

## New floristic records in the Balkans: 11\*

Compiled by Vladimir Vladimirov<sup>1</sup>, Feruzan Dane<sup>2</sup> & Kit Tan<sup>3</sup>

<sup>1</sup> Institute of Botany, Bulgarian Academy of Sciences, Acad. Georgi Bonchev St., bl. 23, 1113 Sofia, Bulgaria, e-mail: vdvlad@bio.bas.bg

<sup>2</sup> Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey, e-mail: feruzandane@gmail.com

<sup>3</sup> Institute of Biology, University of Copenhagen, Øster Farimagsgade 2D, DK-1353 Copenhagen K, Denmark, e-mail: kitt@bio.ku.dk

**Abstract.** New chorological data are presented for 83 species and subspecies from Bulgaria (records no. 1-6, 34-41, 70-83), Greece (14-30, 59-69) and Turkey-in-Europe (7-13, 31-33, 42-58). The taxa belong to the following families: *Anacardiaceae* (75), *Apiaceae* (15, 24), *Asteraceae* (1, 2, 16, 25, 26, 34, 45-50, 59-61, 70, 71, 79, 80), *Berberidaceae* (62), *Brassicaceae* (17, 27, 35), *Campanulaceae* (3, 4, 42-44), *Caryophyllaceae* (5, 28, 72, 81), *Commelinaceae* (22), *Crassulaceae* (29), *Fabaceae* (7-10, 36, 51-58, 63, 82, 83), *Geraniaceae* (18), *Guttiferae* (73), *Iridaceae* (31-33), *Lamiaceae* (74), *Liliaceae* s.l. (11-13, 38-40), *Malvaceae* (19), *Onagraceae* (64), *Orchidaceae* (68, 69), *Orobanchaceae* (65), *Oxalidaceae* (20), *Poaceae* (23, 32, 41), *Polypodiaceae* (14), *Primulaceae* (66), *Ranunculaceae* (37), *Rhamnaceae* (76), *Rosaceae* (77, 78), *Rubiaceae* (notes after record no. 30), *Scrophulariaceae* (6, 21) and *Solanaceae* (67).

First reports for countries are: Greece – *Tradescantia fluminensis* (22) and *Ludwigia grandiflora* (64).

The publication includes contributions by A. Asenov (1-6), M. Aybeke (7), M. Aybeke, C. Kurt & A. Semerci (8-10), N. Başak, N. Özhata & F. Dane (11-13), B. Biel & Kit Tan (14-23), R.M. Burton (24-30), F. Dane, G. Yılmaz & G. Dalgıç (31-33), V. Goranova, K. Vassilev & H. Pedashenko (34-41), S. Kırıcı, N. Başak & F. Dane (42-44), Ç. Meriç, F. Dane & G. Yılmaz (45-47), Ç. Meriç, G. Yılmaz, K. Alpinar & F. Dane (48-50), G. Savaş, G. Yılmaz, N. Başak & F. Dane (51-58), Kit Tan, G. Sfikas, G. Vold & T. Lafranchis (59-69), A. Tashev (70-74), A. Tashev & E. Tsavkov (75-78) and V. Vladimirov (79-83).

---

This is the eleventh report in a series dealing with the new chorological data of vascular plants in the Balkans. For details on the presentation of information see *Phytologia Balcanica*, vol. 12(1), pp. 107-108 and vol. 12(2), p. 279.

\* Reports for Bulgaria have been reviewed by V. Vladimirov, for Greece by Kit Tan and for Turkey-in-Europe by F. Dane.

## Reports 1-6

### Asen Asenov

Herbarium (SO), Faculty of Biology, St Kliment Ohridski Sofia University, 8 Dragan Tsankov Blvd, 1164 Sofia, Bulgaria, e-mail: asenasenov71@yahoo.com

#### Asteraceae

##### 1. *Hieracium sparsum* Friv.

**Bu** Pirin Mts (*Northern*): Kornishki Circus, 2200 m, in an open ridge area, GM-12, 03.08.2008, coll. A. Asenov (SO 105347).

Apparently omitted for this floristic region in all recent literature sources for the Bulgarian flora (Peev 1992; Delipavlov 2003; Assyov & Petrova 2006) and the Flora of Pirin Mts (Kitanov & Kitanov 1990) although in the older botanical literature the species has been reported for the alpine and subalpine belts of the high mountains of Bulgaria (e.g. Stojanov & al. 1967). Also, diploid chromosome number in accessions from Pirin Mts has been recently reported (Vladimirov & Szelag 2001).

##### 2. *Onopordum tauricum* Willd.

**Bu** Znepole Region: Mt Zemenska, close to Silni Vrah locality, 900 m, limestone, in an open ridge area, FN-30, 06.06.2008, coll. A. Asenov (SO 105771).

New for Znepole Region.

#### Campanulaceae

##### 3. *Campanula patula* L.

**Bu** Znepole Region: Mt Zemenska, close to peak Tichak, limestone, 800 m, in an open ridge area, FN-30, 12.06.2008, coll. A. Asenov (SO 105773).

New for the Znepole Region.

##### 4. *Campanula versicolor* Andrews

**Bu** Znepole Region: Mt Zemenska, close to Silni Vrah location, limestone, in an open ridge area, FN-30, 20.06.2008, coll. A. Asenov (SO 105770).

New locality for this rare species in Mt Zemenska.

Already known from Znepole Region (Anchev 1984).

#### Caryophyllaceae

##### 5. *Dianthus deltoides* L.

**Bu** Pirin Mts (*Northern*): Kadievi Livadi locality, 1300 m, in an open ridge area, GM-12, 02.08.2008, coll. A. Asenov (SO 105395).

New for the Pirin Mts region.

#### Scrophulariaceae

##### 6. *Verbascum humile* Janka

**Bu** Forebalkan (*Western*): close to Mezdra town, GN-18, 16.05.1899, coll. S. Georgiev (SO 64481).

— Znepole Region: Mt Zemenska, close to Silni Vrah locality, limestone, 900 m, in an open ridge spot, FN-30, 14.06.2008, coll. A. Asenov (SO 105769). New for both floristic regions.

## Report 7

### Mehmet Aybeke

Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey, e-mail: mehmetaybeke@yahoo.com

#### Fabaceae

##### 7. *Ornithopus compressus* L. (Fig. 1)

**Tu(E)** A1(E) Edirne: Uzunköprü, Çöpköy, waste places, 145 m, 41°13'11"N, 26°49'22"E; 12.05.2004, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 411); Centre, Üyüklütatar village, 50 m, 41°32'44"N, 26°36'36"E, 26.05.2004, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 448); Elçili village, 101 m, 41°27'13.7"N, 26°38'38.1"E, 26.05.2004, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 485); Menekşe-Sofular village, 119 m, 41°46'00"N, 26°39'00"E, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 872); Lalapaşa, Hamzabeyli village, grassland and *Quercus* openings, 391 m, 41°57'50"N, 26°38'39"E, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 984).

New for A1(E) Edirne, Kırklareli, Tekirdağ in European Turkey. The species has been known so far from A2(E) Istanbul Sarıyer (Chamberlain 1970).

Furthermore, the International Legume Database & Information Service (ILDIS) reported this taxon



Fig.1. *Ornithopus compressus* (photo C. Kurt).

from Europe (Albania, Azores, Balearic Isl., Bulgaria, Corsica, Crete, Former Yugoslavia, France, Greece, Italy, Malta, Portugal, Sardinia, Sicily, Spain, and also Turkey in Europe, Istanbul Sarıyer), as described above (ILDIS, <http://www.ildis.org/>)

**Acknowledgements.** Fieldwork was carried out in 2004, under the project TAGEM /04/04/01/002.

## Reports 8-10

**Mehmet Aybeke<sup>1</sup>, Cengiz Kurt<sup>2</sup> & Arif Semerci<sup>2</sup>**

<sup>1</sup> Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey,  
e-mail: mehmetaybeke@yahoo.com

<sup>2</sup> Department of Forage Crops, Trakya Agricultural Researches Institute, 22030 Edirne, Turkey, e-mail: cengizkurt69@hotmail.com; arifsemerci@ttae.gov.tr

### Fabaceae

**8. *Lathyrus digitatus* (M. Bieb.) Fiori & Paol.**

**Tu(E)** A1(E) Edirne: Keşan, Kılıçköy village, grassland, 24 m, 40°47'00"N, 26°33'00"E, 05.05.2004, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 290); Altıntaş village, in a field, 141 m, 41°01'00"N, 26°42'00"E, 12.05.2004, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 373); Meriç, Yakupbey village, 107 m, 41°15'06.8"N, 26°32'46.3"E, 26.05.2004, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 540).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli, and A2(E) İstanbul Sarıyer (Davis 1970).

**9. *Lathyrus pratensis* L.**

**Tu(E)** A1(E) Edirne: Lalapaşa, Hacılar village, in a field, 460 m, 378 m, 41°56'00"N, 26°47'00"E, 08.07.2003, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 064).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli-Vize, A2(E) İstanbul (Davis 1970).

**10. *Lathyrus laxiflorus* (Desf.) O. Kuntze subsp. *laxiflorus***

**Tu(E)** A1(E) Edirne: Uzunköprü, Çöpköy, 145 m, 41°13'11"N, 26°49'22"E, 12.05.2004, coll. M. Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 409); Meriç, Subaşı village, 48 m, 41°09'47.3"N, 26°23'37.6"E, 26.05.2004, coll. M.

Aybeke, C. Kurt & A. Semerci, det. M. Aybeke (ETTA 614).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli-Demirköy, and A2(E) İstanbul Belgrad forest (Davis 1970).

