Additions to the flora of the Prespa National Park, Greece

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Abstract. The vascular flora of the Prespa National Park (Greece) has been critically revised. C. 610 species recorded after Pavlides (1985) are listed. Some previously published records were found to be incorrect or dubious and should be deleted. As a result, 1769 species are now recorded for this area in the north-western corner of Greece, compared with 1249 in the publication by Pavlides. New or excluded taxa are listed alphabetically with locality and collection data, sometimes also with comments on taxonomy, distribution, etc.

Key words: flora, Greece, Mount Devas, Mount Triklario, Mount Varnous, Prespa, vascular plants.

Introduction

The Prespa National Park (PNP) in the north-western corner of Greece covers an area of 257 km² and extends altitudinally from 850 m (the level of the two lakes) to 2334 m on Mt Varnous (also known as Varnountas, Kalo Nero, Bela Voda or Peristeri). The area is characterized by great geological diversity with gneiss and granite on Mt Varnous and limestone on the hills and lower mountains around the lakes. On the Greek side, the lakes are surrounded by extensive reedbeds and flat farmland used mainly for bean cultivation. The Prespa area is renowned for its high biological diversity and is particularly famous as a fine bird locality. For general information on the area, see, e.g., Crivelli & Catsadorakis (1997), Catsadorakis (1999) and Standring & al. (2009).

In 1974 most of Greek Prespa was declared a National Park, including the Greek parts of the Prespa Lakes and the slopes of the mountains Varnous and Triklario that overlook them. The Society for the Protection of Prespa (SPP), an NGO established in 1991, works on nature conservation and natural history projects in the area. Following a meeting in 2 February 2000 of the Prime Ministers of Greece, the Former Yugoslav Republic of Macedonia (FYROM) and Albania, the protected areas of the three countries around the Prespa Lakes now form the Transboundary Prespa Park. The Greek part of the Prespa Park comprises two sites of the European Union 'Natura 2000' network of protected areas, 'Prespa National Park' (GR 1340001) and 'Varnoundas Mountain' (GR 1340003). The present paper refers to the entire Greek Prespa National Park (PNP), encompassing both Natura 2000 sites, which fall under
the responsibility of the Prespa Park Management Body (PPMB) since 2003.

Pavlides, a botanist at the Aristotle University of Thessaloniki, published an extensive geobotanical study of the Prespa National Park in 1985, with an annotated list of 1249 species of vascular plants. In addition to his own collections, Pavlides frequently cited records by Zaganiaris (1939, 1940), Quézel & Contandriopoulos (1968) and Quézel (1969). Mt Varnous, which dominates the north-eastern sector of the Greek part of the Prespa National Park, is a large mountain range extending from the pass of Pissoderi (Vigla), northwards across the present national border into FYROM where it is known as Pelister and reaches an altitude of 2600 m; also north of the border it is mainly granitic. This part of the mountain had previously been visited by Grisebach, who climbed from Bitola in early June, 1839, and discovered many interesting species including Pinus peuce Griseb., which here forms extensive forest. Orpianides visited the same area in 1862 and collected several new species including two that were subsequently named after him (Heracleum orphanidis Boiss. and Viola orphanidis Boiss.). Formánek collected in the area in the 1890s, and his gatherings were critically revised by Vandas (1909). None of these three 19th century botanists are likely to have extended their travels south of the border into present Greek territory. The first to collect in what is now the Greek part of the Prespa National Park may have been Alston & Sandwith, who made important contributions to the flora of Al with Plank's herbarium (at BM and K; they include water plants such as Ranunculus incommensurabilis (on Mt Varnous above Pissoderi) – both have subsequently been confirmed. Zaganiaris also collected in the area in the 1930s. Only fragments of his herbarium seem to be extant (at the University of Thessaloniki), and his published identifications are sometimes dubious. After the book of Pavlides (1985), some floristic and phytogeographical data are found in subsequent publications such as Strid (1986), Hopp & Petrídis (1987), Babalonas & Pavlides (1989), Strid & Kit Tan (1991), Crivelli & Catsadorakis (1997), Catsadorakis (1999), Pavlides (1997a, b), Jordan (2009), Fotiadis & al. (2012a, b), Strid & al. (2012) and Fotiadis (2013), but the bulk of new gatherings and observations remained unpublished.

