNYA, iso. GAZI, K).

■ Pseudognaphalium Kirp.

eP. luteoalbum** (L.) Hilliard & B.L.Burtt subsp. **turicum** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **A9** Artvin: Borçka, Camili, Düzenli köyü, Ukviyela çevresi, karışık orman, 1125-1175 m, 20.ix.2010, §.Yıldırımlı 37306 (holo. Hb. Yıldırımlı, iso. HUB).

Rhaponticoides L. (5: 460)

e R. aytachii** Bağcı, Doğu & Dinç, in Nord. J. Bot. 27: 479-482 (2009).

(Doğu et al., 2009)

Type: Turkey, **C4** Karaman: Sariveliler, Dumlugöze Village, deprived *Quercus* forest, opening, 1000-1050 m a.s.l., 20.vi.2007, S.Doğu 1398, Bağcı & Dinç (holo. KNYA, iso. GAZI, Hb. Yıldırımlı).

Scorzonera L. (5: 632)

***S. ketzkhovelii** Grossh., in Fl. Kavk. 4: 240 (1934).

(Hamzaoğlu et al., 2010b)

Turkey, **A8** Artvin: Yusufeli, between Yaylalar and Körahmet, around transmitting station, 2050 m, 21.viii.2008, Hamzaoğlu 5363 & Aksoy (ANK, BOZOK Hb., ERCİYES Hb, GAZI).

***S. renzii** Rech. f., in Fl Iranica. 122: 48 (1977).

(Doğan & Duran, 2010)

E. Anatolia. **B9** Bitlis: Tatvan, Sapur village, Karz mountain, 1965 m, 38°26.154'N, 042°24.413'E, 06.vii.2009, A.Duran 8646 & B.Doğan (MR, GAZI, ANK, HUB).

Senecio L. (5: 145)

***S. grandidentatus** Ledep., in Fl. Ross. 2: 636 (1845).

(Budak et al., 2009)

N.E. Anatolia. **A10** Ardahan: Posof, between Posof and Yurtbekler village, 1200 m, 05.x.2008, Başkent

& Tekin (KATO) 7690); ibid., 1300 m, 23.viii.2008, Hamzaoğlu 5368, Budak & Aksoy (BOZOK Hb.).

**S. doriiformis* DC. subsp. *doriiformis*, in Prodr. 6: 352 (1838).

(Budak et al., 2009)

E. Anatolia. **B9** Van: between Van and Çatak, near Ganispi waterfall, 1750 m, 01.vii.2006, Hamzaoğlu 4113, Aksoy & Budak (BOZOK Hb.); Van: from Çatak to Van 8 km, 1710 m, 22.vii.2008, Budak 2297, Hamzaoğlu & Aksoy (BOZOK Hb.); Van: Gevaş, Artos Mountain, c. 2135 m, 14.vii.1954, P.H.Davis 22690 & Polunin (ANK); Van: Çatak, Dalbastı village, Şeytanderesi, 1350 m, 20.vii.2002, Bani 1255 (GAZI); Van: south of Büyük Erek Mountain, 3100 m, 03.viii.1986, Özçelik 1101 (VANF 736).

***S. inops* Boiss. & Balansa subsp. *karamanicus* Hamzaoğlu & Budak, in Turk. J. Bot. 33: 285-289 (2009).

(Hamzaoğlu et al., 2009)

Type: Turkey, **C4** Karaman: Başyayla-Taşkent arası, 7-9 km, 1810 m, taşlı yamaçlar, 21.vi.2006, Hamzaoğlu, Budak & Aksoy 2066 (holo. BOZOK Hb., iso. ANK, BOZOK Hb., ERCIYES Hb., GAZI, HUB).

***S. munzurdaglarensis* Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Tunceli: Ovacık, Munzur dağları, Kepir tepesi, Bellihasan çukuruğu sırtları, 2500-2700 m, 29.vii.1979, §. Yıldırımlı 2300 (holo. Hb. Yıldırımlı, iso. BOZOK Hb., HUB).

Taraxacum Wiggers (5: 788)

***T. salsitatis* Kirschner, Stepanek Et Yıldırımlı, in Folia Geobot. 33: 391-414 (1998).

(Kirschner & Stepanek, 1998)

Type: Turkey, Anatolia merid., montes Taurus, in declivi sicco petroso in pylis Kiliki prope pagum Topbaksar in valle fl. Pozanti, solo vulcanico, alt. ca. 900 m s.m. (1988 Krisa, cult. no. JS 4207, PRA, no. det. 8840); IT: ibidem; PT: Turcia, Anatolia centr., in salso prope pagum Sasgeqit, ca. 10 km situ bor.-occid, ab oppido Ereğli, alt. ca. 1100 m s.m. (1988 Krisa, cult. no. JS 4203, PRA, no. det. 8839); Specimen ceterum: ex semin. *Haertu Dagh* (s.d. Haussknecht JE, no. det. 9187).

e** *T. tuzgoluensis* Yıld. & A.Doğru-Koca, in Ot Sistematisk Botanik Dergisi 12(2): 1-12 (2005).

(Yıldırımlı & Doğru-Koca, 2005)

Type: Turkey, **B4** Aksaray: Eskil, from Eskil to edges of Tuzgölü 5 km, halophytic steppe, 914 m, 24.ix.2006, §. Yıldırımlı 32237 & A.Doğru-Koca (holo. Hb. Yıldırımlı, iso. GAZI, HUB).

e** *T. tuzgoluensis* Yıld. & A.Doğru-Koca var. *eskilensis* Yıld. & A.Doğru-Koca, in Ot Sistematisk Botanik Dergisi 12(2): 1-12 (2005).

(Yıldırımlı & Doğru-Koca, 2005)

Type: Turkey, **B4** Aksaray: Eskil, from Eskil to edges of Tuzgölü 5 km, halophytic steppe, 914 m, 24.ix.2006, §. Yıldırımlı 32239 & A.Doğru-Koca (holo. Hb. Yıldırımlı, iso. HUB).

Tripleurospermum Schultz Bip. (5: 295)

e***T. griersonii* Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Tunceli: Ovacık, Munzur suyu çevresi, 1200 m, 06.vii.1980, §. Yıldırımlı 3421 (holo. Hb. Yıldırımlı, iso. HUB).

Paratype: Turkey, **B7** Tunceli: Ovacık, Munzur suyu kıyısı, çayırlık 1200 m, 18.vi.1979, §. Yıldırımlı 1985 (Hb. Yıldırımlı, HUB).

***T. ziganaense* Inceer & Hay.-Ayaz, in Bot. J. Linn. Soc. 158: 696-700 (2008).

(Inceer & Hayirlioglu-Ayaz, 2008)

Type: Turkey, **A7** Gümüşhane: Zigana Dağı, between Zigana pass and Torul, 1200-1300 m a.s.l., 6.vii.2006, Inceer 216 (holo. KTUB, iso. GAZI).

BORAGINACEAE (6: 237)

Anchusa L. (6: 388)

e***A. konyaense* Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C4** Konya: Selçuk evrenkenti, Keykubat yerleşkesi, konukevi üstü, dikim sedir koruluğu, 1100-1150 m, 18.x.2008, §. Yıldırımlı 35335 (holo. Hb. Yıldırımlı, iso. HUB, KNYA).

***A. konyaense* Yıld. var. *selcukense* Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C4** Konya: Selçuk evrenkenti, Keykubat yerleşkesi, konukevi üstü, dikim sedir koruluğu, 1100-1150 m, 18.x.2008, §. Yıldırımlı 35336 (holo. Hb. Yıldırımlı, iso. EGE).

CAMPANULACEAE (6: 2)**Campanula** L. (6: 2)

eC. ovacikensis** Yild. subsp. **ovacikensis**, in Ot Sistematis Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Tunceli: Ovacık, Munzur dağları, Karagöl kepezi (vadisi), Dilap yaylası, 1750-2250 m, 07.vii.1980, §. Yıldırımlı 3556 (holo. Hb. Yıldırımlı, iso. HUB).

Paratypes: Turkey, **B7** Tunceli: Ovacık, Munzur dağları, Kepir tepesi, Bellihasan çukurluğu sırtları, 2500-2700 m, 29.vii.1979, §. Yıldırımlı 2297 (Hb. Yıldırımlı); Ovacık, Munzur dağları, Karagöl kepezi, Dilap deresi başı, 1600 m, 07.vii.1980, §. Yıldırımlı 3448 (HUB); Ovacık, Munzur dağları, Dilap yaylası, 2250-2500 m, 08.vii.1980, §. Yıldırımlı 3665 (Hb. Yıldırımlı).

C. ovacikensis Yild. subsp. **capitellata** (Dambolt) Yild., in Ot Sistematis Botanik Dergisi 17(2): 1-114 (2010). comb. et stat. nov.

(Yıldırımlı, 2010)

Basionym: *Campanula ptarmicifolia* Lam. var. *capitellata* Dambolt

Type: Turkey, B7 Malatya: In monte Göl da., Bornmüller 1893: 3426 (holo. B, iso. E, G, LD, W, WU).

CHENOPodiACEAE (2: 294)**Noaea** Moq. (2: 335)

***N. major** Bunge, in Mem. Acad. Imp. Sc. Petersb. 7, ser 4. 11: 27 (1862).

(Yıldırımlı, 2010)

Turkey. **B3** Eskişehir: Sivrihisar, Aşağıkepen köyü yakını, jipsli yerler, 950-1000 m, 27.ix.2008, §. Yıldırımlı 35320 (BOZOK Hb, DUF, EGE, GAZI, Hb. Yıldırımlı, HUB).

Salsola L. (2: 328)

eS. turcica** Yild., in Ot Sistematis Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey. **B3** Eskişehir: Sivrihisar, Aşağıkepen köyü yakını, jipsli yerler, 950-1000 m, 27.ix.2008, §. Yıldırımlı 35321 (holo. Yıldırımlı, iso. ANK, DUF, HUB).

CUCURBITACEAE (4: 200)**Bryonia** L. (4: 204)

eB. flexuosa** Yild., in Ot Sistematis Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Tunceli: Ovacık, Karagöl kepezi (vadisi), kayalik ve taşlık alanlar, 1350 m, 30.vi.1983, §. Yıldırımlı 5488 (holo. Hb. Yıldırımlı, iso. HUB).

CRASSULACEAE (4: 209)**Prometheum** (A. Berger) H. Ohba (11: 121)

e P. chrysanthum** (Boiss.) 't Hart subsp. **uludaghense** Kaynak, Yılmaz & Daşkın, in Ann. Bot. Fenn. 46: 456-458 (2009).

(Daşkın et al., 2009a)

Type: Turkey, **A2** Bursa: Uludağ, Soğukpinar-Karaıslah road, 1 km to Soğukpinar, 40°01'N, 29°07'E, 890 m, 24.vii.2005, *Kaynak* 28745 & *Yılmaz* (holo. BULU).

Sempervivum L. (4: 244)

S. armenum Boiss. & Huet subsp. **armenum**, in Boiss., Diagn Ser. 2(2): 60 (1856).

(Karaer & Celep, 2010)

Type: Turkey, Inter Bayburt et Erzurum, in valle Kassaklu, Agugust 1853, A. Huet (iso. K)

S. armenum Boiss. & Huet subsp. **insigne** (Muirhead) F. Karaer, in Bangladesh J. Bot. 39(1): 1103-105 (2010). stat. nov.

(Karaer & Celep, 2010)

Type: Turkey, Ankara: near Kızılcahamam, c. 1200 m, 22.vii.1956, *McNeill* 284 (holo. E, cult. E)

S. ekimii F. Karaer, in Ann. Bot. Fennici 45: 229-232 (2008). nom. et stat. nov.

(Karaer & Celep, 2008)

Type: Turkey, **A7** Giresun: Dereli, Tamdere to İkisu, around tunnel, granite rocks, 1100-1250 m, F.Karaer 10125-10126 (OMUB); **A8** Rize: Cimil Da.,

1934, *Ballas* (K); **A8** Rize: Çamlıhemşin, between Yukarı Kavrun plateau and Mezevit, alpine meadows, granite area, 2150-2750 m, A.Güner 2897, (HUB); **A8** Rize: Çamlıhemşin, Yukarı Kavrun plateau, between Pornag and Kaçkar M., alpine steppe, granite area, 2750-3010 m, A.Güner 2859 (HUB); **A8** Rize: İkizdere, between Gölyayla and Telfeniş, alpine meadows, 2400 m, A.Güner 6646 (HUB); **A8** Rize: İkizdere, between Gölyayla and Cihantepe, stony place, 2500-2800 m, A.Güner 6578 (HUB); **A8** Rize: Çamlıhemşin, Amlakit plateau, Kaygut to Çovinovit, granite area, alpine steppe, 2200-2750 m, A.Güner 1062 (HUB); **A8** Rize: Çamlıhemşin, above Ayder plateau, Yukarı Kavrun, F.Karaer 9614-9615 (OMUB).

**S. sosnowskyi* Ter-Chatsch., in Zametki Sist. Geogr. Rast. 13: 17 (1947).

(Karaer et. al, 2010)

N. E. Anatolia, **A9** Artvin: Artvin to Şavşat, Yanıklı village, high plateau, alpine, 16.vii.2000, 1700 m, F.Karaer 8681-8683 (OMUB); ibid., 11.viii.2000, 2100 m, F.Karaer 8844-8857 (OMUB); ibid. 30.vii.2002, 2200-2400 m, F.Karaer 9594-9603 (OMUB).

CRUCIFERAE (1: 248)

Alyssum L. (1: 362)

eA. misirdalianum** Orcan & Binzet, in Novon 19: 494-496 (2009).

(Orcan & Binzet, 2009)

Type: Turkey, **C5** Mersin Prov.: Fındıkpinarı, Deve Koyağı, 1800 m, stony slopes, 30.vi.2002, N.Orcan 500 (holo. ANK, iso. GAZI, MO).