**Acknowledgements.** Fieldwork was carried out in 2003 and 2004 under the project TAGEM /04/04/01/002.

## Reports 11-13

**Nesibe Başak, Neriman Özhatay & Feruzan Dane**

Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey,  
e-mail: feruzandane@yahoo.com

### Liliaceae

**11. *Gagea pratensis* (Pers.) Dumort.**

**Tu(E)** A1(E) Edirne: Lalapaşa, Büyükdöllük village, in a field, 50 m, 41°45'00"N, 26°36'00"E, 04.03.1989, coll. N. Başak (EDTU 3000; ISTE 60024!); Havsa, in a field, 70 m, 41°33'01"N, 26°49'13"E, 26.03.1989, coll. N. Başak (EDTU 3081; ISTE 60113!); Havsa, Üyüklütatar village, 2 km, in a field, 50 m, 22.03.1989, coll. N. Başak (EDTU 3067; ISTE 60099!); Süloğlu dam, in a field, 200 m, 41°46'02"N, 26°54'43"E, 23.03.1989, coll. N. Başak (EDTU 3077; ISTE 60109!); Süloğlu: Musabeyli village, under *Paliurus*, 100 m, 41°41'00"N, 26°40'00"E, 23.03.1989, coll. N. Başak (EDTU 3073; ISTE 60104!).

New for A1(E) Edirne in European Turkey. So far the species has been known from Kırklareli (Rix 1984).

**12. *Gagea bohemica* (Zauschn) Schult. & Schult. f.**

**Tu(E)** A1(E) Edirne, Centre: Kapıkule, Yıldırım graveyard, 26 m, 41°40'28"N, 26°33'39"E, 22.03.1989, coll. N. Başak (EDTU 3065; ISTE 60097!); Havsa: Oğulpaşa village, in a field, 101 m, 41°35'00"N, 26°45'00"E, 28.03.1988, coll. N. Başak (EDTU 1892; ISTE 59978!); Havsa: Sazlıdere entry, under *Pinus*, 80 m, 41°36'00"N, 26°41'00"E, 02.03.1989, coll. N. Başak (EDTU 3025; ISTE 60046!); Havsa: Derebağlar site, 65 m, 41°33'01"N, 26°49'13"E, 02.04.1989, coll. N. Başak (EDTU 3089; ISTE 60121!); Süloğlu, grassland, under *Paliurus*, 20 m, 40°44'00"N, 26°22'00"E, 17.03.1988, coll. N. Başak & G. Dalgıç (EDTU 1839; ISTE 59928!); Süloğlu, around dam, bottom

- rock, 156 m, 41°46'02"N, 26°54'43"E, 23.03.1989, coll. N. Başak (EDTU 3078; ISTE 60110!); Lalapaşa, Değirmenyanı village, graveyard, 35 m, 41°45'00"N, 26°33'00"E, 04.03.1989, coll. N. Başak (EDTU 3004; ISTE 60028!); Lalapaşa: Hatipköy exit, under *Quercus*, 52 m, 41°49'00"N, 26°34'00"E, 03.1989, N. Başak (EDTU 3006; ISTE 60030!); Lalapaşa, Çamlık village, grassland, under *Quercus*, 172 m, 41°50'00"N, 26°44'00"E, 05.03.1989, coll. N. Başak (EDTU 3007; ISTE 60031!); Lalapaşa: Hanlıyenice village, under *Quercus*, 229 m, 41°52'00"N, 26°42'00"E, 05.03.1989, coll. N. Başak (EDTU 3009; ISTE 60032!); Lalapaşa: Taşlımüselli village, grassland, 195 m, 41°49'00"N, 26°47'00"E, coll. N. Başak (EDTU 3011; ISTE 60035!); Uzunköprü: Orhaniye village, under *Paliurus*, 53 m, 41°27'04"E, 26°37'16"E, 12.03.1989, coll. N. Başak (EDTU 3027; ISTE 60049!); Uzunköprü: Kurttepe village, under *Quercus*, 95 m, 41°22'00"N, 26°43'00"E, 18.03.1989, coll. N. Başak (EDTU 3046; ISTE 60078!); Uzunköprü: Hamitli village, graveyard, 48 m, 41°20'00"N, 26°42'00"E, 13.03.1989, coll. N. Başak (EDTU 3047; ISTE 60079!); Uzunköprü: Yeniköy village, graveyard, 44 m, 40°52'00"N, 26°34'00"E, 19.03.1989, coll. N. Başak (EDTU 3060; ISTE 60092!).
- A1(E) Kırklareli, Centre: Slope of stream, 194 m, 41°43'54"N, 27°13'29"E, 11.03.1989, coll. N. Başak (EDTU 3019; ISTE 60042!); İnece, slope of a hill, 105 m, 41°40'35"N, 27°04'16"E, 11.03.1989, coll. N. Başak (EDTU 3018; ISTE 60041!); Dereköy, graveyard, 446 m, 41°55'58"N, 27°22'00"E, 11.03.1989, coll. N. Başak (EDTU 30239; ISTE 60072!); Pehlivanköy: Doğanca village, under *Quercus*, 50 m, 41°20'54"N, 26°55'23"E, 19.03.1989, coll. N. Başak (EDTU 3056; ISTE 60088!); Pehlivanköy, Kuştepe village, under *Quercus*, 26 m, 41°40'28"N, 26°33'39"E, 19.03.1989, coll. N. Başak (EDTU 3057; ISTE 60089!).

New for A1(E) Edirne and Kırklareli in European Turkey. So far the species has been known from A1(E) Çanakkale (Rix 1984).

### 13. *Gagea villosa* (M. Bieb.) Duby

Tu(E) A1(E) Edirne, Centre: around Trakya Üniversty, 26 m, 41°40'28"N, 26°33'39"E, 26.03.1989, coll. N. Başak (EDTU 3084; ISTE

60116!); Buçuktepe, in a field, 26 m, 41°40'28"N, 26°33'39"E, 05.04.1988 (ISTE 59949!); Eskikadın village, 26 m, 41°40'28"N, 26°33'39"E, 16.03.1988, coll. N. Başak (EDTU 1836; ISTE 59955!); Kapıkule: Ekmekçi village exit, in a field, 130 m, 41°44'00"N, 26°28'00"E, 14.03.1989, coll. N. Başak (EDTU 3039; ISTE 60060!); Budakdoğanca village, big grove, in a field, 100 m, 41°45'37"N, 26°20'33"E, 21.03.1989, coll. N. Başak (EDTU 3062; ISTE 60094!); Süloğlu: around dam, 156 m, 41°46'02"N, 26°54'43"E, 07.03.1988, coll. N. Başak & G. Dalgıç (EDTU 1844; ISTE 59971!); Musabeyli village, under *Paliurus*, 100 m, 41°41'00"N, 26°40'00"E, 23.03.1989, N. Başak (EDTU 3073; ISTE 60105!); Haciumur village, in graveyard, 120 m, 41°43'00"N, 26°48'00"E, 23.03.1989, coll. N. Başak (EDTU 3074; ISTE 60106!); Musabeyli village, under *Paliurus*, 100 m, 41°41'00"N, 26°40'00"E, 23.03.1989, coll. N. Başak (EDTU 3073; ISTE 60105!); Lalapaşa, Çomlekköy village, in a field, 172 m, 41°50'00"N, 26°44'00"E, 05.03.1989, coll. N. Başak (EDTU 3008; ISTE 60032!); Büyükdöllük village, in a field, 50 m, 41°45'00"N, 26°36'00"E, 50 m, 09.03.1989, coll. N. Başak (EDTU 3001; ISTE 60025!); Suakacağı village, in a field, 172 m, 41°50'00"N, 26°44'00"E, 04.03.1989, coll. N. Başak (EDTU 3005; ISTE 60029!); Uzunköprü: Elçili village, in a field, 50 m, 53 m, 41°27'04"E, 26°37'16"E, 12.03.1989, coll. N. Başak (EDTU 3028; ISTE 60050!); Sığircık village, in a field, 150 m, 41°16'10"E, 26°41'10"E, 12.03.1989, coll. N. Başak (EDTU 3031; ISTE 60051!); Saçlımüselli village, in a field, 50 m, 41°25'24"N, 26°37'54"E, 18.03.1989, coll. N. Başak (EDTU 3041; ISTE 60073!); Uzunköprü-Sığircılı village, in a field, 50 m, 41°24'40"N, 26°38'59"E, 18.03.1989, coll. N. Başak (EDTU 3042; ISTE 60074!); Havsa, centre, under *Paliurus*, 70 m, 41°33'01"N, 26°49'13"E, 26.03.1989, coll. N. Başak (EDTU 3083; ISTE 60115); Üyüklütatar village, in a field, 44 m, 41°32'44"N, 26°36'36"E, 22.03.1989, coll. N. Başak (EDTU 3068; ISTE 60100!); Lalapaşa, Büyükdöllük village, in a field, 50 m, 41°45'00"N, 26°36'00"E, 04.03.1983, coll. N. Başak (EDTU 3002; ISTE 60026!); Suakacağı village, in a field, 172 m, 41°50'00"N, 26°43'06'00"E, 04.03.1989, coll. N. Başak (EDTU 30059; ISTE 60029!); Enez: Kılıçköy village, in a

field, 25 m, 40°47'00"N, 26°33'00"E, 18.03.1989, coll. N. Başak (EDTU 3049; ISTE 60081!).

- A1(E) Kırklareli: Dereköy, 500 m, 41°55'58"N, 27°22'00"E, 19.03.1974, coll. A. Baytop & E. Tuzlaci (ISTE 27224!); İnece village, 105 m, 41°40'35"N, 27°04'16"E, 22.05.1988, coll. N. Başak (EDTU 2057; ISTE 59950!); Babaeski, in a field, 55 m, 41°25'57"N, 27°05'35"E, 19.03.1989, coll. N. Başak (EDTU 3050; ISTE 60082!); Pehlivanköy, in a field, 50 m, 41°20'54"N, 26°55'23"E, 19.03.1989, coll. N. Başak (EDTU 3051; ISTE 60083!); Pehlivanköy: Doğanca village, under *Quercus*, 50 m, 41°23'17"N, 26°59'35"E, 19.03.1989, coll. N. Başak (EDTU 3055; ISTE 60087!).