**Material and methods**

We have attempted to summarize floristic data accumulated after the publication by Pavlides (1985) and also to critically assess previous records. Pavlides's herbarium is kept at the premises of SPP in Agios Germanos where large parts of it were studied by A.S. in October 2010 as well as later. More recently it has also been examined by F.S. with the intention of building up a database.

For practical reasons the study area has been defined as localities in the Prefecture of Florina (Nomos Florinis) with geographical coordinates >40°40’N and <21°16’E. This will also include some sites just outside the borders of the Prespa National Park, but in practice many recorded localities are not precise enough to determine whether they are inside or just outside the borders. It would have been desirable to include also areas of the Transboundary Prespa Park in Albania and FYROM, but limited data has been available from here. Thus our study, like that of Pavlides, is limited to Greek territory. Detailed and accurate topographical maps of the area, including boundaries of the National Park and all relevant place names, are found in Standring & al. (2009).

From the area as defined above, 9262 records (herbarium collections, literature reports and field notes) have been registered in the Flora Hellenica Database. Some of the most important collectors after 1984, as represented in the database, are:

- Stamatiadou (1985): 55 records [+ 750 before 1985 which were only partly considered by Pavlides].

In addition, Fotiadis, Vrahnakis and Kazoglou (2009–2016) have made more than 2000 collections and field notes, which so far have only been partly registered in the database.

The study is based on examination of herbarium material kept mainly at ATH, B, C, G and LD, as well as the Pavlides herbarium (at SPP, Agios Germanos) and the private herbarium of the senior author (A.S.). In addition, all relevant published records have been considered, as well as field notes to the extent that they have been available.
VASCULAR CRYPTOGRAMS

DRYOPTERIDACEAE

*Dryopteris cristata* (L.) A. Gray
Pavlides (1985: 155) reported this species from three localities in PNP, but specimens in his herbarium belong to *D. villarii*. *D. cristata* is a species of N & C Europe with no confirmed localities south of Serbia.

*Dryopteris villarii* (Bellardi) Woyn. ex Schinz & Thell.
S of the military post of Koula and above the road to the village of Pili, 950 m. Barren, stony calcareous ground. 1975-05-10, Stamatiadou 18525 (ATH); subsp. *pallida* (Bory) Heywood. – NE of Vrondero, 1450 m. Rocky places, on limestone. 2000-07-22, Schuler 00/398 (B); subsp. *villarii*. – Hag. Germanos ad orientem isthmi lacus Prespa, 1000 m, substr. silic. 1972-06-21, Rechinger 44972 (G); subsp. *villarii*.

VPG (Dimopoulos & al. 2013: 38) retained *D. villarii* and *D. pallida* as separate species, but the differences are obscure.

*Polystichum lonchitis* (L.) Roth
1–1.5 km S of the summit of Gortsa Toumba, 2000–2100 m. Alpine meadows and steep rocky slopes, granite. 1981-06-27, Stamatiadou 22186 (ATH); subsp. *pallida* (Bory) Heywood. – NE of Vrondero, 1450 m. Rocky places, on limestone. 2000-07-22, Schuler 00/398 (B); subsp. *villarii*. – Hag. Germanos ad orientem isthmi lacus Prespa, 1000 m, substr. silic. 1972-06-21, Rechinger 44972 (G); subsp. *villarii*.

*Polystichum setiferum* (Forssk.) Moore ex Woyn.

EQUISETACEAE

*Equisetum palustre* L.
NO Kotas, 860 m. Feuchte Talauen, Eichenwald, Ackerr. 1988-08-01, Willing 71942 (B). – This species was reported already by Lavrentiades (1956: 55) “pr. Antartikon”, but not cited by Pavlides (1985).

SALVINIACEAE

*Azolla filiculoides* Lam.

This species was first reported in Greece in 1982 and appears to be spreading, especially in the north.

GYMNOSPERMS

EPHEDRACEAE

*Ephedra distachya* L.
See under *E. nebrodensis*. In Greece *E. distachya* occurs in coastal habitats in the NE and has recently been reported also from Peloponnisos.