Brassica L. (1: 263)

eB. beytepeensis** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B4** Ankara: Beytepe, Maslak kepezi (vadisi), yetiştirme karaçam ormanı, 1000 m, 22.vii.2010, Ş.Yıldırımlı 37300 (holo. Hb. Yıldırımlı, iso. HUB).

Cardamine L. (1: 438)

***C. flexuosa** With., in Arr. Br. Pl. ed. 3, 3: 578 (1796).

(Doğru-Koca & Yıldırımlı, 2004)

N.W. Anatolia. **A3** Düzce: Akçakoca, entrance of Deredibi köyü, stream banks, 40-75 m, 10.v.2003, A.Doğru-Koca 2246 (HUB, Hb. YILDIRIMLI).

Crambe L. (1: 272)

***C. hispanica** L., in Sp. Pl. 2: 671 (1753).

(Yıldıztugay et al., 2009)

S. Anatolia. **C4** Mersin: Anamur district, Anamurium Antique City, stony place and roadside, 0-5 m, 17.v.2007, E.Yıldıztugay no:1230. The plant specimens are deposited in KNYA Herbarium.

Descurainia Webb & Berth. (1: 486)

D. sophia (L.) Webb ex Prantl subsp. **bartschii** (O.E.Schulz) C.Vural, in Ann. Bot. Fenn. 46: 65-66 (2009). comb. & stat. nov.

(Vural, 2009)

Type: Turkey, Kleinasien, Erdschias, auf dem Gipfel Ali Dag, 1700 m, 4.v.1930 Bartsch n.4. *Descurainia bartschii* O.E.Schulz, Notizblatt des Botanischen Gartens und Museums zu Berlin-Dahlem, 11: 391, 1932.

Draba L. (1: 413)

eD. anatolica** A.Duran & Dinç, in Novon 18:464-468 (2008).

(Duran et al., 2008)

Type: Turkey, Kastamonu: Ilgaz Mtn., Büyük Hacettepe, rock crevices, 1750 m, 10.vii.2006, A.Duran 7372 & M.Dinç (holo. KNYA, iso. GAZI, HUB).

e D. orientalis** Karabacak & Behçet, in Ann. Bot. Fenn. 46: 447-450 (2009).

(Karabacak & Behçet, 2009)

Type: Turkey, **B9** East Anatolia region, Van province: Erciş district, north-east of Aksakal village, Kırdekar hill, 2746 m, 39°11'650"N, 43°25'930"E, rocky crevices, 8.vi.2007, O.Karabacak 6131 (holo. VANF).

Paratypes: Turkey, East Anatolia region, Van province: Erciş district, north-east of Aksakal village, Kırdekar hill, 2692 m, 39°11'938"N, 43°25'667"E, rocky crevices, 28.v.2007, O.Karabacak 6081 (VANF, in flower); ibid., 2715 m, 39°11'648"N, 43°25'883"E, rocky crevices, 29.vii.2007, O.Karabacak 7339 (VANF, in fruit).

Erysimum L. (1: 466)

* **E. aucheranum** J. Gay in Erys. Nov. Diagn., 9 (1842).

(Yıldırımlı, 2008c)

E. Anatolia. **C9** Hakkari: Berçalan yaylası, 2500 m, 21.vii.1977, M.Koyuncu & M.Güneş s.n. (AEF, Hb. Yıldırımlı); **C10** Hakkari: Sat dağı, between Varegöz and Satgölü, pastures, 2300 m, 27.vi.1966, P.H.Davis 45600 (HUB).

e** **E. bagcii** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B10** İğdır: Aralık, Topraksu 1 numaralı deneme alanının güneyi, 890 m, 07.vi.1985, A.Tatlı & A.Istanbulluoğlu 7539 (holo. Hb. Yıldırımlı, iso. KNYA).

e** **E. baytopiae** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B7** Tunceli: Ovacık, Dilap yaylası ile Koyungöl köyü arası, Munzur dağları, kayalık ve taşlık, 1250-2250 m, 30.vi.1983, Ş.Yıldırımlı 3571 (holo. Hb. Yıldırımlı, iso. HUB).

e** **E. baytopiae** Yild. var. **asliae** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80, (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B7** Tunceli: Ovacık, Karagöl vadisi, Munzur dağları, kayalık ve taşlık, 1350 m, 30.vi.1983, Ş.Yıldırımlı 5494 (holo. Hb. Yıldırımlı, iso. HUB).

* **E. boissieri** Polatschek, in Phyton (Horn) 34(2): 200 (1994).

(Yıldırımlı, 2008c)

E. Anatolia. **B9** Bitlis: Tatvan, Nemrut dağı, Soğukgöl, titrekkavak ve huş ormanı, kayalık, çayırlık, 2200-2300 m, 14.vi.2003, Ş.Yıldırımlı 28916 (Hb. Yıldırımlı, HUB).

E. bulgaricum (Velen.) Ancev & Polatschek, in Ann. Naturh. Mus (Wien) 104B: 691-698 (2003). comb. et stat. nov.

(Ancev & Polatschek, 2003)

Type: European Turkey, Edirne: Argel 9 km NNE Uzunköprü, 200 m, 27.v.1988, F.Spetta [LI]; - Ca. 10

km SE Edirne in Richtung Iskenderköy, 20.vi.1981, A.Polatschek [W]; Edirne, Iskenderköy, 10 km ESE Edirne, trockener Steppenrasen, 5.v.1968-8.vi.1968, K.Bauer, K.Fitz, F.Spitzenberger [W]; Kirkclareli, oberhalb Poyrali, Richtung Demirköy, 31.v.1988, F.Spetta [LI].

e** **E. dincii** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **C5** Karaman: Ayrancı, Bolkar dağları etekleri, Çatköy üstü, bozkır, 1870 m, 23.vi.2007, 37°10'908"N, E 33°55'903"E, M.Dinç 2969 & Y.Bağcı (holo. Hb. Yıldırımlı, iso. HUB, KNYA).

e** **E. dirmilense** Yild. & Dinç, in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **C2** Burdur: Altinyayla (Dirmil), Oyüklu tepe, bayır, ardış-karaardış-ilme karışık ormanı, kuru dere yatağı, 1300-1700 m, 03.vi.2001, Ş.Yıldırımlı 26711 & M.Dinç (holo. Hb. Yıldırımlı, iso. ANK, B, EGE, G, GAZI, HUB, ISTE, K, KNYA, UPA, VANF, W, Hb. PAROLLY).

e** **E. duranii** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B6** Sivas: Taşlıdere, Kayseri yolu, 12 km, Güllüce köyü, tarla kenarı, 1250 m, 21.ix.1985, Ş.Civelek 1094 (holo. Hb. Yıldırımlı, iso. GAZI, HUB).

Paratype: Turkey, **A4** Ankara: Kızılcahamam, Soğuksu Milli Parkı, tenis alanı, 1500 m, 15.vii.1990, Ö.Eyüboğlu 1812 (Hb. Yıldırımlı); **B7** Elazığ: Mollakendi-Hazargölü arası, bozkır, 1450-1550 m, 10.viii.1995, A.A.Dönmez 4865 & H.Aslantaş (HUB). **B7** Malatya: Pötürge, Kubbe dağı, vali çeşmesi çevresi, 1000 m, 11.vii.1986, M.Koyuncu 7362 & Y.Altan (AEF, Hb. Yıldırımlı).

e** **E. euphraticum** Polatschek, in Ann. Naturh. Mus. (Wien) 109B: 147-165 (2008).

(Polatschek, 2008)

Type: Turkey, Birecik: 3 km N Birecik, 500 m, Steppenhögel; 28.iv.1980, F.Sorger 80-7-29 (W 2004-00072).

e E. guneri** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B9** Bitlis: Above Adilcevaz, Süphan dağı, barren screes, dry rocky ridge, flowers yellow (ascends to 4300 m), 13,500 ft (4115 m), 26.viii.1954, *P.H.Davis* 24657 & *O.Polunin* (holo. ANK, iso. Hb. Yıldırımlı).

Paratype: Turkey, **B5** Kayseri: Erciyes dağı, 2410 m, 14.vii.1973, *R.Cetik* 3250 (Hb. Yıldırımlı).

* **E. ibericum** (Adams) DC. in Reg. Veg. Syst. Nat., 2: 498 (1821).

(Yıldırımlı, 2008c)

N.E. Anatolia. **A9** Ardahan: Çıldır, Çıldır gölü batı yakası, bayır, 2050 m, 07.vi.1998, §.Yıldırımlı 22212, fl. (GAZI, HUB, Hb. Yıldırımlı); Çıldır, çay boyunca, 1850 m, 06.vi.1998, §.Yıldırımlı 22134, fl. (Hb. Yıldırımlı); Kars: Susuz, Erdağ güneyi, bozkır, tarla, 1800 m, 11.vii.1998, *H.Ocakverdi* & *B.Kaya* 1222, fr. (Hb. Yıldırımlı).

e E. ikizdereense** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **A8** Rize: Başköy (Cimil), Cermaniman yaylası, Kurusulak çevresi, kayalık, 23.vii.1984, 3000-3150 m, *A.Güner* 6037 & *M.Vural* (holo. HUB).

Paratype: Turkey, **A8** Rize: İkizdere, Anzer köyü üstü, sarp kayalık yamaçlar, 2100-2150 m, 11.vii.1984, *A.Güner* 5835 & *M.Vural* (HUB, Hb. Yıldırımlı); Çamlıhemşin, Ortayahyla köyü, Verçenik yaylası, Puşut çevresi, çarşak, 3000 m, 12.viii.1985, *M.Vural* 3679 (GAZI); Çamlıhemşin, Başköy, Taligor yaylası, çayır, çağıl, 2900-3120 m, 16.viii.1993, *A.Güner* 10822, *A.A.Dönmez* & *M.Öztekin* (Hb. Yıldırımlı).

e E. jacquemoudii** Yild., in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **A4** Çankırı: Şabanözü, Eldivan dağı, Eldivan'a doğru, Akkaya mevkisi, 1600 m, 14.vi.1983, §.Yıldırımlı 5228 (holo. Hb. Yıldırımlı, iso. HUB).

e E. kartalkayaense** Yild. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **A3** Bolu: Aladağ, Kartalkaya, hilly, dry rocky igneous slopes, 2100-2200 m, 12.vii.1962, *P.H.Davis* 37341 & *M.J.E.Coode* (holo. HUB, iso. Hb. Yıldırımlı).

e E. ketenoglui** Yild. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B5** Kırşehir: Mucur, Kurugöl köyü, devlet yolu kuyusu, ekin tarlası içi, 1200 m, 21.v.1989, §.Yıldırımlı 12010 (holo. Hb. YILDIRIMLI, iso. HUB).

Paratype: Turkey, **B5** Kırşehir: Mucur, Kurugöl köyünden Ayrı dağlarına doğru, ekin tarlası içi, 1250-1300 m, 21.v.1989, §.Yıldırımlı 12156 (Hb. YILDIRIMLI; ANK).

e E. kostkae** Polatschek, in Ann. Naturh. Mus. (Wien) 109B: 147-165 (2008).

(Polatschek, 2008)

Type: Turkey, Adiyaman: Nemrut Dağ, 2140 m, 8.vi.1973, *F.Sorger* 73-29-27 (holo. W 2004-00073, iso. E).

e E. munzuriense** Polatschek, in Ann. Naturh. Mus. (Wien) 109B: 147-165 (2008).

(Polatschek, 2008)

Type: Turkey, Erzurum: Mercan Dağları, Munzur Silsilesi Tayran Dağ, 2500 m, NW and W slopes, 15.vii.1967, *Albury, Cheese & Watson* 3358 (holo. E, iso. W 1978-12905, K).

e E. pulchellum** (Willd.) J. Gay subsp. **siehanum** Yild. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **C5** Mersin: Taurus bei Mersin, Siehe 91 (holo. ANK, iso. Hb. YILDIRIMLI).

e E. repandum** L. var. **linnaeanum** Yild. & A. Doğru-Koca, in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Erysimum [Hesperis - deleted] repandum Hesperis 6 Mill. Dict. Ard[uino] 30. (Lectotype designated here: LINN 837.4, Herb. Linn.). Pinned with sheet LINN 837.4

Paratype: Turkey, **B4** Kırıkkale: Keskin'den Akpinar'a, yosunlu ve likenli taşlar arası, 1100-1200 m, 14.iv.2006, 36575531E, 4370381N, *Ş.Yıldırımlı* 30691 & *A.Doğru-Koca* (Hb. Yıldırımlı, HUB); **C3** Burdur: Ağlasun, Gürlek, Kızılbel-Bodrum-Ballıkkaya-Havacılıvalı kaya-Pencereli ölü, Domuzkırığı-Kıralın sarayı-Eski Gavur hamamı-Araplar-Gölcük- Hökkem Kayası- Ardıç pınarı-Belibaşı-Kocakır-Hırsız deresi-İrben pınarı-Şalbalı-Dükkük kaya mevkileri, bahçelikler, 1200-1500 m, 20.iv.1987, *Ş.Yıldırımlı* 9518 (Hb. Yıldırımlı); **C3** Isparta: Şarkikaraağaç, Kızıldağ Milli Parkı, Göztepe dağı etekleri, 1200 m, 23.iv.1995, *B.Mutlu* 1284 (HUB); **C4** Konya: Ermene, Göktepe kasabası, Dumlugöze köyü, Gavur alanı mevkisi, 1200 m, 08.iv.1984, *H.Süm慅ül* 2731 (Hb. Yıldırımlı, HUB).

e E. rizeense** Yıld. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **A8** Rize: Çamlıhemşin, Elevit, Haçevanak aşısı, erozyonlu yamaçlar, 2950-3000 m, 25.viii.1986, *M.Vural* 4285 (holo. Hb. Yıldırımlı; iso. HUB).

e E. serpentinicum** Polatschek, in Ann. Naturh. Mus. (Wien) 109B: 147-165 (2008).