New for A1(E) Edirne and Kırklareli in European Turkey. So far the species has been known from A2(E) Istanbul (Rix 1984).

## Reports 14-23

Burkhard Biel<sup>1</sup> & Kit Tan<sup>2</sup>

<sup>1</sup> Am Judengarten 3, D-97204 Höchberg, Germany,  
e-mail: b.biel@arcor.de

<sup>2</sup> Institute of Biology, University of Copenhagen, Øster Farimagsgade 2D, DK-1353 Copenhagen K, Denmark,  
e-mail: kitt@bio.ku.dk (author for correspondence)

This is the ninth report of new plant-records for the island of Samothraki (N Aegean islands, Nomos Evrou, Eparchia Samothrakis) based on fieldwork carried out in June 2007, November 2008 and February 2009. The records listed are all new to the island and when specifically stated, to the floristic region N Aegean (NAe) as circumscribed in *Flora Hellenica* (Strid & Tan 1997). The distribution on the other N Aegean islands is also provided.

### Polypodiaceae

#### 14. *Polyodium cambricum* L.

**Gr** Samothraki: E-NE of Pachia Ammos, granitic rock outcrops in phrygana at hill saddle, 130 m, 40°24'02"N, 25°36'51"E, 11.02.2009, Biel 09.070.

Mainly dry rock crevices in another six localities near Pachia Ammos. Also noted at Ano Meria-Kipi, Xiropotamos-Seli and east of Profitis Ilias. Recorded from the islands of Ag. Evstratios, Limnos and Thasos in the N Aegean.

### Apiaceae

#### 15. *Smyrnium creticum* Mill. (Fig. 2)

**Gr** Samothraki: NE of Kamariotissa, embankment

near dirt road by river, 15 m, 40°28'53"N, 25°29'01"E, 08.06.2008, Biel 08.022.

Also noted in two other localities near Alonia. *Smyrnium olusatrum* L., the other species of *Smyrnium* on the island, is more widely distributed and was noted in at least 12 localities including Alonia, Chora, Kamariotissa, Palaeopolis and Profitis Ilias. The record of *S. perfoliatum* subsp. *rotundifolium* (Mill.) Hartvig reported by Katsikopoulos (1936: 8) has not been confirmed. *Smyrnium creticum* is reported from the N Aegean island of Limnos.

### Asteraceae

#### 16. *Tanacetum parthenium* (L.) Schultz Bip.

**Gr** Samothraki: SE of Chora (Samothraki), embankment above well with *Platanus* growing nearby, 300 m, 40°28'17"N, 25°31'39"E, 18.06.2007, Biel 07.072.

Established escape, presumably planted for herbal properties. New for the N Aegean islands.

### Brassicaceae

#### 17. *Hymenolobus procumbens* (L.) Nutt.

**Gr** Samothraki: Pachia Ammos, western margin of a sandy beach in vicinity of restaurant, 3 m, 40°23'41"N, 25°34'38"E, 11.02.2009, Biel 09.072.

A large population of plants just coming into flower was found at this early season. Later in the year almost all will disappear, trampled by visitors and eradicated by beach-bulldozers. New for the N Aegean islands.

### Geraniaceae

#### 18. *Geranium pusillum* Burm. f.

**Gr** Samothraki: E of Anomeria-Remboutsadi,

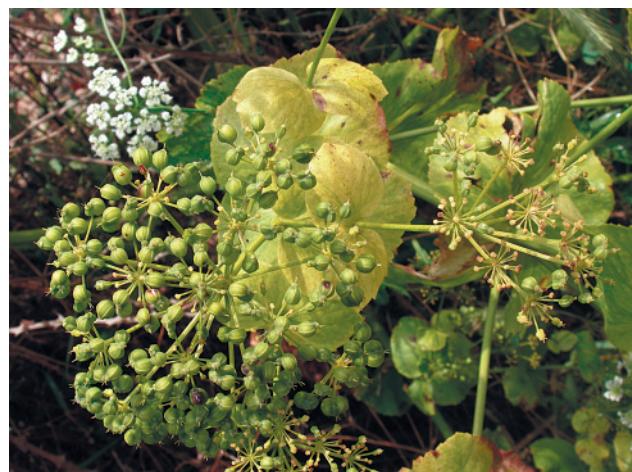


Fig. 2. *Smyrnium creticum* (photo B. Biel).

fenced pasture above Agistros stream, growing on granitic gravel and loam, 70 m, 40°27'32"N, 25°40'50"E, 12.02.2009, Biel 09.082.

Together with *Arum elongatum*, *Galanthus reginae-olgae*, *Geranium rotundifolium*, *G. robertianum* subsp. *purpureum*, *Lamium purpureum*, *Muscaris neglectum*, etc. New for the N Aegean islands.

#### *Malvaceae*

##### 19. *Malva pusilla* Sm.

**Gr** Samothraki: Kamariotissa, ruderal ground at beach promenade, 2 m, 40°28'37"N, 25°28'20"E, 09.02.2009, Biel 029.091.

Recorded from the islands of Limnos and Thasos (sub nom. *M. borealis* Wallm.) in the N Aegean.

#### *Oxalidaceae*

##### 20. *Oxalis pes-caprae* L.

**Gr** Samothraki: Kamariotissa, road margins and waste ground in village, 15 m, 40°28'31"N, 25°28'26"E, 15.02.2009, Biel 09.099.

Although widely distributed and long established in the Mediterranean area, the species seems to have arrived fairly recently to Samothraki as there are few collections or observations of the plant in or near the area of Kamariotissa, the main port of entry. However, it has been recorded from the N Aegean island of Ag. Evstratios, not far from the harbour.

#### *Scrophulariaceae*

##### 21. *Veronica polita* Fries

**Gr** Samothraki: Kamariotissa, ruderal ground at beach promenade, 2 m, 40°28'37"N, 25°28'20"E, 12.02.2009, Biel 09.091.

Recorded from the N Aegean islands of Limnos and Thasos.

#### *Commelinaceae*

##### 22. *Tradescantia fluminensis* Vellen.

**Gr** Samothraki: NW of Therma, waste ground and ditch near thermal bath, 50 m, 40°29'44"N, 25°36'16"E, 03.11.2008, Biel 08.363.

Together with *Sambucus ebulus* and *Impatiens balfourii* in a large damp area with wet ditch (running water present most of the year). Another locality was noted along a water channel leading east of Therma, a third at Kamariotissa beach, this last a planted escape. *T. fluminensis* is native to N and S America. It is perennial, creeping and rooting at the nodes, with 3-5 cm long ovate to ovate-oblong leaves and flowers 1-1.5 cm in diameter. The petals are white and the

filaments hairy. New for the N Aegean islands and apparently newly established for Greece.

#### *Poaceae*

##### 23. *Catapodium marinum* (L.) C.E. Hubb.

**Gr** Samothraki: W-SW of Kamariotissa, at northern edge of flat coastal lagoon, on sandy ground, 3 m, 40°28'16"N, 25°27'17"E, 07.06.2008, Biel 08.009.

Also observed at the beach N of the village of Therma. Recorded from the N Aegean islands of Limnos and Thasos, for the latter as *C. loliaceum* (Huds.) Link.

All cited vouchers are provisionally kept in the private herbarium of B. Biel at Höchberg (herb. Biel).

## Reports 24-30

#### Rodney M. Burton

Sparepenny Cottage, Sparepenny Lane, Eynsford, Kent DA4 0JJ, Great Britain, e-mail: postmaster@rodneyburton.plus.com

The following new plant-records result from a two-week stay on the Ionian island of Kefallinia (Nomos Kefallinias). They have not been previously reported in the flora by Phitos & Damboldt (1985). Thanks are due to Kit Tan for her help and for her continuing encouragement. The numbers cited, e.g. 'Gr 08.02', refer to specimens kept in the private herbarium of R.M. Burton at Kent (herb. R.M. Burton). The distribution on the other Ionian islands is also provided.

#### *Apiaceae*

##### 24. *Caucalis platycarpos* L.

**Gr** Kefallinia: Eparchia Kraneas, Ainos, steep SW-facing slope ca. 200 m south of the OTE station, 24.05.2008, Gr 08.50.

Recorded from the Ionian islands of Kerkira and Zakynthos.

#### *Asteraceae*

##### 25. *Erigeron sumatreensis* Retz. [Syn.: *Conyza sumatreensis* (Retz.) Walker]

**Gr** Kefallinia: Eparchia Kraneas, Poros, weed in streets near harbour, 22.05.2008, obs.

Also noted in a similar habitat in Sami, and in front of the airport terminal. Reported forty years ago on the Italian side of the Ionian Sea. This is a perennial weed originating from S America and rapidly becoming one of the most widespread species in the world. Its phenolic constituents indicate a closer relationship to the genus *Erigeron* rather than to *Conyza* and this name is adopted in the text.

**26. *Helminthotheca echoioides* (L.) Holub**

**Gr** Kefallinia: Eparchia Samis, Sami, Antisamos Bay near the restaurant, a single plant, 28.05.2008, *obs.* Also noted in front of the airport terminal. The species was first collected on Kefallinia by Snogerup & al. in May 1998 but from the Pali Peninsula (eparchia Palis).

**Brassicaceae****27. *Sisymbrium altissimum* L.**

**Gr** Kefallinia: Eparchia Samis, Agia Effimia, Moni Thematon, against outside wall of inner enclosure, 20.05.2008, *obs.* & *photo*.

A single plant, presumably an introduced casual, though the associated species (*Papaver rhoeas*, *P. apulum*, *Campanula ramosissima*, *Trifolium tomentosum*, etc.) do not indicate the means of introduction. Reported from Kerkira (Ionian island) and also from the ruins of Mistras in the S Peloponnese, both records well outside the normal distribution range in Greece.