*Ephedra nebrodensis* Guss.
Pavlides (1985: 58) reported *E. distachya* L. subsp. *distachya* from Agathoto, but specimens under this name in his herbarium belong to *E. nebrodensis*. The latter has been confirmed elsewhere in PNP, e.g., along walking trail from Psarades to Cape Roti (Strid 2016-04-26, obs), and near Sfika (Fotiadis, obs).

PINACEAE

*Abies borisii-regis* Mattf.
Mt. Varnous, E of Ag. Germanos, 2–3 km SE of place called Potistra, margin of mixed fir forest, 1760 m. 2016-08-31, Bergmeier 16/175 (Be).

Trees observed by EB and GF match *A. borisii-regis* in their pubescent twigs, slightly emarginate or obtuse needles and resinous buds. Other native trees in mixed forest on Mt Varnous above Agios Germanos have flat twigs and seem referable to *A. alba* Mill. (Strid, photos). Planted trees in the village of Agios Germanos and probably elsewhere in the area match *A. borisii-regis*.

*Pinus peuce* Griseb.
Pavlides (1985: 159) reported this species from "Kalo Nero", citing Zaganiaris (1940). It forms extensive forest north of the border.
(locus classicus), but there appears to be no recent confirmation from the Greek side of Mt Varnous. In Greece *P. peuce* is otherwise known only from a few localities in Mt Voras and Mt Rodopi, always close to the borders.

*Pinus nigra* is very rare in PNP. Pavlides reported it near "Kalo Nero", citing Zaganiaris (1940). In 2016 Strid & Fotiadis observed small, solitary individuals on Mt Trikliario (c. 1600 m) and near the windmills on Mt Varnous above the Vigla pass (c. 1750 m), which probably represent *P. nigra*. Pavlides (1985: 159) reported *P. hederichii* Christ (sub nom. *P. leucodermis* Antoine) from Mt Varnous, based on a map in Fukarek (1975). The occurrence of *P. hederichii* in the area is plausible but needs confirmation. In young individuals it is hard to tell the difference.

**ANGIOSPERMS**

**ACANTHACEAE**

*Acanthus greuterianus* Snoجرع, B. Snoجرع & Strid

A newly described species known only from a few localities in NW Greece, and recently reported also from the Albanian side in the Prespa area (Pils 2016: 20).

*Acanthus hungaricus* (Borbás) Baen.
2–5 km from Pili towards Vrondero, by the hill of Velika Glavia, 950–1050 m. Forest with *Quercus*, *Fraxinus*, *Acer* and *Buxus*. Stony calcareous ground. 1972-06-22, Stamatiadou 15853 (ATH, St). – 3 km from Vrondero to the ruins of Agathoto to the same habitats. 2010-08-05, Fotiadis & Vrahnakis 7014 (Fo).

**ACERACEAE**

*Acer tataricum* L.
Near the village of Oxia, 880 m. Damp meadow, roadsides and open deciduous woodland. 2016-08-11, Strid 58606 (G, St). – Alluvial plain between Karyes and Oxia. 2016-09-05, Bergmeier (obs).

**ALISMATACEAE**

*Alisma lanceolatum* With.
NW side of Lake Mikri Prespa, SSE of Koula military post, by road to Pili. Damp grassy meadows and marshes, 853 m. 1985-07-21, Stamatiadou 22915 (ATH). – S shore of lake Megali Prespa, 3 km W of Plati, small lagoon near the shore, 850 m. 1998-07-01, Snoجرع 15876 (LD).

*Damasonium bourgaei* Coss.
Reported by Košanin (1932) from Lake Megali Prespa, north of the border. The species has few and scattered localities in Greece.

*Sagittaria sagittifolia* L.
The species was recorded by Zaganiaris (1940) from Megali Prespa and Pavlides (1985) from Mikri Prespa, but no specimen exists in the herbarium of Pavlides. It has not been confirmed from the PNP, but there are few and scattered records elsewhere in northern Greece.

**ALLIACEAE**

*Allium amethystinum* Tausch
2–5 km from Pili towards Vrondero, by the hill of Velika Glavia. Forest with *Quercus*, *Fraxinus*, *Acer* and *Buxus*. Stony calcareous ground, 950–1050 m. 1972-06-22, Stamatiadou 15850 (ATH, BM).