(Polatschek, 2008)

Type: Turkey, **C1** Muğla: 28 km W Marmaris, 150 m, vulkanisches Gestein, 10.iv.1982, *F.Sorger & Buchner* Nr. 82-19A-1 (holo. W 1982-11159, iso. W 2004-00081).

e E. sivasicum** Yıld. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B6** Sivas: Taşlıdere, Kayseri yolu 15. km, batı yamaçlar, jipizli yerler, 1500 m, 10.vii.1985, *Ş.Civelek* 1982 (holo. ANK).

* **E. subulatum** J. Gay in Erys., 8 (1842).

(Yıldırımlı, 2008c)

E. Anatolia. **B10** İğdır: Between İğdır and Orkof, 1150 m, *H.Demiriz* 3422 (E); **B10** İğdır: Tuzluca çıkış, kırmızı topraklı yerler, bayır, 1000 m, 31.v.1998, *Ş.Yıldırımlı* 21890 & *A.Polat* (Hb. Yıldırımlı).

e E. thyrsoideum** Boiss. subsp. *ekicii* Yıld. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B5** Nevşehir: Zelve, Akdağ, volkanik tuf, erozyonlu sarp yamaçlar, 1260 m, 19.vi.1989, *M.Vural* 5273 & ark. (holo. GAZI, iso. Hb. Yıldırımlı).

Paratype: Turkey, **B5** Nevşehir: Zelve, Akdağ, volkanik tuf, erozyonlu sarp yamaçlar, 1260 m, 19.vi.1989, *M.Vural* 5259 (HUB).

e E. tuteliae** Yıld. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B6** Kahramanmaraş: Göksun, Berit dağı, kuzey yamaç, 2000 m, 23.vii.1977, *B.Yıldız* 1333 (holo. HUB, iso. Hb. Yıldırımlı).

e E. tuteliae** Yıld. subsp. *doganii* Yıld. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **B1** Manisa: Sipil dağı, At alanı güneyi, 1200-1300 m, 24.v.1983, *H.Duman* 1061 (holo. GAZI).

* **E. verrucosum** Boiss. & Gaill. in Boiss. Diagn. Ser. 2, 6: 12-13 (1859).

(Yıldırımlı, 2008c)

C8 Mardin: Between Mardin and Kızıltepe, calcareous rocky slopes, steppe, 900-950 m, 23.vi.1996, *Ş.Yıldırımlı* 19554 (Hb. Yıldırımlı; HUB).

e E. vuralii** Yıld. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **C2** Muğla: Köyceğiz, Hamitköy, Hamitköy-Ekincik arası, kuzey yamaç, kızılçam ormanı, başkalaşımı taşlı yerler, 75 m, 12.iv.2008, *Ş.Yıldırımlı* 34600 & *Görkem Yıldırımlı* (holo. Hb. Yıldırımlı, iso. ANK, B, EGE, G, GAZI, HUB, ISTE, K, KNYA, UPA, VANF, W, Hb. PAROLLY).

Paratype: Turkey, **C2** Muğla: Köyceğiz, Hamitköy, Domuzdireği tepesi, metamorfik kuzey yamaçlar, yanın alanı, 20-50 m, 17.iii.1991, *A.Güner* 8198, *H.Duman* & *H.Şağban* (HUB, Hb. Yıldırımlı); ibid., 15.iv.1991, *A.Güner* 8652, *M.Vural*, *H.Duman*, *A.A.Dönmez* & *B.Mutlu* (GAZI); Fethiye, Dalaman, between kışık dere and Dalaman çayı, serpentine rocks, 100 m, 02.iv.1956, *P.H.Davis* 25444 & *O.Polunin* (ANK).

e E. yaltirikii** Yild. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **A4** Çankırı: Işık dağı geçidi, bozkır, 1600 m, 06.v.1990, Z.Aytaç 3209 (holo. GAZI).

e E. yildirimlii** Dinç, in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **A9** Kars: Merkezkaraçoban (Haranvartan) köyü, Samavat dağı, Katırıyyen'den İkiyaka tepesine, çayır, kayalık ve taşlık, dere ve tepe, 2100-2500 m, 23.v.1998, §.Yıldırımlı 21358 (holo. Hb. Yıldırımlı, iso. HUB).

e E. zeybekianum** Yild. in Ot Sistematisk Botanik Dergisi 15(2): 1-80 (2008).

(Yıldırımlı, 2008c)

Type: Turkey, **A8** Artvin: Artvin'den Erzurum'a 15. km, Çoruh vadisi, kayalık ve taşlık, 700 m, 01.vi.1984, §.Yıldırımlı 6395 (holo. Hb. Yıldırımlı, iso. EGE, HUB).

Paratype: Turkey, **A9** Erzurum: Şenkaya, Göle'den Olur'a 22. km, kayalıklar, 1500-1600 m, 27.vi.1998, §.Yıldırımlı 22838 (Hb. Yıldırımlı); **A9** Erzurum: Şenkaya, Artvin'e doğru, Ormanağzı deresinden yukarıya, sağ yamaçlar, çarşak, 1000 m, 27.vi.1998, §.Yıldırımlı 22890 (GAZI, Hb. Yıldırımlı); **A9** Kars: Digor, Halaklışlak üstü, kayalık ve taşlık, 1300-1350 m, 23.vi.1998, §.Yıldırımlı 22349 (ANK, Hb. Yıldırımlı); **A9** Kars: Karakurt, Kars'tan 87. km, Horasan'dan 35. km, Şeytangeçmez deresi boyunca, alkali yamaçlar, 1550-1750 m, 01.vii.1998, §.Yıldırımlı 22981 (Hb. Yıldırımlı); **A9** Kars: Akyaka, Şahnalar köyü, ekin tarlası yanı, kayalıklar, 1550-1650 m, 08.vii.1998, §.Yıldırımlı 23696 (Hb. Yıldırımlı).

Hesperis L. (1: 452)

eH. anatolica** A. Duran, in Novon 18: 453-463 (2008).

(Duran, 2008)

Type: Turkey, **C5** Adana: Pozantı, betw. Hamidiye and Karakuz (Çamlıbel), 4 km, serpentine pebbly slopes, open *Pinus* forest, scrub, 1400 m, 37°32.30'N, 34°00.38'E, 16.v.1999, A.Duran 4498 (holo. KNYA,

iso. ANK, E, GAZI, HUB).

eH. hamzaoglu** A. Duran, in Novon 18: 453-463 (2008).

(Duran, 2008)

Type: Turkey, **C5** Osmaniye: Amanos Mtn., Zorkun, Keldazi hill, 1750 m, 36°58.95'N, 36°24.22'E, 20.v.2001, A.Duran 5694 & Hamzaoğlu (holo. KNYA, iso. ANK, E, GAZI, HUB).

e H. ozcelikii** A. Duran, in Ann. Bot. Fenn. 46: 577-584.

(Duran, 2009)

Type: Turkey, **C3** Isparta: Sütçüler, 17 km from Ayvalıpınar to Kesme, 1025 m, 37°36.53'N, 31°10.26'E, 11.vi.1999, A.Duran 4636, H.Özçelik & Sağiroğlu (holo. KNYA, iso. GAZI, ANK, HUB).

Paratype: Turkey, **C3** Isparta: Sütçüler, 17 km from Ayvalıpınar to Kesme, 1025 m, 37°36.53'N, 31°10.26'E, 4.viii.1999, A.Duran 4973 (KNYA), 9.vi.2000, A.Duran 5262 & H.Özçelik (KNYA); Isparta: Sütçüler, between Ayvalıpınar and Kesme, 130 m, 11.v.1997, H.Özçelik 7714 (SDÜH).

eH. varolii** A. Duran, in Ot Sistematisk Botanik Dergisi 12(2): 19-30 (2005).

(Duran, 2005)

Type: Turkey, **C2** Muğla: Gökova- Marmaris yolu, Marmaris'in göründüğü tepeden sola, 5.km, 27.iv.2002, 500-600 m, 36°53.76'N, 28°17.95'E, A.Duran 5847 & Varol (holo. KNYA, iso. ANK, E, GAZI, HUB, Hb. Yıldırımlı).

Malcolmia R. Br. (1: 460)

***M. intermedia** C. A. Mey., in Verz. Pflanz. Cauc.: 186 (1831).

(Ünal & Özgökçe, 2008)

N.E. Anatolia. **A9** Kars: south-east of Halaklışlak village, around Aras River, slightly saline, sandy banks, 06.v.2006, 974 m, 40°07'388" N, 043°37'752"E, M.Ünal & F.Özgökçe 9182 (in flower), 9294 (in fruit).

■ **Pseudosempervivum** (Boiss.) Grossh.

P. amanum (Contandr. & Quézel) Al-Shehbaz, Mutlu et Dönmez, in Turk. J. Bot. 31: 327-336 (2007). comb. nov.

(Al-Shehbaz et al., 2007)

Type: Turkey, Amanus, 15 km SE Osmaniye, 2000 m, 30.vi.1973, P.Quézel & J.Contandriopoulos 73-434 (holo. MARS).

Basionym: *Cochlearia amana* Contandr. & Quézel, Bull. Soc. Bot. Fr. 123: 418. 1976.

P. gurulkanii (Yild.) Mutlu & Al-Shehbaz & Dönmez, in Turk. J. Bot. 31: 327-336 (2007). comb. nov.

(Al-Shehbaz et al., 2007)

Type: Turkey, C9 Şırnak: Foot of Namaz Mountain, from Yaylabaşı via limekiln to centrum, steppe, rocky quercetum (*Q. brantii* Lindley) places, 1700-1900 m, 21.vi.2005, Ş.Yıldırımlı 30169 (holo. Hb. Yıldırımlı, iso. HUB).

Basionym: *Cochlearia gurulkanii* Yild., Ot Sistematisk Botanik Dergisi, 12(1): 1-8 2005.

Rorippa Scop. (1: 431)

e** **R. behcetii** İlçim, in Ann. Bot. Fenn. 45: 485-487 (2008).

(İlçim, 2008)

Type: Turkey, C6 Kahramanmaraş: Türkoğlu, Gavurgölü (marsh) Bataklığı, 400 m, 3.iv.2005, A.İlçim 1617 (holo. KSUH, iso. VANF, Hb. Yıldırımlı).

e** **R. edirnense** Yild., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, A1 Edirne: Meriç ırmağı kıyısı, Tunca ırmağıyla birleştiği yere dek, kumullar, tarla kıyıları, 155 m, 30.v.2010, Ş.Yıldırımlı 36906 & G.Yıldırımlı (holo. Hb. Yıldırımlı, iso. EDTU, HUB).

Paratype: Turkey, A1 Edirne: Meriç ırmağı kıyısı, karakavak ormanı, kumlu yerler, 130 m, 30.v.2010, Ş.Yıldırımlı 36876 & G.Yıldırımlı (Hb. Yıldırımlı, GAZI, KNYA).

ELAEAGNACEAE (7: 532)

Elaeagnus L. (7: 533)

e** **E. angustifolia** L. var. **turcicus** Yild., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, B5 Nevşehir: Avanos, Kızılırmak kıyısı, harla arası, y. 1000 m, 28.v.1978, Ş.Yıldırımlı 1041 (holo. Hb. Yıldırımlı, iso. HUB).

ERICACEAE (6: 89)

Vaccinium L. (6: 100)

e** **V. myrtillus** L. var. **artvinense** Akpulat & Eminagaoglu, in Annals of Agrarian Science 8(1): 144-146 (2010).

(Eminağaoğlu & Akpulat, 2010)

Type: Turkey, A9 Artvin: Samsat, Karagöl-Sahara National Park, subalpine vegetation, 15.vii.2000, 2100 m, 41°13'17"N, 42°29'18" E, ÖE 2279 (holo. CUFH, iso. ACUH, ISTE).

EUPHORBIACEAE (7: 566)

■ **Acalypha** L.

***A. australis** L., in Sp. Pl. 2: 1004. 1753.

(Duman & Terzioğlu, 2009)

N.E. Anatolia. A8 Trabzon: Of (Town), Balıca village, Solaklı stream bed, 9 km south of the Black Sea, 25.ix.2007, 25m, HD 9900; Kumludere köyü, 06.ix.2008, 160 m, KATO 16741; A7 Trabzon: Karadeniz Technical University, Kanuni Campus, 17.ix.2008, 60 m, KATO 16742.

GERANIACEAE (2: 450)

Erodium L'Herit (2: 475)

e** **E. aytacii** Yild. & A.Doğru-Koca, in Ot Sistematisk Botanik Dergisi 11(1): 1-6 (2004).

(Yıldırımlı & Doğru-Koca, 2004)

Type: Turkey, B6 Malatya: From Gürün to Darende, 15 km before Darende, hilly steppe, calcareous stony slopes, 1400-1500 m, 37366614E, 4274484N, 16.iv.2006, Ş.Yıldırımlı 30767 & A.Doğru-Koca (holo. Hb. Yıldırımlı (YO), iso. GAZI, HUB).

Geranium L. (2: 451)

***G. macrorrhizum** L., in Sp. Pl. 680 (1753).

(Öner et al., 2010)

W. Anatolia. B1: Balıkesir: Erdek, Kapıdağ Peninsula, slopes, shady and wet areas, meadows and especially under *Castanea sativa*, *Carpinus betulus*, *Fagus orientalis*, *Platanus orientalis*, and *Tilia tomentosa* groups, on brown forest soil where on the granite and granodiorite main rock, 200-650 m, 27.v.2008, H.Öner 646. (EGE).

GLOBULARIACEAE (7: 27)

Globularia L. (7: 27)

eG. anatolica** A.Duran, Ö.Cetin & M.Öztürk, in Nord. J. Bot. 27: 232-237 (2009).