**Caryophyllaceae****28. *Arenaria leucadia* Phitos & Strid**

**Gr** Kefallinia: Eparchia Samis, Sami, roadside cliff by viewpoint to Antisamos Bay, 21.05.2008, *Gr 08.32*.

Seen also in a similar habitat above the south side of the road opposite the viewpoint south of Mirtos Bay. This species was described from the adjacent island of Lefkas *ca.* 15 years ago, and its occurrence on Kefallinia is not surprising, though the new habitat is different from the sandy beach of the type locality. *Arenaria leucadia* is very similar to *A. conferta* Boiss. and *A. serpyllifolia* L. A specimen collected and named *A. leucadia* by Strid in 1985 was from rocky limestone slopes and roadside gravel at an altitude of 850 m on Levkas.

**Crassulaceae****29. *Sedum rubens* L.**

**Gr** Kefallinia: Eparchia Samis, ruined wall of Samis castle, 16.05.2008, *Gr 08.02*.

Reported from the Ionian islands of Kerkira, Paxi, Levkas and Zakynthos.

**Poaceae****30. *Poa maroccana* Nannf.**

**Gr** Kefallinia: Eparchia Samis, Karavomilos, beach east of the Sami Beach Hotel just west of the river mouth, 26.05.2008, *Gr 08.55*.

New for the Ionian islands. A single plant, growing together with *Lolium rigidum* subsp. *lepturoides*, *Gaudinia fragilis*, *Polypogon monspeliensis* and *Trisetum aureum*, and not far from a single plant of *Symphyotrichum squamatum* (*Aster squamatus*). It is probably a recent introduction like the last-named.

**Notes****Rubiaceae*****Galium* sp.**

**Gr** Kefallinia: Eparchia Samis, Karavomilos, ditch at eastern margin of property of Sami Beach Hotel, 21.05.2008, *Gr 08.28*. The accessible material was insufficient for determination although *G. constrictum* Chaub. or *G. palustre* L. s.l., are the only possibilities. The first would be new for the Ionian islands; *G. palustre* has been reported from Levkas.

***Galium* sp.**

**Gr** Kefallinia: Eparchia Samis, Divarata, S side of road opposite viewpoint S of Mirtos Bay, at foot of cliff and in ditch, 23.05.2008, *Gr 08.40*.

This herbaceous perennial is different from *G. peloponnesiacum*, *G. circae* and *G. mixtum*, the three species listed as occurring on the Ionian islands, and also from all others described by Krendl (1988). The plant is 30–35 cm tall, with leaves almost linear to linear-spathulate, up to 13 × 1.2 mm but strongly revolute with conspicuous antrorse papillae; the mid-vein is slender. The lower inflorescence branches are as long as or slightly longer than the corresponding internodes, presenting a ± oblong inflorescence up to 5 cm in length. The corolla is creamy white and *ca.* 3.5 mm diameter *in vivo*, excluding the strongly incurved apiculi 0.5–0.6 mm long. Immature fruit appear to have a few minute papillae. A fragmentary specimen was collected at Rakhi near Nidri on Lefkas on 10.09.1980 and this may represent the same taxon although its leaves are longer. Further identification following Krendl's taxonomic treatment is impossible for us.

**Reports 31-33****Feruzan Dane, Gülden Yılmaz & Güler Dalgıcı**

Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey, e-mail: feruzandane@yahoo.com; guldenuyl@yahoo.com

**Iridaceae****31. *Iris pseudacorus* L.**

**Tu(E)** A1(E) Edirne, Centre: Suakacagi village entrance, 26 m, 41°40'28"N, 26°33'39"E, 02.08.1991, coll. & det. G. Dalgıcı (EDTU 4688).

New for European Turkey. So far the species has been known from A1(E) Kırklareli, A2(E) İstanbul (Mathew 1984).

### 32. *Iris sintenisii* Janka

**Tu(E)** A1(E) Edirne, Uzunkopru: Copkoy village, 56 m, 41°13'11"N, 26°49'22"E, 23.05.1989, coll. G. Dalgic & N. Polat, det. G. Dalgic (EDTU 3137); around Degirmenci dam, 20 m, 41°18'37"N, 26°42'02"E, 17.05.1992, coll. & det. G. Dalgic (EDTU 4824); Kesan: Mecidiye, 61 m, 40°38'20"N, 26°32'14"E, 10.07.1992, coll. F. Dane & G. Dalgic, det. G. Dalgic (EDTU 5177); Lalapasa: Donkoy village, 334 m, 41°56'00"N, 26°42'00"E, 02.06.1992, coll. N. Basak & F. Dane, det. N. Basak (EDTU 5058); Kalkansogut village, Callidere village, 337 m, 41°56'00"N, 26°44'00"E, 23.05.1994, coll. & det. G. Dalgic (EDTU 2568).

New for European Turkey, with specimens collected from Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli, Tekirdag (Mathew 1984).

### 33. *Iris suaveolens* Boiss. & Reuter

**Tu(E)** A1(E) Edirne, Centre: Sogutluk forest, 26 m, 41°40'28"N, 26°33'39"E, 21.04.1991, coll. & det. G. Dalgic (EDTU 4687); Lalapasa: Baglik deresi, 172 m, 41°50'00"N, 26°44'00"E, 04.04.1991, coll. C. Yarci & G. Dalgic, det. G. Dalgic (EDTU 4689); Suleoglu: around dam, 156 m, 41°46'02"N, 26°54'43"E, 04.04.1990, coll. R. Ozden, det. G. Dalgic (EDTU 4296).

- A1(E) Kırklareli, Babaeski: Katranca village, 14 m, 41°21'00"N, 27°03'00"E, 15.04.1987, coll. & det. G. Dalgic (EDTU 655); Yoguntas village, 301 m, 41°49'44"N, 27°04'08"E, 06.05.1988, coll. G. Dalgic & N. Basak, det. G. Dalgic (EDTU 2001).
- A1(E) Tekirdag: Kumbag, 0 m, 40°51'00"N, 27°27'00"E, 10.04.1990, coll. E. Duzalan, det. G. Dalgic (EDTU 2615).

New for European Turkey. So far the species has been known from A1(E) Çanakkale, A2(E) İstanbul (Mathew 1984).

## Reports 34-41

Valentina Goranova, Kiril Vassilev & Hristo Pedashenko

Institute of Botany, Bulgarian Academy of Sciences, Acad. Georgi Bonchev St., bl. 23, 1113 Sofia, Bulgaria, e-mail: goranova@bio.bas.bg

### Asteraceae

#### 34. *Doronicum columnae* Ten.

**Bu** Valley of Mesta River: on slopes above the public mineral bath at Ognyanovo village, Gotse Delchev district, GM-31, 05.05.2009, coll. K. Vassilev & V. Goranova (SOM 164933).

New species for that floristic region.

### Brassicaceae

#### 35. *Teesdalia coronopifolia* (J.P. Bergeret) Thell.

**Bu** Valley of Mesta River: in open places on the slope above the road close to Beslen village, Hadzhidimovo district, GL-49, 04.05.2009, coll. K. Vassilev & V. Goranova (SOM 164931).

First record for the species from that floristic region (for the distribution in Bulgaria, see Ančev 2007).

### Fabaceae

#### 36. *Lathyrus venetus* (Mill.) Wohlf.

**Bu** Valley of Mesta River: on slopes above the public mineral bath at Ognyanovo village, Gotse Delchev district, GM-31, 05.05.2009, coll. K. Vassilev & V. Goranova (SOM 164935).

This species is widespread in Bulgaria (Terziiski 2003; Assyov & Petrova 2006), but it has not been reported so far for the Valley of Mesta River.

### Ranunculaceae

#### 37. *Ranunculus sprunerianus* Boiss.

**Bu** Valley of Mesta River: in grassy places by *Quercus pubescens* and *Juniperus oxycedrus* shrubs, between Petrelit and Teplen villages, Hadzhidimovo district, GL-49, 04.05.2009, coll. K. Vassilev & V. Goranova (SOM 164932).

This species has not been reported so far for that floristic region (Popova 2003; Assyov & Petrova 2006).

### Liliaceae

#### 38. *Fritillaria pontica* Wahlenb.

**Bu** Valley of Mesta River : on slopes above the public mineral bath at Ognyanovo village, Gotse Delchev district, GM-31, 05.05.2009, coll. K. Vassilev & V. Goranova (SOM 164937).

The species is protected by the Bulgarian Law on Biodiversity. This is the first record from that region.

#### 39. *Gagea saxatilis* (Mert. & W.D.J. Koch) Schult. & Schult. f.

**Bu** Valley of Mesta River: in open grassy places on the slopes between Baldevo and Gospodintsi

villages, Gotse Delchev district, GM-21, 08.03.2009, coll. H. Pedashenko, K. Vassilev & V. Goranova (SOM 164934).

The species has limited occurrence in Bulgaria (Popova 2003; Assyov & Petrova 2006) and has been reported from three floristic regions only: the Black Sea Coast (*Southern*), Rhodopi Mts (*Central*) and Thracian Lowland.

#### **40. *Ornithogalum montanum* Cirillo**

**Bu** Valley of Mesta River: in grassy places between Petrelit and Teplen villages, Hadzhidimovo district, GL-49, 04.05.2009, coll. K. Vassilev & V. Goranova (SOM 164936).

This species is present in most floristic regions in Bulgaria (Popova 2003; Assyov & Petrova 2006) but it has not been reported so far for the Valley of Mesta River.

#### **Poaceae**

##### **41. *Millium vernale* M. Bieb.**

**Bu** Valley of Mesta River: on slopes above the public mineral bath at Ognyanovo village, Gotse Delchev district, GM-31, 05.05.2009, coll. K. Vassilev & V. Goranova (SOM 164930).

First record for the species from that floristic region.

## **Reports 42-44**

### **Seval Kiyıcı, Nesibe Başak & Feruzan Dane**

Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey, e-mail, feruzandane@yahoo.com

#### **Campanulaceae**

##### **42. *Campanula macrostachya* Waldst. & Kit.**

**Tu(E)** A1(E) Kırklareli: between Kırklareli-Pınarhisar, 206 m, 41°37'27"N, 27°31'12"E, 17.06.1972, coll. A. Baytop & E. Tuzlaci (ISTE 22508!); Kırklareli-Kofçaz road, 17 km off Kırklareli, 445 m, 41°55'42"N, 27°09'40"E, 03.07.1975, coll. A. Baytop (ISTE 32459!); between Kırklareli-Sığircılı, 194 m, 41°43'54"N, 27°13'29"E, 09.06.1987, coll. F. Dane & N. Başak (EDTU 926!); İğneada, 0 m, 41°52'28"N, 27°59'02"E, 17.06.1987, coll. A. Asan, G. Olgun & H. Arda (EDTU 1423!).

New for A1(E) Kırklareli in European Turkey. So far the species has been known from A1 (E) Edirne (Damboldt 1984).

##### **43. *Campanula phrygia* Jaub. & Spach**

**Tu(E)** A1(E) Edirne: İpsala, 43 m, 40°55'05"N, 26°22'59"E, 25.05.1973, coll. G. Entem (ISTE 25042!).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli (Damboldt 1984).

##### **44. *Campanula rapunculus* L. var. *rapunculus***

**Tu(E)** A1(E) Edirne, Centre: around Faculty of Medicine, 26 m, 41°40'28"N, 26°33'39"E, 23.05.1985, coll. G. Olgun & A. Asan (EDTU 126!); around Faculty of Medicine, 26 m, 41°40'28"N, 26°33'39"E, 25.05.1986, coll. C. Yarçı (EDTU 338!); Kapıkule, 26 m, 41°40'28"N, 26°33'39"E, 02.06.1986, coll. G. Dalgıç, N. Başak & F. Dane (EDTU 891!); between Tayakadın-Karakasım, 29 m, 41°31'00"N, 26°38'00"E, 09.06.1987, coll. F. Dane & N. Başak (EDTU 1003!); Tayakadın-Karakasım exit, 29 m, 41°31'00"N, 26°38'00"E, 07.06.1989, coll. F. Dane & N. Polat (EDTU 3290!); around Faculty of Medicine, 26 m, 41°40'28"N, 26°33'39"E, 15.05.2002, coll. S. Kiyıcı (EDTU 8469!); Centre, 26 m, 41°40'28"N, 26°33'39"E, 17.05.2002, coll. N. Başak (EDTU 8473!); Karakasım, 29 m, 41°31'00"N, 26°38'00"E, 20.05.2002, coll. S. Kiyıcı & G. Savaş (EDTU 8479!); Uzunköprü; between Yeniköy-Kircasalih villages, 89 m, 41°23'33"N, 26°48'11"E, 15.05.2002, coll. S. Kiyıcı (EDTU 8476!); Kircasalih-Havsa, 10 km, 89 m, 41°23'33"N, 26°48'11"E, 19.05.2002, coll. S. Kiyıcı (EDTU 8471!); Çöpköy pasture, 56 m, 41°13'11"N, 26°49'22"E, 28.05.2002, coll. S. Kiyıcı (EDTU 8492!); Uzunköprü exit, İstasyon Avenue, 1 km, 7 m, 41°16'10"N, 26°41'10"E, 08.06.2002, coll. Seval Kiyıcı (EDTU 8527!); Değirmenci pasture, 20 m, 41°18'37"N, 26°42'02"E, 08.06.2003, coll. S. Kiyıcı (EDTU 8528!); between Hamitli-Çakmak villages, 38 m, 41°23'00"N, 26°40'00"E, 10.06.2003, coll. Seval Kiyıcı (EDTU 8529!); between Sığircılı-Sağlımüsellim villages, 69 m, 41°25'24"N, 26°37'54"E, 10.06.2003, coll. S. Kiyıcı (EDTU 8530!); Azatlı village, 94 m, 41°30'08"N, 26°41'51"E, 10.06.2003, coll. S. Kiyıcı (EDTU 8532!); Kurttepe village, 95 m, 41°22'00"N, 26°43'00"E, 10.06.2003, coll. S. Kiyıcı (EDTU 8533!); Meriç, between Yenicegöre-Meriç villages, 20 m, 41°11'22"N, 26°25'03"E,

22.05.2002, coll. Seval Kiyıcı (EDTU 8531!); Nasuhbey village, around Dallik forest, 46 m, 41°13'00"N, 26°21'00"E, 22.05.2002, coll. S. Kiyıcı (EDTU 8474!); Süloğlu: around Süloğlu dam, 156 m, 41°46'02"N, 26°54'43"E, 01.06.1987, coll. G. Olgun, F. Dane & C. Yarcı (EDTU 1033!); Süloğlu, Taçlımüselli road, 156 m, 41°46'02"N, 26°54'43"E, 01.06.1987, coll. G. Olgun, F. Dane & H. Arda (EDTU 709!); near Süloğlu dam, 156 m, 41°46'02"N, 26°54'43"E, 03.06.2003, coll. N. Başak & S. Kiyıcı (EDTU 8487!); Lalapaşa: Çömler köy village, 148 m, 41°51'00"N, 26°37'00"E, 19.06.2002, coll. N. Başak & S. Kiyıcı (EDTU 8475!); between Suakacağı-Saksağan villages, 172 m, 41°50'00"N, 26°44'00"E, 19.06.2002, coll. S. Kiyıcı & N. Başak (EDTU 8477!); Büyükkısmailce village, 118 m, 41°48'00"N, 26°29'00"E, 19.06.2002, coll. S. Kiyıcı & N. Başak (EDTU 8478!); Hüseyinakpınar village, at the roadside, 172 m, 41°50'00"N, 26°44'00"E, 19.06.2002, coll. N. Başak & S. Kiyıcı (EDTU 8480!); Bağlıkderesi-Büyünlü, 5 km, 220 m, 41°53'00"N, 26°44'00"E, 03.06.2003, coll. S. Kiyıcı, N. Başak & H. Arda (EDTU 8482!); Çallıdere pasture, 337 m, 41°56'00"N, 26°44'00"E, 03.06.2003, coll. N. Başak, S. Kiyıcı & H. Arda (EDTU 8485!); Büyünlü pasture, 220 m, 41°53'00"N, 26°44'00"E, 03.06.2003, coll. S. Kiyıcı, N. Başak & H. Arda (EDTU 8484!); between Tekketepe-Doğanköy villages, 334 m, 41°56'00"N, 26°42'00"E, 03.06.2003, coll. N. Başak & S. Kiyıcı (EDTU 8486!).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli and A2(E) İstanbul (Damboldt 1984).

## Reports 45-47

### Çiler Meriç, Feruzan Dane & Gülden Yılmaz

Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey, e-mail: cilermeric@trakya.edu.tr; feruzandane@yahoo.com; guldenyl@yahoo.com

#### Asteraceae

##### 45. *Carthamus lanatus* L.

**Tu(E)** A1(E) Edirne, Centre: around Faculty of Medicine, 26 m, 41°40'28"N, 26°33'39"E, 30.06.2003, coll. & det. Ç. Meriç (EDTU 8518).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Tekirdag and A2(E) İstanbul (Kupicha 1975).

##### 46. *Centaurea diffusa* Lam.

**Tu(E)** A1(E) Edirne, Centre: Musabeyli village, 109 m, 41°41'00"N, 26°40'00"E, 15.09.1989, coll. F. Dane & N. Polat, det. F. Dane (EDTU 3886).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli and A2(E) İstanbul (Wagenitz 1975).

##### 47. *Centaurea solstitialis* L. subsp. *soltstitialis*

**Tu(E)** A1(E) Edirne, Centre: around Faculty of Medicine, near stream, 26 m, 41°40'28"N, 26°33'39"E, 18.06.2003, coll. & det. Ç. Meriç (EDTU 8535); Musabeyli village, near pasture, 109 m, 41°41'00"N, 26°40'00"E, 15.09.1989, coll. F. Dane & N. Polat, det. F. Dane (EDTU 3900).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli and A2(E) İstanbul (Wagenitz 1975).

## Reports 48-50

### Çiler Meriç, Gülden Yılmaz, Kerim Alpınar & Feruzan Dane

Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey, e-mail: cilermeric@trakya.edu.tr; feruzandane@yahoo.com; guldenyl@yahoo.com

#### Asteraceae

##### 48. *Scorzonera lacinata* L. subsp. *lacina*

**Tu(E)** A1(E) Edirne, Centre: around Faculty of Medicine, 26 m, 41°40'28"N, 26°33'39"E, 28.07.2005, coll. Ç. Meriç, det. N. Güler (EDTU 8523).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Tekirdag (Chamberlain 1975).

##### 49. *Scorzonera sublanata* Lipsch.

**Tu(E)** A1(E) Edirne, Ipsala: Yakupbey pasture, 21 m, 41°15'00"N, 26°34'00"E, 30.04.2004, coll. Ç. Meriç, det. K. Alpınar (EDTU 8549).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Çanakkale (Chamberlain 1975).

##### 50. *Tragopogon pratensis* L.

**Tu(E)** A1(E) Edirne, Centre: around Faculty

of Medicine, 26 m, 41°40'28"N, 26°33'39"E, 17.05.2004, coll. Ç. Meriç, det. K. Alpınar (EDTU 8526).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Tekirdag and A2(E) Istanbul (Matthews 1975).

## Reports 51-58

### Gülsemin Savaş, Gülden Yılmaz, Nesibe Başak & Feruzan Dane

Department of Biology, Faculty of Science and Arts, University of Trakya, 22030 Edirne, Turkey, e-mail: feruzandane@yahoo.com; guldenyl@yahoo.com

#### Fabaceae

##### 51. *Trifolium bocconeii* Savi

**Tu(E)** A1(E) Edirne, Lalapasa, 172 m, 41°50'00"N, 26°44'00"E, 08.06.1999, coll. N. Başak & N. Güler (EDTU 7450).

New for A1(E) Edirne in European Turkey. So far the species has been known from A2(E) Istanbul (Zohary 1970).