(Duran et al., 2009a)

Type: Turkey, **C2** Denizli: Honaz, Menteş village, vicinity of gypsum mine, 924 m a.s.l., 17.vi.2008, 37°44.147'N, 29°20.026'E, A.Duran 8060, Ö.Cetin & M.Öztürk (holo. KNYA, iso. ANK, GAZI, HUB).

GUTTIFERAE (2: 355)

Hypericum L. (2: 355)

eH. musadoganii** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C5** Niğde: Ulukışla, Çiftehan, Horozköy, Bolkar dağları, Kızıltepe, Gevençukuru mevkisi, taşlık ve kayalık, 2500-2750 m, 31.vii.1984, §.Yıldırımlı 7253 (holo. Hb. Yıldırımlı, iso. HUB).

e H. sechmenii** Ocak & Koyuncu, in Ann. Bot. Fenn. 46: 591-594 (2009).

(Ocak et al., 2009)

Type: Turkey, **B3** Eskişehir: Günyüzü, Arayit dağı, 1750-1820 m, rock crevices, 39°18.243'N, 31°44.851'E, 10.vi.2006, A.Ocak 5345 (holo. Eskişehir Osmangazi Univ. Herb., iso. GAZI, HUB).

LABIATEAE (7: 36)

Clinopodium L. (7: 329)

eC. hakkaricum** Dirmenci & Fırat, in Ann. Bot. Fenn. 46: 451-455 (2009).

(Fırat & Dirmenci, 2009)

Type: Turkey, **C9** Hakkari: 37 km from Hakkari to Çukurca, S of Üzümlü village, Zap valley, 37°28'067"N, 43°30'618"E, rocky crevices, 1062 m, 5.ix.2007, M.Fırat 10202 & T.Dirmenci (holo. GAZI, iso. E, HUB, ISTE, M).

Paratypes: Turkey, **C9** Hakkari: ca. 20 km from Hakkari to Çukurca, Zap valley, rocky crevices, ca. 1200 m, 09.vi.2006, M.Fırat 10125 & T.Dirmenci & M.Armağan (GAZI, M); 37 km from Hakkari to Çukurca, S of Üzümlü village, 37°28'067"N, 43°30'618"E, rocky crevices, 1062 m, 24.vi.2007, T.Dirmenci 3427 (GAZI, M).

Eremostachys Bunge (7: 100)

E. tournefortii Jaub. et Spach, in III. Pl. Or. 5: 12 (1854). stat nov.

(Karavelioğulları et al., 2008a)

E. Anatolia. **B10** Ağrı: Doğubeyazıt, Topçatan village, 1,550 m, 09.vi.2001, volcanic slopes, FAK 3064 (GAZI), Ibid., FAK 3065 (GAZI); Ibid. 07.vi.2002, steppe, *M.Ekici* 2399 (GAZI); Ibid., *M.Ekici* 3128 (GAZI); Ibid., 1,600 m, 18.viii.2005, calcareous stony slopes, FAK 3483 (GAZI); Ibid, MEU 2106a (GAZI).

■ **Lophantus** Adans.

eL. turcicus** Dirmenci, Yıldız & Hedge, in Turk. J. Bot. 34: 123-129 (2010).

(Dirmenci et al., 2010)

Type: Turkey, **B9** Van: Çatak, Kavuşşahap mountain, Krapet pass, between Çatak and Bahçesaray, rocky and stony north slope, 2750 m, Yıldız (16959), Dirmenci & Fırat (holo. GAZI, iso. E, HUB, ISTE, K, M, W).

Salvia L. (7: 400)

***S. aristata** Aucher ex Benth. in DC., Prodr. 12: 270 (1848).

(Behçet & Avlamaz, 2009)

E. Anatolia. **B10** Van: Başkale district, Mor Mountain, Çaldıran village, south slopes of Mustepe Hill, steppe, 2000-2200 m, 16.vi.2007, *D.Avlamaz* & *L.Behçet* (DA 358); Başkale district, Mor Mountain, north of Tutuklu village, slopes area, steppe, 1900-1950 m, 14.vi.2007, *D.Avlamaz* & *L.Behçet* (DA 532).

e S. ekimiana** Celep & Doğan, in Ann. Bot. Fenn. 47: 63-66.

(Celep & Doğan, 2010)

Type: Turkey, Central Anatolia, **B5** Yozgat: Above Akdağmadeni, Aktaş region, 39°35'157"N, 35°50'014"E, 1793 m, open *Pinus sylvestris* forest and alpine steppe, 16.vi.2007, *F.Celep* 1214 (holo. ANK, iso. E, K, GAZI).

Paratype: Turkey, **B5** Kayseri: Felahiye, Büyük Toraman Kasabası, Akdağ, 2000 m, 9.vi.2005 *A.Duran* 7019 (GAZI).

eS. ertekinii** Yıld. in Ot Sistematisk Botanik Dergisi 15(1): 1-8 (2008).

(Yıldırımlı & Ertekin, 2008)

Type: Turkey, **C9** Siirt: Aydınlar (Tillo), towards Çatılı köyü, steppe, clearings of *quercetum* (*Quercus brandii* Lindl), meadows, 1400-1450 m, 16.vi.2007, §. Yıldırımlı 33968 & A.S.Ertekin (holo. Hb. Yıldırımlı, iso. ANK, DUF, GAZI, HUB).

***S. macrosiphon** Boiss Diagn. Pl. Or. Nov. Ser. 1, 5: 11 (1844).

(Kahraman et al., 2009)

E. Anatolia. **C8** Diyarbakır: Mardin to Diyarbakır, 14 km before Çınar, 759 m, field edges, 37°39'16"N, 40°28'21"E, 24.v.2007, A.Kahraman 1382.

****S. marashica** İlçim, Celep & Doğan, in Ann. Bot. Fenn. 46: 75-79 (2009).

(İlçim et al., 2009)

Type: Turkey, **C6** Kahramanmaraş: Yukarı Ceyhan vadisi (upper Ceyhan valley), Ahır Dağı, (Ahır Mt.), around Maksutlu village, 1450-1600 m, rocky places, 17.iv.2001, A.İlçim 995 (holo. KSUH, iso. ANK, E, GAZI, K, VANF).

****S. sericeotomentosa** Rechinger f. var. **hatayica** Celep & Doğan, in Novon 19: 432-435 (2009).

(Celep et al., 2009b)

Type: Turkey, **C6** Hatay: Samandağ to Arsuz, among *Quercus coccifera* shrubs, 36°12'734"N, 35°51'218"E, 20-50 m, 19.vi.2007, F.Celep 1232 & G.Akgül (holo. GAZI, iso. ANK, E, K, MO).

Paratype: Turkey, **C6** Hatay: Samandağ to Arsuz, 36°12'734"N, 35°51'218"E, 25.vii.2006, S.Bagherpour & F.Celep 1197b (ANK); Samandağ to Arsuz, 36°12'736"N, 35°51'218"E, 19.vi.2007, F.Celep 1232 (ANK); Arsuz to Samandag, 36°13'393"N, 35°50'711"E, 02.v.2008, G.Akaydin & F.Celep 1403 (ANK).

***S. viscosa** Jacq. Misc. 2: 328 1781.

(Celep et al., 2009a)

Turkey, **C6** Hatay: Between Yayladağ and Antakya, 22 km on the old road, 3.vii.2001, 1000 m, *Laurus nobilis* L. altı, A.Duran 5735.

Stachys L. (7: 199)

****S. cretica** L. subsp. **kutahyensis** Akçiçek, in Turk J Bot, 34: 1-6 (2010).

(Akçiçek, 2010)

Type: Turkey, **B2** Kütahya: 20 km from Tavşanlı to Harmancık, stony places, 39°39'230"N, 029°16'613"E, 850 m, 07.vi.2007, Akçiçek 4609 & Dirmenci (holo. GAZI, iso. ANK, HUB, ISTE).

Paratypes: Turkey, **B2** Kütahya: 20 km from Tavşanlı to Harmancık, stony slopes, 39°39'122"N, 029°17'228"E, 870 m, 04.vi.2008, Akçiçek (5077) & Dirmenci; **B2** Kütahya: 24 km from Tavşanlı to Harmancık, forest openings, 850 m, 06.vii.2007, Akçiçek 4726; **B2** Balıkesir: 9 km from Dursunbey to Harmancık, forest openings, 39°37'981"N, 028°46'192"E, 235 m, 04.vi.2008, Akçiçek (5099) & Dirmenci.

****S. ketenoglui** Kaynak, Daşkın & Yılmaz, in Nord. J. Bot. 27: 238-242 (2009).

(Daşkın et al., 2009b)

Type: Turkey, **C5** Mersin: Tarsus, Çamlıyayla, 37°09'N, 34°45'E, limestone rocks, 430 m a.s.l., 12.v.2008, Kaynak 29795 (holo. BULU).

****S. marashica** İlçim, Çenet & Dadandı, in Ann. Bot. Fenn. 45: 151-155 (2008).

(İlçim et al., 2008)

Type: Turkey, **C6** Kahramanmaraş: Andırın, between Başkonuş mountain and Sarımsak mountain, Efil ağzı, on limestone rocks, 615 m, 10.v.2003, A.İlçim 1299 (holo. KSUH, iso. VANF).

Paratypes: Turkey, **C6** Kahramanmaraş: Andırın, Harboğazı, on limestone rocks, 385 m, 26.v.2004, A.İlçim 1519 (KSUH); **C6** Kahramanmaraş: Andırın, Kabakkesme, on limestone rocks, 875 m, 26.v.2004, A.İlçim 1521 (KSUH).

****S. namazdagensis** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C9** Şırnak: Gabar dağı ile Namaz dağı arası, İzvakiye bulağından (çeşmesinden) yayla başına, kayalık, meşelik, bozkır, 1800-2000 m, 21.vi.2005, §. Yıldırımlı 30142 (holo. Hb. Yıldırımlı, iso. HUB).

****S. pseudobombycina** Kaynak, Daşkın & Yılmaz, in Nord. J. Bot. 28: 341-343 (2010).

(Yilmaz et al., 2010)

Type: Turkey, **C3** Antalya: Küçükçaltıcak, 34°46'N, 30°34'E, under *Pinus brutia* canopy, 10 m a.s.l., 15.v.2008, G.Kaynak 29795 (holo. BULU).

Paratype: Turkey, **C3** Antalya: Küçükçaltıcak, 34°46'N, 30°34'E, under *Pinus brutia* canopy, stony places, 10 m a.s.l., 16.v.2009, R. Daşkın 31338 (BULU).

Teucrium L. (7: 53)

* **Teucrium melissoides** Boiss. & Hausskn. Ex Boiss., in Flora Orientalis 4: 813 (1879).

(Dönmez et al., 2010)

E. Anatolia. **C9** Şırnak, 12.5 km from Uludere road junction to Beytüşşebap, around the spring, wet places, 37°23'353"N, 42°54'026"E, 1070 m, 18. vi. 2003, AA.D. 11230 & B.Mutlu (HUB, INU).

LEGUMINOSAE (3: 10)

Astragalus L. (3: 49)

** **A. adiyamanensis** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, Ak Dag Cappadociae, 1837, P.M.B. Aucher-Eloy 1331 (holo. G).

** **A. aladagensis** Ekici & Podlech, in Feddes Repertorium 119 (1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **C5** Adana/Niğde: Aladağ, NW part, Narpız valley ca. 6 km SE of the village of Demirkazık, 37°45'N, 35°08'E, 2700-2800 m a.s.l., limestone screes, 23.vii.1984, G.Görk, P. Hartwig & A. Strid, Strid et al. 23901 (holo. MSB, iso. C).

** **A. ansinii** Uzun, Terzioglu & S. Palabaş-Uzun, in Nord. J. Bot. 27: 397-401 (2009).

(Uzun et al., 2009)

Type: Turkey, **A7** Trabzon: Maçka, Çeşmeler district, stony places in pseudo-macchie, ca 632 m a.s.l., 11.vii.2008, 40°46'58"N, 39°33'49"E, A. Uzun 493 (KATO).

Paratype: Turkey, **A7** Trabzon: Maçka, Çeşmeler district, stony places in pseudo-macchie, ca 750 m a.s.l., 18.vi.2008, 40°47'20"N, 39°33'59"E, A. Uzun 492 (KATO).

* **A. apricus** Bunge, in Mém. Acad. Imp. Saint Petersbourg 11(16): 40 in clave [et 1.c. 15(1): 58. 1869].

(Podlech & Ekici, 2008)

C. Anatolia. **B5** Nevshehir: Göreme, 1200 m a.s.l., 17.vii.1969, Sorger 69-63-18 (MSB).

** **A. bahcesarayensis** Akan, Fırat & Ekici, in Bot. J. Linn. Soc. 156: 439-444 (2008).

(Akan et al., 2008)

Type: Turkey, **B9** Van: Bahçesaray, Karabel (Kirapit) pass, 3200-3400 m, stony places, 5.viii.2004, M.Fırat 4221 (holo. GAZI, iso. E, MSB, W).

** **A. calvertii** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Typus: sine loco distinco, 'Armenia' [most probably Eastern Anatolia (before 1867), H.H.Calvert & J.Zohrab (holo. E)].

** **A. darendensis** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **B6** Malatya: 33 km E of Darende at road to Hekimhan, 1220 m, 04.vi.1987, M.Nydegger 42631 (holo. MSB, iso. BASBG).

* **A. davisii** D.F.Chamb & V.A.Matthews in Notes Roy. Bot. Gard. Edinburgh 29: 308 (1969).

(Podlech & Ekici, 2008)

E. Anatolia. **B9** Van: Erek Dag, above Değirmenköy, 3200 m a.s.l., 06.vi.1966, Davis 44465 (holo. E).

* **A. dzhebrailicus** Grossh Bot. Mater. Gerb. Bot. Inst. Komarova Akad. Nauk SSSR 10: 100 (1947).

(Podlech & Ekici, 2008)

E. Anatolia. **B9** Van: Pelli Dağ, 54 km WSW of Van, 3000 m a.s.l., 42°50'E, 38°20'N, 09.vii.1971, Edmondson 639 (W).

* **A. expetitus** Maassoumi, in Irab. J. Bot. 6: 204 (1994).

(Podlech & Ekici, 2008)

E. Anatolia. **B9** Van: 15 km nördlich Muradiye, 1900 m a.s.l., 02.vii.1981, Sorger 81-10-1 (W).

e** **A. guzelsuensis** F.Ghahrem. Nejad, Behçet & Demir, in Ann. Bot. Fenn. 46: 151-154 (2009).

(Ghahremanejad et al., 2009)

Type: Turkey, **B9** Van province, Güzelsu (Hoşap) district, between Zernek Dam and Üçgen village, rocky slopes, grassy steppe, 2063 m, 12.v.2007, *İbrahim Demir* 125 [in flowering state] (holo. VANF, iso. FAR, GAZI, VANF, W).

Paratype: Turkey, East Anatolia region, Van province: Güzelsu (Hoşap) district, between Zernek Dam and Üçgen Village, rocky slopes, grassy steppe, 2063 m, 10.vi.2007, *İbrahim Demir* 496 (in fruiting state).

e** **A. helbaekii** Podlech & Ekici, in Feddes Repertorium 119 (1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **C4** Konya: Kücük Köy, 40 km SE Konya, 23.vi.1962, *H.Helbaek* 2626 (holo. C).

e** **A. horasanicus** Podlech, in Feddes Repertorium 119 (1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **B9** Agri: in jugo Saç Geçidi inter Agri (Karaköse) et Horasan, 2000-2500 m a.s.l., 03.viii.1965, *K.H.Rechinger* 32770b (holo. M, iso. W).

e** **A. mahmutlarensis** Podlech, in Feddes Repertorium 119 (1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **C4** Province Antalya: ca. 35 km NE Mahmutlar (Alanya), 1270 m a.s.l., 11.vi.2002, *R.Ulrich* A/20 (holo. MSB).

***A. mirus** Sosn., in Trudy Tbilissk. Bot. Inst. 12: 230 (1948).

(Podlech & Ekici, 2008)

C. Anatolia, Çoruh: distr. Artvin, in valle fl. Aravet-su, infra p. Tanzot, 16.v.1907, *G.Woronow* (TBI); Ardanuç – Kordevan dag (Artvin -Ardahan), 1100 m a.s.l., 26.vi.1957, *Davis & Hedge D.* 30086 (E).

e** **A. mugliensis** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **C2** Muğla: Ak Dağ, west side, 1900 m a.s.l., 11.vii.1984, *P.Hartwig*, *Özcan Seçmen* & *A.Strid*, *Strid* et al. 23494 (holo. MSB, iso. C).

e** **A. munzurensis** Yıld., in Ot Sistematis Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Tunceli: Ovacık, Karagöl kepezi (vadisi), kayalik ve taşlık alanlar, 1350 m, 30.vi.1983, *S.Yıldırımlı* 5455 (holo. Hb. Yıldırımlı, iso. HUB).

Paratype: Turkey, **B7** Tunceli: Ovacık, Karagöl kepezi, kayalik ve taşlık alanlar, 1350 m, 30.vi.1983, *S.Yıldırımlı* 5443 (Hb. Yıldırımlı).

e** **A. nigropedunculatus** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Typus: Turkey, **B9** Van: distr. Gevas, Artos Dag, 12,000 ft, summit ridge, 15.vii.1954, *P.Davis* 22,882 & *O.Polunin* (holo. K).

e** **A. pseudovegetus** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **B9** Bitlis: in jugo Kuzgunkivan Geçidi inter Gevash et Reshadiye, 2200 m, 01.vii.1975, *K.H.Rechinger* 53904 (holo. M, iso. MSB, W).

e** **A. rausianus** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **A4** Çankiri: Devres-Tal östlich von Ilgaz, trockene, beweidete Hänge nördlich des Flusses, 1200m a.s.l., 05.viii.1982, *TH.Raus* 6910 (holo. B).

e** **A. sakaryaensis** Podlech, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **A3** Sakarya: Geyve-Tarakli, ca. 2 km from Tarakli to Geyve, ca. 1 km from the bridge over the river Aksu to Geyve, 520 m a.s.l., 23.v.1990, *R.Lampinen* 7795 (holo. E, iso. H).

e** **A. suserianus** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **B6** Sivas: 50 km SWW of Suseri, 1800 m, 12.vii.1971, *Jan Steen Andersen* et al. 2210 (holo. C, iso. E.).

e A. trabzonicus** Ekici, Aytaç & Akan, in Bot. J. Linn. Soc. 157: 741-747 (2008).

(Ekici et al., 2008)

Type: Turkey, **A8** (Trabzon) Bayburt: Araklı 41 km, steppe, 2300 m, 10.vii.2002, 40°29'273"N, 39°58'677"E, M.Ekici 3046, Z.Aytaç & H.Akan (GAZI).

e A. tunceliensis** Podlech & Ekici, in Feddes Repertorium 119(1-2): 24-36 (2008).

(Podlech & Ekici, 2008)

Type: Turkey, **B7** Tunceli: Hozat, 1700 m a.s.l., 14.vii.1957, P.Davis & I.Hedge D.31121 (holo. M, iso. E).

■ **Chamaespartium** Adans

***C. sagittale** (L.) P.E.Gibbs in feddes Repert. Vol. 79, p.54 (1968).

(Efe et al., 2009)

Turkey, **A2 (A)** Kocaeli: Yuvacik Dam area, Camidüzü, 480-545 m, roadsides, maquis, south, 4.v.2006, A.Efe, N.Aksoy & D.Demir 1233 (ISTO); **A3** Kocaeli: Yuvacik Dam area, between Serindere and Camidüzü, 650-820 m, maquis, south-east, 4.v.2006, A.Efe, N.Aksoy & D.Demir 1241 (ISTO); Kocaeli: Yuvacik Dam area, Servetiye and near Camidüzü, 480 m, maquis, south, 04.v.2006, A.Efe, N.Aksoy & D.Demir s.n (DUOF).

Coronilla L. (3: 538)

***C. emerus** L. subsp. **emerus**, in Sp. Pl. 742 (1753).

(Keskin & Sadıkoğlu, 2008)

S. Anatolia. **C3** Antalya: Kemer, Göynük, Düden şelalesi, 01.ii.2007, M.Keskin 5397 & N.Sadıkoğlu.

Lathyrus L. (3: 328)

eL. egirdiricus** Genç & Şahin, in Bot. J. Linn. Soc. 158: 301-305 (2008).

(Genç & Şahin, 2008)

Type: Turkey, **C3**: Isparta the road from Eğirdir to Aksu, 3-4 km, Isparta province 27°50'32"N, 30°54'45"E, 1000-1020 m. Grassy places around *Pinus* forests, 28.iv.2004. H.Genç & A.Şahin 1100. (iso. in FUH, GAZI).

e L. nivalis** Hand.-Mazz. subsp. **sahinii** Genç, in Nord. J. Bot. 27: 402-404 (2009).

(Genç, 2009)

Type: Turkey, **C4** Karaman: the Karadağ Mountains, 37°23.21'74"N, 33°09.58'01"E, 1500-1700 m, a.s.l, grassy places around *Quercus* forests in the Karadağ Mountains in Karaman province, 28.vi.2004. H.Genç 1150 (holo. FUH, iso. GAZI).

Melilotus L. (3: 448)

e M. gorkemii** Yıld. in Ot Sistematisk Botanik Dergisi 14: 1-4 (2008).

(Yıldırımlı, 2008a)

Type: Turkey, **C1** Muğla: Datça Kinidos'a doğru, yol kıyısı, yamaç, 550-600 m, 13.iv.2008, Ş.Yıldırımlı 34708 & Görkem Yıldırımlı (holo. Hb. Yıldırımlı, iso. ANK, GAZI, HUB, K, KNYA).

Paratypes: **C1** Muğla: Datça, Kinidos'a doğru 5. km, maki, 125 m, 13.iv.2008, Ş.Yıldırımlı 34697 & Görkem Yıldırımlı (Hb. Yıldırımlı); **C2** Muğla: Köyceğiz, Yangı Köyü, Yangı deresi, sarp ve derin vadi, kalker kayalığı, 100-200 m, 18.iv.1991, fruiting specimen, A.Güner 8883, M.Vural, H.Duman, A.A.Dönmez & B.Mutlu (HUB).

Onobrychis Adanson (3: 560)

e O. cigdemae** Yıld., in Ot Sistematisk Botanik Dergisi 11(2): 1-10 (2004).

(Yıldırımlı, 2004)

Type: Turkey, **C9** Şırnak: Between Gabar dağı and Namaz dağı, from Izvakiye fountain (Genya Izvakiye) to yaylabaşı, steppe, rocky quercetum (*Q. brantii* Lindley) places, 1800-2000 m, 21.vi.2005, Ş.Yıldırımlı 30133 (holo. Hb. Yıldırımlı, iso. HUB).

e O. cigdemae** Yıld. subsp. **gorkemii** Yıld., in Ot Sistematisk Botanik Dergisi 11(2): 1-10 (2004).

(Yıldırımlı, 2004)

Type: Turkey, **C9** Şırnak: Cudi dağı, Gümüş tepesi, northern foot, sandy coal quercetum (*Q. brantii* Lindley), 1100-1200 m, 20.vi.2005, Ş.Yıldırımlı 30020 (holo. Hb. Yıldırımlı, iso. HUB).

Trifolium L. (3: 384)

***T. patense** L. var. **maritimum** Zaber, in Arch. Ver. Freunde Naturg. Meklenburg 14: 31 (1859).

(Keskin, 2007)

N. Anatolia, **A4** Bartın: Amasra, Göçgün yalısı, dere kenarı, *T. pratense* var. *pratense* ile beraber, 6

m, 24.x.2006, 41°48'10.8"N, 32°32'35.1"E, M.Keskin 5296 & N.Sadıkoğlu.

**T. patense* L. var. *villosum* DC., in Lam. & DC., in Fl. Fr. Ed. 3, 4: 426 (1805).

(Keskin, 2007)

N.E. Anatolia. **A8** Artvin: Hopa, Başköy, 27.vii.2003, M.Keskin 2927.

Trigonella L. (3: 452)

***T. coerulescens* (Bieb.) Hal. subsp. *kemerensis* Göktürk, in Ann. Bot. Fenn. 46: 62-64 (2009).

(Göktürk, 2009)

Type: Turkey, **C3** Antalya: Kemer, Çıraklı, sandy seashores, 3 m, 2.iv.2007, 36°23'895"N, 30°28'537"E, R.S.Göktürk 6013 (holo. AKDU, iso. ANK, GAZI, HUB).

Paratypes: Turkey, **C3** Antalya: Kemer, Çıraklı, sandy seashores, 3 m, 21.iv.2007, 36°23'895"N, 30°28'537"E, R.S.Göktürk 6034 (AKDU); Kumluca, Adrasan, sandy seashores, 5 m, 21.iv.2007, 36°18'212"N, 30°27'967"E, R.S.Göktürk 6032 (AKDU).

**T. monantha* C. A. Meyer subsp. *incisa* (Benth.) Ali, in Fl. Pakistan 100: 294 (1977).

(Ertekin & Kaya, 2004)

E. Anatolia. **C7** Diyarbakır: Ergani, Diyarbakır-Siverek 50. km, yol kenarı, 1100 m, 10.v.2001, A.S.Ertekin 2001-251 & Ö.F.Kaya (DUF); **C8** Diyarbakır: Bismil, Diyarbakır-Bismil, yol ve tarla kenarı, 40-41. km, 730-750 m, 11.v.1983, Ö.Saya ve ark. DUF 3595 (Hb. Yıldırımlı); Diyarbakır: Dicle Üniveristesi kampusu, bozkır, 660 m, 29.iv.1998, A.S.Ertekin 1998-128 (DUF).

LINACEAE (2: 425)

Linum L. (2: 425)

***L. ertugrulii* Tugay, Bağcı & Uysal, in Ann. Bot. Fenn. 47: 135-138 (2010).

(Tugay et al., 2010)

Type: Turkey, **B4** Konya: Cihanbeyli, Tuz Gölü, Gölyazı-Eskil arası, step, 920 m, 38°32.543' N, 33°12.240' E, 9.vii.2005 O. Tugay 3500, Y.Bağcı & Uysal (holo. KNYA, iso. GAZI, K).

***L. kaynakiae* Yılmaz, in Nord. J. Bot. 28: 605-612 (2010).

(Yılmaz, 2010)

Type: Turkey, **C2** Burdur: Göktepe, Ballık-Ören, 8 km, 36°49'59"N, 29°24'59"E, 1367 m a.s.l., 22.vi.2005, Ö.Yılmaz (holo. BULU no. 24024).

L. pubescens Banks & Sol. subsp. *anisocalyx* (P.H.Davis) Yılmaz and Kaynak, in J. Biol. Environ. Sci. 2(4): 5-9 (2008). comb. & stat nov.

(Yılmaz & Kaynak, 2008b)

Type: Turkey, **C5** İçel: plaine de Mersina, v.1855, Balansa (holo. K, iso. BM).- *Linum anisocalyx* P.H.Davis, in Notes Royal Bot. Garden Edinburgh 22: 149, 1957.

L. verruciferum Azn. emend. Yild., in Bull. Herb. Boiss. Ser. 2(7): 314 (1907).

(Yıldırımlı, 2010)

B3 Eskişehir: Sivrihisar, Afyon'a doğru, Aşağıkepen köyü yakını, bozkır, jipsli yerler, 990-1030 m, 31.v.2008, Ş.Yıldırımlı 34751 & Görkem Yıldırımlı (Hb. Yıldırımlı, HUB).