##### 52. *Trifolium diffusum* Ehrh.

**Tu(E)** A1(E) Edirne, Centre: Haciumur village, 123 m, 41°43'00"N, 26°48'00"E, 16.07.1999, coll. G. Savaş (EDTU 7416).

New for European Turkey. So far the species has been known from A3 Bolu, B2 Izmir, B8/9 Mus, C10 Hakkari (Zohary 1970).

##### 53. *Trifolium incarnatum* L. var. *molinieri* (Balb.) DC.

**Tu(E)** A1(E) Edirne, Lalapasa: Taslimusellim village, 193 m, 41°49'00"N, 26°47'00"E, 01.06.1987, coll. G. Olgun, F. Dane, H. Arda & A. Asan (EDTU 703).

New for European Turkey. So far the species has been known from A2(A) Istanbul (Zohary 1970).

##### 54. *Trifolium pallidum* Waldst. & Kit.

**Tu(E)** A1(E) Edirne, Enez: Abdurrahim village, 40 m, 40°38'31"N, 26°15'25"E, 22.05.1999, coll. G. Savaş (EDTU 7408).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Tekirdag and A2(E) Istanbul (Zohary 1970).

##### 55. *Trifolium pratense* L. var. *pratense*

**Tu(E)** A1(E) Edirne, Centre: Buyukismailce village, 118 m, 41°48'00"N, 26°29'00"E, 04.06.1985, coll.

N. Başak & G. Olgun (EDTU 156); between Sazlidere village and Iskender village, 80 m, 41°36'00"N, 26°41'00"E, 21.06.1998, coll. G. Savaş (EDTU 7347); around Trakya University Campus, 26 m, 41°40'28"N, 26°33'39"E, 16.05.1998, coll. G. Savaş (EDTU 7341).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Kırklareli and A2(E) Istanbul (Zohary 1970).

##### 56. *Trifolium striatum* L.

**Tu(E)** A1(E) Edirne, Centre: around Faculty of Medicine, 26 m, 41°40'28"N, 26°33'39"E, 08.06.1989, coll. F. Dane (EDTU 3720); Kesan: Kilickoy, 24 m, 40°47'00"N, 26°33'00"E, 22.05.1999, coll. G. Savaş (EDTU 7396); Enez: Mecidiye, seaside, 0 m, 40°38'20"N, 26°32'14"E, 11.06.1997, coll. N. Başak & N. Güler (EDTU 7474).

New for A1(E) Edirne in European Turkey. So far the species has been known from A2(E) Istanbul (Zohary 1970).

##### 57. *Trifolium sylvaticum* Gérard ex Loisel.

**Tu(E)** A1(E) Edirne, Centre: around Trakya University Campus, 26 m, 41°40'28"N, 26°33'39"E, 28.05.2000, coll. G. Savaş (EDTU 7495); Suloglu: 156 m, 41°46'02"N, 26°54'43"E, 01.06.1999, coll. N. Başak & N. Güler (EDTU 7433); Enez: Mecidiye, 61 m, 40°38'20"N, 26°32'14"E, 26.05.1997, coll. N. Başak & N. Güler (EDTU 7469); Lalapasa: between Domurcali and Taslimusellim villages, 196 m, 41°49'00"N, 26°49'00"E, 01.06.1987, coll. H. Arda (EDTU 918).

New for A1(E) Edirne in European Turkey. So far the species has been known from A2(E) Istanbul (Zohary 1970).

##### 58. *Trifolium tenuifolium* Ten.

**Tu(E)** A1(E) Edirne, Uzunkopru: Kurttepe village, 95 m, 41°22'00"N, 26°43'00"E, 04.08.1998, coll. G. Savaş (EDTU 7352); Enez: Abdurrahim village, 40 m, 40°38'31"N, 26°15'25"E, 22.05.1999, coll. G. Savaş (EDTU 7411); Suloglu: Domurcali village, 196 m, 41°49'00"N, 26°49'00"E, 16.07.1999, coll. G. Savaş (EDTU 7430); Suloglu-Edirne, 3 km, 26 m, 41°40'28"N, 26°33'39"E, 16.07.1999, coll. G. Savaş (EDTU 7431).

New for A1(E) Edirne in European Turkey. So far the species has been known from A1(E) Çanakkale and A2 (E) Istanbul (Zohary 1970).

## Reports 59-69

Kit Tan<sup>1</sup>, George Sfikas<sup>2</sup>, Gert Vold<sup>3</sup> & Tristan Lafranchis<sup>4</sup>

<sup>1</sup> Institute of Biology, University of Copenhagen, Øster Farimagsgade 2D, DK-1353 Copenhagen K, Denmark, e-mail: kitt@bio.ku.dk (author for correspondence)

<sup>2</sup> 2 Vyzantiou St., Argyroupolis, Athens 16452, Greece

<sup>3</sup> Botanical Garden, University of Copenhagen, Øster Farimagsgade 2C, DK-1353 Copenhagen K, Denmark

<sup>4</sup> c/o Diakopto, Achaias 25003, Greece

Continuing a series of new plant-records based on further floristic investigations in Greece. The floristic regions adopted follow those circumscribed in *Flora Hellenica* (Strid & Tan 1997).

### Asteraceae

**59. *Centaurea affinis* subsp. *laconiae* Prodan**

**Gr** Nomos Korinthias, Eparchia Korinthias: Oligirtos, rocky limestone slope in *Abies* forest, 1280 m, 37°47' N, 22°24' E, 17.06.2009 & 27.06.2009, Bonetti s.n.; Nomos Arkadias, Eparchia Mandinias: Menalon, rocky limestone slopes, 1630 m, 37°39' N, 22°16' E, 17.06.2009, Bonetti (photo).

New for Mts Oligirtos and Menalon. A Greek endemic first collected on Mt Taigetos by C. Leonis in June 1902. It has since been recorded from several mountains in the Peloponnese (including Panachaikon, Erimanthos, Kallifoni, Chelmos and Killini in the north and Parnonas to the southeast), as well as from Sterea Ellas (Kallidromo and Parnitha). We are grateful to Andrea Bonetti for communicating these records.

**60. *Scorzonera sublanata* Lipsch. (Fig. 3)**

**Gr** Nomos Lakonias, Eparchia Epidavrou Limirias: in stony phrygana of *Genista acanthoclada* and *Cistus* near Manolarianika, 36°34' N, 23°00' E, 05.04.2005, Lafranchis (photo); near the village of Lira, 36°38' N, 22°58' E, 06.04.2005, Lafranchis s.n. & photo (herb. Lafranchis; det. Kit Tan 2009).

New for eparchia in southeastern Peloponnese. It has also been collected south of Lira, along the road to Ellinikon (Strid & al. 28526, herb. Strid).

**61. *Senecio hercynicus* var. *expansus* (Boiss. & Heldr.) Herbørg**

**Gr** Nomos Fokidos, Eparchia Parnassidos: Mt Vardousia, Prof. Ilias, ca. 1450 m, 38°41' N, 22°11' E, 24.06.2008, Lafranchis s.n. & photo (herb. Lafranchis; det. Kit Tan 2009).

New for Mt Vardousia in Sterea Ellas. The upper leaves are sessile, semi-amplexicaule and the

peduncles and phyllaries glandular-pubescent, distinguishing it from *S. ovatus* (P. Gaertner & al.) Willd. which has the upper leaves shortly petiolate and the peduncles and phyllaries without glandular hairs; the latter has also a geographical distribution more to the west on mainland Greece (N and S Pindos) and on Mt Chelmos (N Peloponnese).

### Berberidaceae

**62. *Bongardia chrysogonum* (L.) Griseb.**

**Gr** Nomos Chiou, Eparchia Chiou: southern part of island of Chios, phrygana and olive grove near Pirgi, limestone, ann. 2005, Başak Güner obs. Confirmation of existence on the East Aegean island of Chios. This plant is now very rare in Greece being known from one other East Aegean island (Rodos) and only two localities in the Peloponnese; however, we feel it is not extinct there. Boissier (1867: 99) states it was collected on Chios by Olivier; there are no recent records. In the year 2005, Başak Güner and Ian Green discovered the plants while on a botanical tour to the southern part of the island. They did not collect any specimens but there is no reason to doubt their record as Başak, daughter of the well-known Turkish botanist Adil Güner, is herself a botanist familiar with the plant in Turkey where it is fairly widespread. We thank her for sending this information to KT.

### Fabaceae

**63. *Lathyrus gorgoni* Parl.**

**Gr** Nomos Dodekanisou, Eparchia Ko: Nisiros, vicinity of Nikiá, 36°34' N, 27°11' E, 07.04.2009, Sfikas obs. (photo).

New for the East Aegean island of Nisiros. This discovery, as well as several others, was made during a botanical tour to Nisiros led by George Sfikas.



Fig. 3. *Scorzonera sublanata* (photo T. Lafranchis).

Rodos is the only other island in the East Aegean from whence *L. gorgoni* has been reported.

#### Onagraceae

**64. *Ludwigia grandiflora*** (Michaux) Greuter & Burdet (Fig. 4)

**Gr** Nomos Etolias-Akarnanias, Eparchia Trichonidos: northern edge of Lake Lysimachia, 38°35'N, 21°22'E, 10.08.2002, Lafranchis photo (conf. Kit Tan 2009).