***L. vuralianum* Yılmaz & Kaynak, in Bot. J. Linn. Soc. 156: 459-462 (2008).

(Yılmaz & Kaynak, 2008a)

Type: Turkey, **B2** Kütahya: Tavşanlı-Emet, 2 km from Emet, 39°20'N, 29°18'E 1026 m, 17.vi.2004, Ö.Yılmaz, E.Erdoğan (holo. BULU 19958).

Paratype: **A2** Bilecik: Yenişehir-Bilecik, around Pelitözü, 40°10'N, 29°55'E, 746 m, 26.vi.2004, Ö.Yılmaz (BULU 19943).

OROBANCHACEAE (7: 1)

■ **Bornmuellerantha** Rothm.

***B. alshehbaziiana* Dönmez & Mutlu, in Novon 20: 265-267 (2010).

(Dönmez, 2010)

Type: Turkey, Antalya: Gazipaşa, Kaş pasture, above *Pinus nigra* forest, high mtn. steppe, limestone, 36°28'859" N, 032°25'697" E, 1760 m, 23.ix.2006, Ali A.Dönmez 14036 & Birol Mutlu (holo. HUB, iso. E, INU, MO).

Orobanche L. (7: 3)

* **O. palaestina** Reut. in DC., Prodr. 11: 718 (1847).

(Zare et al., 2009)

Turkey, **C5** Antakya: Samandağ 3 km from Çevlik to Keldağ, on seashore, 36°05'571"N 035°56' 371"E, 0 m, 26.vii.2009, A.A.Dönmez 15970.

PAEONIACEAE (1: 204)

Paeonia L. (1: 204)

P. mascula (L.) Miller subsp. **orientalis** (Thiebaut) D. Y. Hong, in Acta Phytotax. Sin. 38: 381-385 (2000). stat & comb. nov.

(Hong, 2000)

Turkey, Hatay: Amanus doplan, Kostelli-Kouph Or. Mont, 14.iv.1967, Y.Ahman 138 (E); Mt. Amanus, 1906, M.Haradjian 238 (G); Hatay: Belen, Karlik tepe, 1200 m, above Suguk Oluk *Abies cilicica* forest, 24.iv.1957, Davis & Hedge D27104 (E); Hakkari: below Oramar, 1300 m, in shade of *Platanus orientalis* and *Castanea sativa*, 17.v.1978, J.Trelawny & J.McPhail 2031 (E); Hakkari: Mosul, ad confines Turciae, inter Dohuk et Amadiya, 1200 m, 12.vii.1957, K.H.Rechinger 11678 (E); Hakkari: 9-10 km from Semdinli to Yuksekova, 1700-1800 m, in oak woods, 16.vi.1966, P.H.Davis 45045 (E); Bitlis: southern slopes of Kambos Dagh above Tutu, 2000 m, under scrub oak near treeline, 17.viii.1956, McNeil 621 (E); Simvav, Vilovel siirl, 09.v.1972, H.J.Leep L7228 (SA); Antalya: Kemer (Lucia) Teke dagh 1100-1200 m, in *Quercus coccifera* and *Q. libani* scrub, 12.vii.1949, P.H.Davis 15199 (E); Adana: Haruniye, E. NW of Kurtlar, 1250 m, Fagetum, 02.v.1952, H.Demiriz 929 (E); Izmir: North side of Samsun Dagh, above Guzelcamli, 200-400 m, mixed forst, P.H.Davis 41775 (E); Cilicien, Thal Agatsch Kissä, vi.1896, W.Siehe (G).

PAPAVERACEAE (1: 213)

Papaver L. (1: 219)

eP. yildirimlii** Ertekin, in Ot Sistematisk Botanik Dergisi 15(1): 1-8 (2008).

(Yıldırımlı & Ertekin, 2008)

Type: Turkey, **C9** Siirt: Aydinlar (Tillo), towards Pervari 3 km, steppe, slopes, 1150-1200 m, 17.vi.2007, §.Yıldırımlı 34048 & A.S.Ertekin (holo. Hb. Yıldırımlı, iso. GAZI, HUB).

Paratype: Turkey, **C9** Siirt: Aydinlar (Tillo), towards Pervari 3 km, steppe, slopes, 1150-1200 m, 22.v.2007, A.S.Ertekin 2007-325, budding plant (DUF).

PLUMBAGINACEAE (7: 463)

Acantholimon L. (7: 478)

eA. doganii** Bağcı, Doğu & Akaydın, in Nord J Bot. 27: 228-231 (2009).

(Bağcı et al., 2009a)

Type: Turkey, **C4**: Karaman, Sariveliler, At meydanı, *Cedrus* forest opening, 1640 m a.s.l., 6.viii.2007, S.Doğu 1673 & Bağcı (holo. KNYA, iso. ANK, GAZI, HUB).

Limonium Miller (7: 465)

e L. gueneri** Doğan, Duman & Akaydın, in Ann. Bot. Fenn. 45: 389-393 (2008).

(Doğan et al., 2008)

Type: Turkey, **C2** Antalya: Kaş, Patara, steppe calcareous coastal slopes, ca. 30 m, 17.viii.1996, A.Güner 12329, H.Duman and S.S.Çağlar (GAZI).

Paratype: Turkey, **C2** Antalya: Kaş, Patara, steppe calcareous coastal slopes, ca. 20 m, 30.vii.2004, Akaydın 9920 & Doğan (GAZI).

POLYGALACEAE (1: 533)

Polygala L. (1: 533)

eP. peshmenii** Eren, Parolly, Raus & Kürschner, in Bot. J. Linn. Soc. 158: 82-86 (2008).

(Eren et al., 2008)

Type: Turkey, **C3** Antalya: between Antalya and Feslikan Yayla, ascent to Feslikan Yayla above Çakırlar, main road, c. 4 km below Geyikbayırı, vertical limestone rocks in open *Pinus brutia* Ten. forest, 36°31'33"N, 30°18'14"E, 370 m, 12.v.2003, Eren 78/03 & Şirin (holo. AYDN, iso. B, E, EGE, GAZI, HUB, ISTE, herb. Parolly).

POLYGONACEAE (2: 265)

Polygonum L. (2: 269)

e P. istanbulicum** Keskin, in Nord J Bot. 27: 11-15 (2009).

(Keskin, 2009)

Type: Turkey, **A2(A)** İstanbul: Maltepe, Başbüyük district, forest of Süreyyapaşa hospital, 40°56'58.5"N, 29°08'20.9"E, 69 m a.s.l., 24.viii.2006, M.Keskin 5105 (holo. ISTE 83798, iso. ANK, ISTF, MUFE, herbarium M. KESKIN).

PRIMULACEAE (6: 111)

Lysimachia L. (6: 135)

***L. japonica** Thunb., in Fl. Jap. 83. 1784.

(Terzioğlu & Karaer, 2009)

Type: Turkey, **A8** Trabzon: Of, Balıca village, adjacent to the Solaklı Stream bed, 9 km south of Black Sea, 24.vi.2008, 53 m, KATO 16078. UTM European 50 datum 37 zone, 060°80'91"E, 45°26'514"N.

RESEDACEAE (1: 498)

Reseda L. (1: 499)

***R. globulosa** Fisch. & C. A. Mey., in Ind. Sem. Hort. Petrop. 4: 45 (1837).

(Aytaç & Duman, 2010)

N.E. Anatolia, **A8** Yusufeli (Artvin) to Olur (Erzurum) road, 25 km, 550-600 m, 16.vi.2003, in calcareous rocky places, *Duman* (9434) & Z.Aytaç.

ROSACEAE (4: 1)

Alchemilla L. (4: 80)

***A. fissa** Günther & Schummel, in Sched. Cent. Siles. Exsicc. 9. no.2 (1819).

(Hayırlioğlu-Ayaz & İnceer, 2009)

N.E. Anatolia, **A9** Artvin: Ardanuç, Yalnızçam Dağları (together with *Picea orientalis*, some species of *Rhododendron* and others), grassy stream banks, 200 m, 12.vii.2003, Inceer 181, KTUB.

e****A. hamzaoglu** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **A8** Artvin: Yusufeli, Sarıgöl, Taşkıran köyü, Rindiker yaylası yolu, karışık orman, çayır-çimen, 1350-1650 m, 30.v.1984, S.Yıldırımlı 6370 (holo. Hb. Yıldırımlı, iso. HUB).

***A. haraldi** Juz, in Acta Inst. Acad. Sc. URSS, SER I, fasc. 1 (1933).

(Hayırlioğlu-Ayaz & İnceer, 2009)

N.E. Anatolia, **A8** Rize: İkizdere, above the village of Anzer, alpine meadows, stream banks (together with some species of *Carex*, *Achillea*, *Tripleurospermum*, *Bromus*, among others) 2150 m, 19.vii.1995, Hayırlioğlu-Ayaz 207, KTUB.

***A. pseudomollis** Juz., in Addenda IX, p. 475.

(Hayırlioğlu-Ayaz & İnceer, 2009)

N.E. Anatolia, **A7** Trabzon: Zigana Dağı, on the road of Kadirga (together with some species of *Euphorbia*, *Malva sylvestris*, among others), 1750 m, 17.vii.1995, Hayırlioğlu-Ayaz 195, KTUB.

Rosa L. (4: 106)

Rosa 'Asuman', in Phytologia Balcanica 16(2): 221-225 (2010).

(Tan & Zielinski, 2010)

Turkey, **A2(E)** İstanbul: İstanbul, Maçka, grown on balcony from cuttings originating from the province of Van, 15.vii.2007, A.Baytop (ISTE 83926)

Rosa 'Professor Turhan Baytop', in Phytologia Balcanica 16(2): 221-225 (2010).

(Tan & Zielinski, 2010)

Turkey, **B7** Elazığ: Harput, village of Güllüköy, 1200 m, cultivar in garden, 5.vi.2000, T.Baytop (ISTE 77137).

RUBIACEAE (7: 722)

Asperula L. (7: 734)

A. pseudochlorantha Ehrend. var. **antalyensis** (Ehrend.) Minareci & K.Yıldız, in Ann. Bot. Fenn. 47: 121-128 (2010). comb. et stat. nov.

(Minareci & Yıldız, 2010)

Type: Turkey, **C3** Antalya distr. Kemer (Lycia): Kesme bogaz near Kemer, 14.viii.1949 Davis 14053 bis (holo. W).- **A. antalyensis** Ehrend., Notes Royal Bot. Garden Edinburgh 22: 352 f. 3b (1958).

Galium L. (7: 767)

e****G. babadaghensis** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C2** Denizli: Babadağ, Aktaş mezarlığı Babadağ arası, dimdik Ocakbogazı çıkış, kayalık ve taşlık, 1750-2250 m, 17.vii.1983, S.Yıldırımlı 5584 (holo. Hb. Yıldırımlı, iso. HUB).

e****G. cankiriensis** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **A4** Çankırı: Eldivan, Seydiköy üstü, bozkır, 1300-1350 m, 09.viii.1984, S.Yıldırımlı 7426 (holo. Hb. Yıldırımlı, iso. HUB).

eG. canum** Req. ex DC. subsp. *ulukislaensis* Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, C5 Niğde: Ulukişla, Çiftehan, Horozköy, Bolkar dağları, harlalar (bahçeler), tarlalar, 1200-1350 m, 30.vii.1984, §.Yıldırımlı 7136 (holo. Hb. Yıldırımlı, iso. HUB).

eG. nigdeensis** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, C5 Niğde: Ulukişla, Çiftehan, Horozköy, Bolkar dağları, Kızıltepe, Gevençukuru mevkisi, taşlık ve kayalık, 2500-2750 m, 31.vii.1984, §.Yıldırımlı 7250 (holo. Hb. Yıldırımlı, iso. HUB).

eG. tuncelianum** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, B7 Tunceli: Ovacık, Munzur dağları, Kepir tepesi, doruk çevresi, 3000 m, 29.vii.1979, §.Yıldırımlı 2323 (holo. Hb. Yıldırımlı, iso. HUB).

Paratype: Turkey, B7 Tunceli: Ovacık, Munzur dağları, Fikrik yaylası ve tepesi, 2500-2900 m, 08.vii.1980, §.Yıldırımlı 3689 (Hb. Yıldırımlı).

SALICACEAE (7: 694)

Salix L. (7: 694)

eS. anatolica** J.Zielinski & D.Tomaszewski, in Ann. Bot. Fenn. 45: 386-388 (2008).

(Zielinski & Tomaszewski, 2008)

Type: Turkey, C5 Adana: Cetinik, above Pozanti, stream valley, 21.vi.1988, *Boratynski*, *Tomlik* & *Zielinski* 6531 (holo. KOR, iso. E).

SCROPHULARIACEAE (6: 458)

Chaenorhium (DC.) Reichb. (6: 650)

eC. semispeluncarum** Yıldırım, Kit Tan, Şenol & Pirhan, in Nord J Bot. 28: 457-464 (2010).

(Yıldırımlı et al., 2010)

Type: Turkey, B6 Malatya: Darende, Ağılıbaşı (Engüzek) Belediyesi, cave entrance at Mağalan rocks, calcareous marl rich in potassium nitrate, 1600 m a.s.l., 15.viii.2005, *H.Yıldırım* 316 (holo. EGE 40672, iso. C, HUB, herb. Kit Tan); loc. ibid., 5.ix.2007, *H.Yıldırım* 1269 (para. EGE 40788).

eC. yildirimlii** Kit Tan, Yıldırım, Şenol & Pirhan, in Nord J Bot. 28: 457-464 (2010).

(Yıldırımlı et al., 2010)

Type: Turkey, B7 Erzincan: Kemaliye, Başpinar, Buğdaypınar köyü, 1000-1200 m a.s.l., 20.xi.1980, §.Yıldırımlı 4222 (holo. HUB 24769, iso. HUB 24770).

Scrophularia L. (6: 603)

***S. gracilis** Blakelock, in Kew Bull. 1949, 531-532 (1950).

(Dönmez & Uğurlu, 2010)

E. Anatolia. C9 Şırnak: Uludere, above Taşdelen village, 37°23'550"N, 042°52'458"E, 1007 m, limestones crevices, 25.v.2004, A.A.Dönmez 11884; 28.vi.2009, A.A.Dönmez 15484; Uludere, 2 km from Dağdibi village to Şırnak-Hakkari road, limestone crevices, 37°22'320"N, 043°07'784"E, 1124 m, 28.vi.2009, A.A.Dönmez 15487 (HUB).

Verbascum L. (6: 461)

eV. ×edirnense** Dane & G. Yılmaz, in Phytologia Balcanica 15(2): 181-184 (2009).

(Dane & Yılmaz, 2009)

Type: Turkey, A1(E) Edirne: Center-around the Faculty of Medicine, pasture, 41°40'28"N, 26°33'39"E, 26 m, 11.vii.2007, F.Dane & G.Yılmaz (EDTU 9611); iso. (EDTU 9612).

e V. eskisehirensis** Karavel., Ocak & Ekici, in Nord J Bot 22: 222-227 (2009).

(Karavelioğulları et al., 2009)

Type: Turkey, B3 Eskişehir: Sivrihisar, Karacaören, Arayıt Dağı, 1380 m a.s.l., limestone rocks and scree, 15.vii.2005, F.A.Karaveliogullari (3470), A.Ocak & M.Ekici (holo. GAZI, iso. ANK, HUB, ISTE, Hb. Yıldırımlı).

e V. haraldi-adnani** Parolly & Eren, in Willdenowia 38: 127-134 (2008).

(Parolly & Eren, 2008)

Type: Turkey, C2 Muğla, Yılanlı Dağı E of Muğla along the way to Akyer Göktepe, 37°19'34.2"N, 28°30'30.9"E, 1250 m, siliceous rock in *Pinus nigra* forest, 19.vii.2007, Kürschner 07-269, Erdağ & Eren (AYDN, iso. B, herb Kürschner, herb Parolly).

Paratype: Turkey, **C2** Muğla: Yılanlı Dağı, along the way to Akyer-Göktepe, İkizhasan Mevkii, 37°19'32.3"N, 28°30'33.1"E, 1290 m, siliceous rock in *Pinus nigra* forest, 5.vii.2008, *Eren* 164/08 & Ağcagil (AYDN, B, herb. Parolly).

e V. ozturkii** Karavel., Uzunh & S. Çelik, in Pak. J. Bot. 40(4): 1595-1599 (2008).

(Karavelioğulları et al., 2008b)

Type: Turkey, **B7** Erzincan: Kemaliye-Divriği, 35 km, 1200-1300 m, 10.vii.2005, calcareous stony slopes, *F.A.Karaveliogullari* 3467, *M.E.Uzunhisarcıklı* (holo. GAZI, iso. ANK, HUB).

*** V. samniticum** Ten., Fl. Nap. 3: 219 (1824-1829).

(Yılmaz & Dane, 2008)

European Turkey, **A1(E)** Kırklareli: Pınarhisar: Kaynarca village, roadside, (41°43'54"N, 27°13'29"E, 194 m), 27.vi.2002, *G.Yılmaz* (EDTU 9498).

*** V. szovitsianum** Boiss. var. **szovitsianum** Fl. Or. 4. 333. (1879).

(Karavelioğulları, 2009)

E. Anatolia, **B10** Ağrı: Dogubeyazit-Ağrı 15 km, 1750 m, 09.vi.2001, calcareous stony slopes, *Karaveliogullari* 3066, *Ekici* and *Akan*; Dogubeyazit, 1860 m, 12 vii 2002, steppe, calcareous stony slopes, *Karaveliogullari* 3370 and *Çelik*. Dogubeyazit: San Cavus village, 1100 m, 09.vi.2001, calcareous stony slopes, steppe, *Karaveliogullari* 3061, *Ekici* and *Akan*; ibid. 19.vii.2001, *Karaveliogullari* 3134, *Aytaç*, *Ekici* and *Akan* (GAZI).

eV. turicum** Bani, Adıguzel & Karavel., in Ann. Bot. Fenn. 47: 489-492 (2010).

(Bani et al., 2010)

Type: Turkey, **B6** Adana: Tufanbeyli, Demiroluk village, Öküzçukuru yayla, *Abies* and *Cedrus* mixed forest, 1700-1800 m, 30.vi.2008, *B.Bani* 6415 (GAZI, iso. ANK, HUB).

Paratype: Turkey, **B6** Adana: Saimbeyli, above Naltaş village, Mount Bozoğlan, 1600-1800 m, among *Abies* and *Cedrus* mixed forest, 8.vii.2006, *B.Bani* 4053 (ANK, GAZI, HUB).

Veronica L. (6: 689)

V. erciyasdagii (M.A. Fischer) C. Vural, in J. Syst. Evol. 47 (2): 168-172 (2009). comb. & stat. nov.

(Vural et al., 2009)

Type: Turkey, **B5** Kayseri: Erdshias Dağ (=Mount Erciyes), Tekir jaila (=Tekir plateau), feuchte Stellen, alt. ca 2200 m, 30.vi.1902, E. Zederbauer (holo. WU, iso. W).

UMBELLIFERAE (4: 265)

Dumaniana Yıldırımlı & Selvi

D. glandulosa (Boiss. & Hausskn) Yild. & Selvi, in Ot Sistematischer Botanik Dergisi 14 (1): 17-18 (2008). comb. nov.

(Yıldırımlı, 2008b)

Basionym: *Pastinaca glandulosa* Boiss. & Hausskn in Fl. Or. 2: 1062 (1872).

D. yildizii (Dirmenci) Yild., in Ot Sistematischer Botanik Dergisi 16 (1): 9-14 (2009). comb. nov.

(Yıldırımlı, 2009b)

Basionym: *Pastinaca yildizii* Dirmenci in Bot. J. Linn. Soc. 158: 296-300 (2008).

Type: Turkey, **B1** Balıkesir: Edremit, Kazdağı (Ida) above Mehmetalan village, Nanekırı place, in open places in *Pinus nigra* Arn. forest, 1600 m, 14.ix.2006, *T.Dirmenci* 3350 (holo. GAZI, iso. ANK, HUB, EGE, ISTE).

D. zozimioides (Fenzl) Yild. & Selvi, in Ot Sistematischer Botanik Dergisi 14 (1): 17-18 (2008). comb. nov.

(Yıldırımlı, 2008b)

Basionym: *Pastinaca zozimioides* Fenzl in Asie Min. Bot. 1: 436 (1860).

Ferula L. (4: 440)

e F. brevipedicellata** Peşmen ex Sağıroğlu & H.Duman, in Ann. Bot. Fenn. 47: 293-300 (2010).

(Sağıroğlu & Duman, 2010)

Type: Turkey, **B9** Bitlis: Hizan-Bahçesaray road 22 km, 1000 m, 9.vi.2002, *M.Sağıroğlu* 2003 (holo. GAZI, iso. ANK, E).

Paratypes: Turkey, **B9** Bitlis: Hizan-Bahçesaray road 22 km, 1000 m, 2002, *M.Sağıroğlu* 2152 (GAZI). **B7** Malatya: Arapkir- Kemaliye road 3-9 km, 1100 m, 2002, *M.Sağıroğlu* 2177 (GAZI). **B8** Tunceli: Erzincan-Tunceli crossroads 3 km, 1300 m, 2002, *M.Sağıroğlu* 2065 (GAZI).

e F. duranii** Sağıroğlu & H.Duman, in Ann. Bot. Fenn. 47: 293-300 (2010).

(Sağıroğlu & Duman, 2010)

Type: Turkey, **C3** Antalya: Akseki-Çukurköy, Istarlas mountain, 900-950 m, 25.v.2002, *M.Sağıroğlu* 1896 & *Akçicek* (holo. GAZI, iso. ANK, E, Hb. Yıldırımlı).

Paratypes: Turkey, **C3** Antalya: Akseki-Çukurköy, Istarlas mountain, 950 m, *M.Sağıroğlu* 2163 (GAZI); ibid., 2002 *M.Sağıroğlu* 2240 (GAZI); ibid., *A.Duran* 4129 (GAZI). **C4** Antalya: Alanya castle, 50 m, 2006 *M.Sağıroğlu* 2606 & *F.Karavelioğulları* (GAZI).

■ **Leiotulus** Ehrenb.

e L. nydeggeri** Yıld. & Dinç, in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C4** Karaman: Göktepe, Köristan'ın yeri, köknar ormanı, 1650 m, 30.v.2001, §.Yıldırımlı 26321 & *M.Dinç* (holo. Hb. Yıldırımlı, KNYA).

■ **Neocryptodiscus** Hedge & Lamond

N. papillaris (Boiss.) Herrnst. & Heyn, in Candollea 52(1): 181-184 (1997). comb. nov.

(Herrnstadt & Heyn, 1997)

Cachrys papillaris Boiss. in Ann. Sci. Nat. Bot. ser. 3(2): 75. 1844.

(Turkey): Mardin, betw. Mardin and Kotschassar, *Haussknecht* 515 (G-Boiss.)

Peucedanum L. (4: 473)

eP. kittiae** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Erzincan: Yaylabaşı (Kiy) köyü, Kazankaya dağı, Munzur dağları, Çekem tepesi ve Şenk deresi, 1500-2300 m, 07.viii.1980, §.Yıldırımlı 3835 (holo. Hb. Yıldırımlı, iso. HUB).

e P. ozhatayiorum** Akpulat & Akalın, in Ann. Bot. Fenn. 47: 59-62 (2010).

(Akpulat & Akalın, 2010)

Type: Turkey, Hopa-Borçka, near Borçka, 500 m, 41°24'10"N, 41°31'09"E, 7.ix.2006, *Akpulat* 4216 (holo. ISTE 84194, in flower; iso. CUFH).

Paratypes: Turkey, **A7** Trabzon: around Hamsiköy, in forest, 691 m, 40°45'18"N, 39°37'20"E, 10.ix.2006, *Akpulat* 4232 (CUFH); **A8** Artvin: Hopa-Borçka, near Borçka, 500 m, 41°24'10"N, 41°31'09"E, 20.xi.2007 *Akpulat* 4305 (ISTE 84194, in fruit); **A9** Artvin: in Yalnızçam forest, 1700 m, 45°67'95"N, 38°28'51"E, 8.ix.2006, *Akpulat* 4223 (CUFH).

Pimpinella L. (4: 352)

e P. isaurica** V.A. Matthews subsp. **sumbuliana** Göktürk, in Ann. Bot. Fenn. 45: 293-295 (2008).

(Göktürk, 2008)

Type: Turkey, **C6** Kahramanmaraş: Göksun, 22 km from Göksun to Kahramanmaraş, in calcareous rock crevices, 1350-1450 m, 37°56'32"N, 36°34'52"E, 5.viii.2003 *R.S.Göktürk* 5150 (holo. AKDU, iso. ANK, HUB, GAZI).

Paratypes: Turkey, **C6** Kahramanmaraş: Göksun, 22 km from Göksun to Kahramanmaraş, in calcareous rock crevices, 1350-1450 m, 37°56'32"N, 36°34'52"E, 1.viii.2004, *R.S.Göktürk* 5945 (flowering, AKDU); ibid., 37°56'32"N, 36°34'52"E, 29.viii.2004, *R.S.Göktürk* (5949) & *A.Aksoy* (mature fruiting specimens, AKDU).

***P. nephrophylla** Rech.f. & H. Riedl., in Anz. Math.-Nat. Kl. Österr. Akad. Wiss. 98: 226.

(Ertekin & Kaya, 2005)

E. Anatolia, **B8** Diyarbakır: Dicle, Dicle to Hani 12 km, on rock, 740 m, 27.vii.2004, *A.S.Ertekin* 2004-345, *M.Aksal* (ANK, DUF, Hb. Yıldırımlı); Eğil, Eğil castle, on rock, 950 m, 04.x.2004, *A.S.Ertekin* 2004-362 (DUF).

eP. tunceliana** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Tunceli: Ovacık, Munzur dağları, Karagöl kepezi (vadisi), Dilap yaylası, 1750-2250 m, 07.vii.1980, §.Yıldırımlı 3566 (holo. Hb. Yıldırımlı, iso. HUB).

Seseli L. (4: 367)

eS. paphlagonicum** Pimenov & Kljuykov, in Fl. Medit. 20: 19-27 (2010).

(Pimenov & Kljuykov, 2010)

Type: Turkey, **A4** Kastamonu: Ilgaz Dağı, Ilgazdağı Milli Parkı, 41°00'N, 33°44'E, 2200 m, limestones, 19.viii.2008, Pimenov & Kljuykov 104 (holo. MW).

eS. phrygium** Pimenov & Kljuykov, in Fl. Medit. 20: 19-27 (2010).

(Pimenov & Kljuykov, 2010)

Type: Turkey, **A3** Eskişehir: Sakarya valley, Mayıslar, 40°02'N, 30°39'E, 250 m, in cracks of limestone cliffs. 30.vi.2007, Pimenov & Kljuykov 29 (holo. MW).

Smyrniopsis Boiss. (4: 340)

eS. munzurdaghensis** Yild., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **B7** Tunceli: Ovacık, Karagöl kepezi (vadisi), kayalık ve taşlık alanlar, kepezin orta kesimi, 1350 m, 30.vi.1983, S.Yıldırımlı 5401 (holo. Hb. Yıldırımlı, iso. HUB).