New for Greece. Zotos & al. (2006) recently reported the occurrence of *Ludwigia peploides* subsp. *montevidensis* (Spreng.) P.H. Raven (the floating primrose-willow) as a new alien for the flora of Greece. They found the plants at the northern edge of Lake Lysimachia in Etolia. On 10th August 2002, T. Lafranchis discovered a large flowering population of a prostrate *Ludwigia* covering the flooded northern margin of the same lake. On returning to his vehicle, he saw some tall and erect plants rooted in a ditch near the lake. Both the prostrate and the erect plants were subsequently identified as *Ludwigia peploides* subsp. *montevidensis* and *Ludwigia grandiflora* (the large-flower primrose-willow). According to Dutarte & al. (2006), diploid, tetraploid, hexaploid and decaploid taxa exist in *Ludwigia* sect. *Oligospermum* to which *L. grandiflora* belongs.

There are distinct differences between *L. grandiflora* and *L. peploides*. Zotos & al. (2006) compared their plant (not seen by us) only with the native *Ludwigia palustris* L. which is in the same lake and looks quite different. Surprisingly, they did not compare their plant with the more similar *L. grandiflora* which was in the same locality. Both species originate from the same geographical area in southern S America (Uruguay) where they are aggressive and invasive aquatic weeds. According to Dutarte & al. (2006) *L. peploides* is a diploid with  $2n = 16$ ; it is self-compatible and produces fruit easily. *L. grandiflora* subsp. *hexapetala* (Hook. & Arn.) Nesom & Kertesz is a decaploid with  $2n = 80$ ; it is self-incompatible and sterile. Due to the difference in their breeding system, *L. peploides* (introduced in 20<sup>th</sup> century) has replaced *L. grandiflora* (introduced in 19<sup>th</sup> century) as the invasive colonizer in S France.

The main identification features provided by Dutarte & al. (2006) are as follows:

*L. peploides* subsp. *montevidensis*: stipules reniform, pale brown; stem oily-viscid; sepals less than 10 mm; upper leaves oblong to obovate, abruptly narrowed into petiole.

*L. grandiflora* subsp. *hexapetala*: stipules triangular-acuminate, black; stems not or slightly oily; sepals more than 10 mm; upper leaves lanceolate, gradually narrowed into a petiole.

Judging from these characters discernible in the figures, our plants fit *L. grandiflora* (Fig. 4) and *L. peploides* (Fig. 5) respectively. Both taxa are thus present in the same lake.



Fig. 4. *Ludwigia grandiflora* (photo T. Lafranchis).



Fig. 5. *Ludwigia peploides* (photo T. Lafranchis).

*Orobanchaceae*

**65. *Orobanche baumanniorum*** Greuter (Fig. 6).

**Gr** Nomos Arkadias, Eparchia Mandinias:

Menalon, parasitic on *Pterocephalus perennis* subsp. *perennis* on rocky limestone slopes, 1700 m, 37°39' N, 22°16' E, 17.06.2009, Bonetti s.n. (photo).

New for Mt Menalon. Within the Peloponnese, this Greek endemic has been recorded not only from high altitudes (Mts Killini and the area to the north, Taigetos, Parnonas and the area to the south) but also from much lower altitudes in the outer part of the Mani Peninsula.

*Primulaceae*

**66. *Lysimachia dubia*** Sol. (Fig. 7).

**Gr** Nomos Serron, Eparchia Sintikis: near Vironia, damp meadow by the Strimonas river, 41°16' N, 23°15' E, 05.07.2008, Lafranchis s.n. & photo (herb. Lafranchis, herb. Kit; det. Kit Tan 2009).

New for nomos and eparchia in northeast Greece. An annual with pedicellate pale pink to lilac flowers scattered in NE Peloponnese (Kalogria, Metohi), S Pindos, Evvia, coastal North East and North Central, Rodos and Lesvos. It occurs in wet or damp places in the East Mediterranean from the Balkan Peninsula to SW and C Asia.

*Solanaceae*

**67. *Datura inoxia*** Mill.

**Gr** Nomos Dodekanisou, Eparchia Ko: Nisiros, ruderal habitat at Nikiá, 36°34' N, 27°11' E, 07.04.2009, Sfikas obs. (photo).

New for the East Aegean island of Nisiros. *Datura inoxia* is a poisonous annual weed native to Central America. It is naturalised in several parts of Greece, particularly islands and coastal areas, occurring in ruderal places and on cultivated land. It has been recorded from the other East Aegean islands of Lesvos, Chios, Ikaria and Rodos. The specific epithet is sometimes spelt as 'innoxia' but the original spelling was with a single 'n'. Two other species of *Datura* occur in Greece, *D. stramonium* L. and *D. ferox* L., but both of these have not been observed on Nisiros.

*Orchidaceae*

**68. *Serapias orientalis*** (Greuter) H. Baumann & Künkele

**Gr** Nomos Dodekanisou, Eparchia Ko: Nisiros,



Fig. 6. *Orobanche baumanniorum* (photo A. Bonetti).



Fig. 7. *Lysimachia dubia* (photo T. Lafranchis).

Faneromeni, 36°34' N, 27°12' E, 09.04.2009, Sfikas obs. (photo).

New for the East Aegean island of Nisiros. The discovery was made during a botanical tour to Nisiros led by George Sfikas. As the species occurs on the neighbouring islands of Kos and Tilos, this is not surprising.

#### 69. *Serapias politisii* Renz (Fig. 8)

**Gr** Nomos Chiou, Eparchia Chiou: Chios, Ochrea, near Volissos, 38°28' N, 25°55' E, 14.04.2009, Howard obs. (photo).

New for the East Aegean island of Chios. The discovery was made by Doreen Howard from Cumberland, England during a botanical tour to Chios led by Mike Taylor to whom we are grateful for this communication of a first record. *S. politisii* resembles *S. parviflora* Parl. but has more slender reddish-brown stems, a lax spike and a longer dark red lip. It has been noted from Kithira and Rodos. Records from Epirus and Sterea Ellas probably refer to *S. parviflora*.



Fig. 8. *Serapias politisii* (photo M. Taylor).

## Reports 70-74

### Alexander Tashev

Department of Dendrology, Faculty of Forestry, University of Forestry, 10 Kl. Ochridski Blvd., 1756 Sofia, Bulgaria, e-mail: atashev@mail.bg

#### Asteraceae

##### 70. *Inula aschersoniana* Janka

**Bu** Mt Sredna Gora (*Western*): Ihtimanska Sredna Gora, NE from Belovo, on calcareous rocks, with SW exposition, steep slope, 395 m, 42°13'28.7"N, 23°59'58.7"E, KG-57, 02.05.2007, coll. A. Tashev (SOM 164078, 164079).

This species has been known so far from the Black Sea Coast, Northeast Bulgaria, Forebalkan (*Eastern*), Balkan Range (*Eastern*), Znepole Region, Valley of Struma River, Mt Slavyanka, Rhodopi Mts, Thracian Lowland, Tundzha Hilly Country and Mt Stranzha (Delipavlov 2003; Assyov & Petrova 2006).

##### 71. *Scorzonera austriaca* Willd.

**Bu** Mt Sredna Gora (*Western*): Ihtimanska Sredna Gora, NE from Belovo, on calcareous rocks and with SW exposition, 395 m, 42°13'28.9"N, 23°59'58.3"E, KG-57, 30.04.1998, coll. A. Tashev (SOM 164062, 164063); 02.05.2007, coll. A. Tashev (SOM 164080).

This species has been known so far from the

Northeast Bulgaria, Balkan Range (*Eastern*), Znepole Region, Pirin Mts (*Southern*), Rhodopi Mts (*Central*), Thracian Lowland and Tundzha Hilly Country (Delipavlov 2003; Assyov & Petrova 2006).

#### Caryophyllaceae

##### 72. *Silene flavescens* Waldst. & Kit.

**Bu** Mt Sredna Gora (*Western*): Ihtimanska Sredna Gora, NE from Belovo, on calcareous rocks, with SE exposition, 375 m, 42°13'27.6"N, 23°59'56.4"E, KG-57, 30.04.1998, coll. A. Tashev (SOM 164061); 395 m, 42°13'27.6"N, 23°59'58.8"E, KG-57, 06.06.2008, coll. A. Tashev (SOM 164663; SO 105620).

This species has been known so far from the Northeast Bulgaria, Forebalkan, Balkan Range, Vitosha Region, Znepole Region, Valley of Struma River (*Southern*), Mt Slavyanka, Pirin Mts, Rila Mts, Rhodopi Mts and Thracian Lowland (Delipavlov 2003; Assyov & Petrova 2006).

#### Guttiferae

##### 73. *Hypericum rumeliacum* Boiss.

**Bu** Mt Sredna Gora (*Western*): Ihtimanska Sredna Gora, NE from Belovo, on calcareous rocks, with SW exposition, 370 m, 42°13'26.4"N, 24°00'01.1"E, KG-57, 01.05.1998, coll. A. Tashev (SOM 164064);

on calcareous rocks, with SE exposition, 410 m, 42°13'29.3"N, 23°59'54.9"E, KG-57, 11.05.2008, coll. A. Tashev (SOM 164652).

This species has been known so far from the Northeast Bulgaria, Balkan Range (*Eastern*), Sofia Region, Vitosha Region, Znepole Region, West Frontier Mts, Valley of Struma River, Mt Slavyanka, Pirin Mts, Rila Mts, Mt Sredna Gora (*Eastern*), Rhodopi Mts, Thracian Lowland and Tundzha Hilly Country (Delipavlov 2003; Assyov & Petrova 2006).

#### *Lamiaceae*

##### 74. *Salvia argentea* L.

**Bu** Mt Sredna Gora (*Western*): Ihtimanska Sredna Gora, NE from Belovo, on calcareous rocks, with S exposition, 350 m, 42°13'26.4"N, 23°59'51.5"E, KG-57, 26.04.1998, coll. A. Tashev (SOM 164070, 164071); 02.05.2007, coll. A. Tashev (SOM 164077).

This species has been known so far from the Black Sea Coast, Danubian Plain, Northeast Bulgaria, Forebalkan, Znepole Region, Valley of Struma River, Mt Slavyanka, Rhodopi Mts (*Central*) and Thracian Lowland (Delipavlov 2003; Assyov & Petrova 2006).