Trigonosciadium Boiss. (4: 500)

eT. undulatum** Yild., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C9** Hakkari: Depin, Sümbül çayı kıyısı, harlalar (bahçeler) ve tarlalar, ağaçlık, 1300 m, 14.vi.2009, S.Yıldırımlı 36076 (holo. Hb. Yıldırımlı, iso. KNYA).

MONOCOTYLEDONES

ARACEAE (8: 41)

Biarum L. (8: 55)

***B. syriacum** (Spreng.) H. Riedl in Aroideana 3: 19 (1980).

(Akan & Balos, 2008)

S.E. Turkey, **C6** Gaziantep: Dülükbaba forest, 8 km N of Gaziantep, 10.iv.2005, steppe and rocky ground, 1100-1200 km, H.Akan 5633 & Balos, ibid. 7.v.2005, H.Akan 5782 & Balos, ibid. 03.iv.2008, forest spaces, terra rosa type soil, H.Akan 5841, Balos & Mirdeslioğlu, ibid. 01.v.2008, H.Akan 5844 & Balos.

GRAMINEAE (9: 158)

Aegilops L. (9: 233)

***A. juvenalis** (Thell.) Eig, in Feddes Repert., Beih. 55: 93 (1929).

(Cabi & Doğan, 2009)

S.E. Anatolia. **C8** Şanlıurfa: Ceylanpinar, Ceylanpinar State Farm, Güzelyat area, SE of Güzelyat castle, around GSM base station, 437 m, 23.iv.2007, E.Cabi 1879 (GAZI).

Arundo L. (9: 561)

***A. mediterranea** Danin, in Willdenowia 38: 469 (2008).

(Danin, 2008)

European Turkey, **A1** (E) Tekirdağ: 7 km E of Tekirdağ to İstanbul, between the coastal road and the beach, 3.vii.2007, Danin (B, E, HUJ, PAL).

Bromus L. (9: 272)

***B. danthoniae** Trin. ex C.A. Mey. subsp. **pseudodanthoniae** (Drobov) H.Scholz, in Willdenowia 40: 199 (2010).

(Behçet et al., 2010)

E. Anatolia. **C9** Şırnak, Beytüşsebap town, district of Mesra (37°40'28"N, 43°11'17"E), south of Kerkol hill (around Tahti, Abdo rocky area), stony steppe, c. 2000 m, 20.vi.2009, Rüstemoğlu 833 (B, VANF).

***B. regnii** H. Scholz, in Willdenowia 38: 470 (2008).

(Scholz, 2008)

European Turkey, **A1** (E) Kırklareli: 13 km a Hasva versus Edirne, ad versuras et in incultis, 18.vi.1984, Rechinger 60717 (B). – Id., **C1** Muğla: c. 6 km W of Marmaris, *Liquidambar orientalis* forest, serpentine, c. 100 m, 16.v.1983, Carlström 10398; ibid.: Gölyeri, c. 8 and 7 km NE Emecik, limestone, 18.v.1983, 11.v.1984, Carlström 10683, 12539; ibid.: Kızıldağ, 4 km NW İçmeler, phrygana on serpentine, c. 100 m, 20.v.1983, Carlström 10812; ibid: 3 km SE of Marmaris, open ground on serpentine, 20.v.1983, Carlström 10894; ibid.: 10 km N of Marmaris, serpentine, 26.v.1983, Carlström 11280; ibid.: between Tuludağ and Karadağ, limestone, 09.v.1980, Carlström 9738; ibid.: Datça peninsula, easternmost part of Hisarönü, 11.v.1984, Carlström 12745 (all Carlström collections LD, under "B. japonicus"; det. Scholz).

Catapodium Link (9: 461)

***C. balearicum** (Willk.) H. Scholz, in Willdenowia 38: 470 (2008).

(Raus et al., 2008)

S. Anatolia. **C3** Antalya: coast E of Antalya, Belek park (Absa) W of Gürpinar ($36^{\circ}49'56''N$, $31^{\circ}10'59''E$), depression in coastal dunes, 12.iv.2005, Ristow 319/05.

■ **Cymbopogon** Spreng.

* **C. olivieri** (Boiss.) Bor, in Notes Roy. Bot. Gard. Edinb. 25: 62 (1963).

(Yıldırımlı, 2007)

E. Anatolia, **C9** Şırnak: Kumçatı, roadside, argillaceous stream and hill, 600 m, 26.vi.1997, Ş.Yıldırımlı 20348 & A.A.Dönmez (GAZI, HUB, Hb. Yıldırımlı).

Eremopyrum (Ledeb.) Jaub. et Spach (9: 227)

e** **E. bonaepartis** (Sprengel) Nevski var. **aristatum** (Steudel) Cabi & Doğan, in Plant Syst Evol 287: 129-140 (2010).

(Cabi & Doğan, 2010)

Type: Turkey, **B3** Ankara: 26 km from Polatlı to Sivrihisar $39^{\circ}33.417'N$, $31^{\circ}47.173'E$, 814 m steppe, E.Cabi 339 (holo. GAZI, iso. ANK, E)

E. bonaepartis (Sprengel) Nevski var. **sinaicum** Cabi & Doğan, in Plant Syst Evol 287: 129-140 (2010). comb. nov.

(Cabi & Doğan, 2010)

E. confusum Melderis var. **sublanuginosum** (Drob.) Cabi & Doğan, in Plant Syst Evol 287: 129-140 (2010). comb. nov.

(Cabi & Doğan, 2010)

Poa L. (9: 470)

e** **P. bussmannii** H. Scholz, in Willdenowia 40: 200-201 (2010).

(Scholz, 2010)

Type: Turkey, (C Anatolia): Vilayet Kayseri, Kugelbuschsteppe auf stark verwittertem Basaltschutt an der Nordostseite des Ercyas Dağı, 2120-2700 m, 21.vii.1990, Bussmann (STU).

IRIDACEAE (8: 381)

Crocus L. (8: 413)

e ****C. antalyensis** B. Mathew subsp. **striatus** Erol & Koçyiğit, in Nord. J. Bot. 28: 186-188 (2010).

(Erol et al., 2010)

Type: Turkey, **C1** Mugla: surrounding hills of Mugla, 900-1050 m a.s.l., 16.ii.2007, O.Erol & L.Şik, ISTF 40079 (holo. ISTF).

LILIACEAE (8: 67)

Allium L. (8: 98)

* **A. dentiferum** Webb & Berthel., Hist. Nat. Iles Canaries 3: 345 (1848).

(Koçyiğit & Özhatay, 2010)

European Turkey, **A2 (A)** İstanbul: Maltepe, ISTE 18096; **C3** Antalya: Side, 9 m, ISTE 86053.

* **A. dodecanesii** Karavokyrou & Tzanoudakis in Ann. Muse. Goulandris 9: 141 (1994).

(Koçyiğit & Özhatay, 2010)

S. Anatolia, **C4** Mersin: Kuzucubelen, 671 m, ISTE 86054.

e****A. ertugrulii** Demir. & Uysal, in Nord. J. Bot. 25: 315-317 (2007).

(Demirelma & Uysal, 2007)

Type: Turkey, **C3** Konya: Kızıldağ, stony places openings in *Pinus nigra* forests, 1400-1550 m, $37^{\circ}20'86.5''N$, $31^{\circ}40'68.3''E$, 19.v.2006, Demirelma 3125 & Uysal (holo. KNYA).

e** **A. rumelicum** Koçyiğit & N.Özhatay, in Phytologia Balcanica 16(3): 355-359 (2010).

(Özhatay et al., 2010)

Type: Turkey, **A1(E)** Kırklareli: Demirköy, above Dupnisa Cave, 27.vii.2009, E.Akalın, Y.Yeşil, U.Uruşak, (holo. ISTE 86112, iso. EDTU).

e** **A. yıldırımlıi** Dural, Bağcı & Ertugrul, in Ot Sistematisk Botanik Dergisi 16(1): 1-8 (2009).

(Dural et al., 2009)

Type: Turkey, **C4** Karaman: between Ermenek and Sarıvadi, from Hamitseydi to Yunt dağı, *Cedrus libani* forests, $36^{\circ}31.978'N$, $32^{\circ}47.184'E$, 1710 m a.s.l., 14.vii.2004, K.Ertuğrul 3218, Y.Bağcı & H.Dural (holo. KNYA, iso. Hb. Yıldırımlı).

Fritillaria L. (8: 284)

e F. mughlae** Tekşen & Aytaç, in Ann. Bot. Fenn. 45: 141-147 (2008).

(Tekşen & Aytaç, 2008)

Type: Turkey, **C1** Muğla: Marmaris-Datça, between Hisarönü and Emecik, 45 km to Datça, 70-80 m, rocky slopes, 01.iii.2001, *M.Tekşen* 1996, *E.Tekşen* and *U.Soydemir* (GAZI; iso. ANK, ISTF, HUB).

Paratype: Turkey, **C2** Muğla: Marmaris to Emecik, 350 m, 25.iii.1956, *D. & Pollunin* 25375 (ANK, BM, E, K).

Gagea Salisb. (8: 312)

e G. sivasica** Hamzaoğlu, in Turk. J. Bot. 32: 261-264 (2008).

(Hamzaoğlu et al., 2008)

Type: Turkey, **B6** Sivas: Hafik, Tödürge Lake, around resort of Cumhuriyet University, 1310 m, damp grassy places on gypsaceous rocks, 07.v.2006, *Hamzaoğlu, Aksoy & Budak* 3832 (holo. BOZOK Hb., iso. ANK, BOZOK Hb., ERCIYES Hb., GAZI, HUB).

Muscari L. (8: 245)

eM. babachii** Eker & Koyuncu, in Nord. J. Bot. 26: 49-52 (2008).

(Eker & Koyuncu, 2008)

Type: Turkey, **C6** Hatay: Amanoslar, Arsuz, Karlı Tepe, 1788 m a.s.l., 13.vi.2005, 36°18.218'N, 36°00.272'E, *İ.Eker* 1196 (holo. AIBU, iso. AEF).

eM. sirnakense** Yıld., in Ot Sistematisk Botanik Dergisi 17(2): 1-114 (2010).

(Yıldırımlı, 2010)

Type: Turkey, **C9** Şırnak: Şırnak, Hoşiplin'den Galoşki yaylasına, yayla, çayırlık, karın kalktığı yerler, 1750 m, 10.iv.2010, *Ş.Yıldırımlı* 36530 (holo. Hb. Yıldırımlı, iso. HUB, ISTE).

eM. vuralii** Bağcı & Doğu, in Nord. J. Bot. 27: 243-246, (2009).

(Doğu & Bağcı, 2009)

Type: Turkey, **C4** Karaman: Sariveliler; Atalanı, stony place, steppe, 1950 m a.s.l., 13.iv.2006, *S.Doğu* 106 and *Bağcı* (holo. KNYA, iso. GAZI, Hb. Yıldırımlı).

Ornithogalum L. (8: 227)

***O. boucheanum** (Kunth) Asch., in Österr. Bot. Zeitschr. 16: 192 (1866).

(Dalgıç et al., 2006)

European Turkey, **A1** (E) Edirne: Hacidanism-Saridanism village, 41°31'N, 26°37'E, 29 m alt., at the village entrance, 29.iv.2004, *G.Dalgıç & F.Dane* (EDTU 9499).

eO. nallihanense** Yıld. & A. Doğru Koca, in Nord. J. Bot. 28: 329-331 (2010).

(Doğru-Koca & Yıldırımlı, 2010)

Type: Turkey, **A3** Ankara: Nallıhan, 18 km from Nallıhan to Mudurnu, opposite Doğandere village, Quercetum, inside and slopes of valley, 36°35'37"E, 44°63'532"N, 750-900 m a.s.l., stones and screes, 02.iv.2006, *Ş.Yıldırımlı* 30620 & *A.Doğru-Koca* (holo. Hb. Yıldırımlı, iso. HUB, K). Turkey. Ibid. 29.iv.2007, *A.Doğru-Koca* 2988 (para. Hb. Yıldırımlı).

eO. nudiana** Bağcı & Savran, in Turk. J. Bot. 33: 1-5 (2009).

(Bağcı et al., 2009b)

Type: Turkey, **A2** Bursa: Uludağ (Bithynian Olympus); Uludağ, openings in *Juniperus communis* communities, 1750-1900 m, 09.vi.2008, *Bağcı* 3782 and *Savran* (holo. KNYA, iso. GAZI, Hb. Yıldırımlı).

e O. sandrasicum** Yıld., in Ot Sistematisk Botanik Dergisi 16: 1-8 (2009).

(Yıldırımlı, 2009a)

Type: Turkey, **C2** Muğla: Köyceğiz, Ağla köyü, Sandras dağı, bulak karşısı, karaçam orman açıklığı, çarşak, 1275-1300 m, 30.v.2009, *Ş.Yıldırımlı* 35960, *Görkem Yıldırımlı & H.Işıl Yıldırımlı* (holo. Hb. Yıldırımlı, iso. GAZI, HUB).

Paris L. (8: 355)

***P. quadrifolia** L., in Sp. Pl. 1: 367 (1753).

(Terzioglu et al., 2008)

N.E. Anatolia, **A9** Ardahan: Posof-Gönülaçan village, UTM 030°81'40"E, 46°03'186"N, 1930 m and UTM 030°80'50"E, 46°02'923"N, 2015 m, 17.viii.2007, *S.Terzioglu*, KATO: 10538, Çoşkunçelebi 659 (KTUB).

Tulipa L. (8: 302)

e T. koyuncui** Eker & Babaç, in Nord. J. Bot. 28: 324-328 (2010).

(Eker & Babaç, 2010)

Type: Turkey, **B9** Van: between Van and Başkale, Güzeldere pass, rocky and stony slopes, 2738 m a.s.l., 19.v.2006, *Eker* 1565 (holo. AIBU, iso. AEF).

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