## Reports 75-78

#### Alexander Tashev & Evgeni Tsavkov

Department of Dendrology, Faculty of Forestry, University of Forestry, 10 Kl. Ochridski Blvd., 1756 Sofia, Bulgaria,  
e-mails: atashev@mail.bg; tsavkov@abv.bg

#### *Anacardiaceae*

##### 75. *Cotinus coggygria* Scop.

**Bu** Sofia Region: in the vicinities of Gradets village, close to Beledie Han, on southern slope, 25° inclination, 790 m, 42°53'42.2"N, 23°10'12.0"E, FN-75, 06.06.2009, with flowers, coll. A. Tashev & E. Tsavkov (SOM 164922, 164923; SO 105784, 105785).

The locality rests on limestone rocks and rendzine soils within shrubs, with participation of *Quercus pubescens*, *Fraxinus ornus*, *Carpinus orientalis*, *Ligustrum vulgare*, *Clematis vitalba*, *Rhamnus saxatilis*. First record for this floristic region.

#### *Rhamnaceae*

##### 76. *Rhamnus saxatilis* Jacq.

**Bu** Sofia Region: in the vicinities of Gradets village, Ilin Govedarnik locality, close to Beledie Han, on southwestern slope, 10° inclination, 885 m,

42°54'33.6"N, 23°09'47.4"E, FN-75, 06.06.2009, with fruits, coll. A. Tashev & E. Tsavkov (SOM 164919, 164926; SO 105780, 105781).

The plant grows on limestone rocks, on rendzine soils within the shrubs, together with *Quercus cerris*, *Q. pubescens*, *Acer campestre*, *Cornus sanguinea*, *Prunus spinosa*, *Clematis vitalba* and some other species. A new species for this floristic region.

#### *Rosaceae*

##### 77. *Prunus mahaleb* L.

**Bu** Sofia Region: in the vicinities of Gradets village, Ilin Govedarnik locality, close to Beledie Han, on southwestern slope, 5° inclination, 895 m, 42°54'38.3"N, 23°09'48.7"E, FN-75, 06.06.2009, with fruits, coll. A. Tashev & E. Tsavkov (SOM 164920, 164921; SO 105786, 105787).

The plant grows on limestone rocks, on rendzine soils within the shrubs, together with *Quercus cerris*, *Q. pubescens*, *Ulmus minor*, *Viburnum lantana*, *Prunus spinosa*, *Clematis vitalba* and some other species. First record for this floristic region.

##### 78. *Rubus idaeus* L.

**Bu** Sofia Region: in the vicinities of Drenovo village, Ranislavtsi locality, southern slope, 5° inclination, 840 m, 42°56'18.4"N, 23°10'10.7", FN-75, 06.06.2009, with flowers, coll. A. Tashev & E. Tsavkov (SOM 164924, 164925; SO 105782, 105783).

The species grows in a 30-year old plantation of *Pinus nigra* and *P. sylvestris*, where *Rubus idaeus* forms the understorey, together with other *Rubus* species. A new species for this floristic region.

## Reports 79-83

#### Vladimir Vladimirov

Institute of Botany, Bulgarian Academy of Sciences, Acad. Georgi Bonchev St., bl. 23, 1113 Sofia, Bulgaria, e-mail: vdvlad@bio.bas.bg

#### *Asteraceae*

##### 79. *Hypochoeris glabra* L.

**Bu** Black Sea Coast (*Northern*): beach of Shkorpilovtsi village, NH-75, 01.06.2008, obs. V. Vladimirov.

— Danubian Plain: dry open grassland near Archar village, 43°48'07.0"N, 22°56'57.0"E, 04.05.2009, coll. V. Vladimirov (SOM 164960, 164961, 164962).

New for these floristic regions.

**80. *Tragopogon dubius* Scop.**

**Bu** Mt Slavyanka: by the road from Paril village to the entrance of Parilski Dol, 41°25'31.1"N, 23°40'01.4"E, 21.06.2009, obs. V. Vladimirov.

New for that floristic region.

**Caryophyllaceae****81. *Silene compacta* Fisch.**

**Bu** Valley of Mesta River: wasteland and by the road from Bansko to Gotse Delchev about 6.5 km northwards of Gospodintsi village, 41°41'52.7"N, 23°42'05.2"E, 22.06.2009, coll. V. Vladimirov (SOM 164958).

New for that floristic region.

**Fabaceae****82. *Astragalus depressus* L.**

**Bu** Forebalkan (*Western*): on limestone rocks near the tower above Belogradchik town, 43°37'43.7"N, 22°42'26.9"E, 04.05.2009, coll. V. Vladimirov (SOM 164955, 164956).

New for that floristic region.

**83. *Lotus aegaeus* (Griseb.) Boiss.**

**Bu** Rhodopi Mts (*Western*): near Ablanitsa village, on a slope above the road to Valkosel village, 41°32'04.1"N, 23°56'35.1"E, 20.06.2009, coll. V. Vladimirov (SOM 164957).

New for that floristic region.

**References**

- Anchev, M. 1984. *Campanula versicolor* Andrews. – In: Velchev, V. (ed.), Red Data Book of the PR Bulgaria. Vol. 1. Plants. P. 359. Publishing House Bulg. Acad. Sci., Sofia (in Bulgarian).
- Ančev, M. 2007. Catalogue of the family *Brassicaceae (Cruciferae)* in the flora of Bulgaria. – Phytol. Balcan., 13(2): 153-178.
- Assyov, B. & Petrova, A. (eds). 2006. Conspectus of the Bulgarian vascular flora. Distribution maps and floristic elements. Ed. 3. BBF, Sofia.
- Chamberlain, D.F. 1975. *Scorzonera* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 5, pp. 632-657. Edinburgh Univ. Press, Edinburgh.
- Chamberlain, D.F. 1970. *Ornithopus* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 3, p. 544. Edinburgh Univ. Press, Edinburgh.
- Delipavlov, D. 2003. *Asteraceae*. – In: Delipavlov, D. & Cheshmedzhiev, I. (eds), Key to the Plants of Bulgaria. Pp. 376-432. Acad. Press Agrarian Univ., Plovdiv (in Bulgarian).
- Damboldt, J. 1984. *Campanula* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 6, pp. 2-64. Edinburgh Univ. Press, Edinburgh.
- Davis P. H. 1970. *Lathyrus* L. – In: Davis, P.H. (ed.) Flora of Turkey and the East Aegean Islands. Vol. 3, pp. 341-347, Edinburgh Univ. Press, Edinburgh.
- Dutarte, A. (ed.). 2006. Les jussies: caractérisation des relations entre sites, populations et activités humaines. Implications pour la gestion. – CEMAGREF, Ministère de l'Ecologie et du Développement Durable, Paris.
- Katsikopoulos, I. 1936. Contribution to the study of the flora of Samothraki island. – Geōrgikon Deltion, 29: 225-227; 264-267; 301-304 (in Greek).
- Kitanov, B. & Kitanov, G. 1990. Flora of Pirin Mts. Nauka & Izkustvo, Sofia (in Bulgarian).
- Krendl, F. 1988. Die Arten der *Galium mollugo*-Gruppe in Griechenland. – Bot. Chron. (Patras), 6/7: 5-168.
- Kupicha, F.K. 1975. *Carthamus* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 5, pp. 590-594. Edinburgh Univ. Press, Edinburgh.
- Mathew, B. 1984. *Iris* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 8, pp. 382-410. Edinburgh Univ. Press, Edinburgh.
- Matthews, V.A. 1975. *Tragopogon* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 5, pp. 657-668. Edinburgh Univ. Press, Edinburgh.
- Peev, D. 1992. *Asteraceae*. – In: Kozuharov, S. (ed.), Field Guide to the Vascular Plants in Bulgaria. Pp. 142-227. Nauka & Izkustvo, Sofia (in Bulgarian).
- Phitos, D. & Damboldt, J. 1985. Die Flora der Insel Kefallinia (Griechenland). – Bot. Chron. (Patras), 5(1-2): 1-204.
- Popova, M. 2003. *Liliaceae* (pp. 436-452), *Ranunculaceae* (41-53). – In: Delipavlov, D. & Cheshmedzhiev, I. (eds), Key to the Plants of Bulgaria. Acad. Press Agrarian Univ., Plovdiv (in Bulgarian).
- Rix, E.M. 1984. *Gagea* Salisb. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 8, pp. 312-327. Edinburgh Univ. Press, Edinburgh.
- Stojanov, N., Stefanov, B. & Kitanov, B. 1967. Flora of Bulgaria. Ed. 4. Vol. 2. Nauka & Izkustvo, Sofia (in Bulgarian).
- Strid, A. & Tan, Kit (eds). 1997. Flora Hellenica. Vol. 1. Koeltz Scientific Books, Königstein.
- Terziiski, D. 2003. *Fabaceae* – In: Delipavlov, D. & Cheshmedzhiev, I. (eds), Key to the Plants of Bulgaria. Pp. 199-237. Acad. Press Agrarian Univ., Plovdiv (in Bulgarian).
- Vladimirov, V. & Szelag, Z. 2001. Reports (1271-1277). – In: Kamari, G., Blanché, C. & Garbari, F. (eds), Mediterranean chromosome number reports – 11. – Fl. Medit., 11: 478-483.
- Wagenitz, G. 1975. *Centaurea* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 5, pp. 465-585. Edinburgh Univ. Press, Edinburgh.
- Zohary, M. 1970. *Trifolium* L. – In: Davis, P.H. (ed.), Flora of Turkey and the East Aegean Islands. Vol. 3, pp. 384-448. Edinburgh Univ. Press, Edinburgh.
- Zotos, A., Sarika, M., Lucas, E. & Dimopoulos, P. 2006. *Ludwigia peploides* subsp. *montevidensis*, a new alien taxon for the flora of Greece and the Balkans. – J. Biol. Res., 5: 71-78.