*Allium commutatum* Guss.
By the village of Vrondero. Fallow fields around the military posts, 1100 m. 1972-06-22, Stamatiadou 15873 (ATH). Sub nom. *Allium rotundum* L.

*Allium cupanii* Raf.
Along small road between Psarades and Vrondero, just N of place called Pixos sheepfolds, 980 m. Open deciduous oak woodland. 2016-08-09, Strid 58543 (St).

According to the extremely narrow species concept of Brullo, Pavone & Salmeri (2015) this collection would probably be referable to the newly described *A. balcanicum*.

*Allium guttatum* Steven
Lake Prespa, near and SW of the frontier post of Koula. Stony calcareous ground, 850–900 m. 1972-06-22, Stamatiadou 15805 (ATH).

*Allium moschatum* L.
Mt Trikliario, in grasslands just outside the National Park. 2010-06-06, Fotiadis & Kazoglou 7036 (Fo). – Mt Devas, just W of the summit area, 1300 m. Rocky limestone slopes with open deciduous woodland. 2016-08-13, Strid 58656 (St).
**Allium oleraceum** L.
Mt. Varnous, E of Ag. Germanos, near place called Potistra, 1430 m, rocky site near wood margin. 2016-08-31. Bergmeier 16/166 (Be).

**Allium rhodopeum** Velen. (syn. *A. paniculatum* subsp. *villosulum*)
Along small road between Psarades and Vrondero, just N of place called Pixos sheepfolds, 980 m Open deciduous oak woodland. 2016-08-09, Strid 58545 (G, St).

**AMARANTHACEAE**

*Amaranthus albus* L.

*Amaranthus cruentus* L.

*Amaranthus deflexus* L.

*Amaranthus powellii* S. Watson

*Amaranthus retroflexus* L.
Prespa, E of the village Lemos area, 940 m. 1972-07-08, Hariostos 3950 (ATH).

**AMARYLLIDACEAE**

*Sternbergia colchiciflora* Waldst. & Kit.
Upper part of Devas, rocky limestone slopes with open woodland of *Juniperus foetidissima*, *J. oxycedrus*, *Quercus trojana*, *Acer monspessulanum*, 1300 m. 2006-10-14, Strid (obs). – A map in Artelari & Kamari (1991: 241) indicates a dot in the Prespa area, possibly in the same locality.

**APIACEAE**

*Anthriscus caucalis* M. Bieb.

*Anthriscus nitidus* (Wahlenb.) Garcke
This species was reported by Pavlides (1985: 257) “near Opagia and Agathoto”, but specimens in the Pavlides herbarium represent *Chaerophyllum temulum*. The only Greek collection of *Anthriscus nitidus* appears to be Hugin 6953 (B, Hüg) from Chrisi in nom. Kastorias (see Greuter & Raus 1995: 174).

*Anthriscus sylvestris* (L.) Hoffm.
A report by Pavlides (1985: 257) from Agios Germanos probably refers to subsp. *sylvestris* which has been confirmed by “Kleiner Prespa-See, Oxia, stickstoffreiche Säume im Ort” (2011-06-26, Raus 32551; B). In addition, subsp. *nemorosus* (M. Bieb.) KosoffPol. has been collected by “village of Vrondero, near the military post, 1100 m. Semi-cultivated fields and openings in woodland” (1985-07-20, Stamatiadou 22902; ATH) and on "Mt Devas, just E of the summit, 1300 m. Mixed woodland on rocky limestone slope” (2012-05-21, Strid 57383; St). Subsp. *fumarioides* (Waldst. & Kit.) Spalik has been collected once, “E of Mikri Prespa, NE of Oxia, 860 m, wet fields” (1998-06-27, Snogerup 15641; LD). The latter is the only record in Greece.

*Bifora radians* M. Bieb.
Along forest road between Psarades and Pili, near place called Pixos sheepfolds, 1020 m. Open deciduous oak woodland and cultivated fields with many weeds. 2016-06-04, Strid 58365 (G, St). – Near Vrondero, wheat field, 1090 m. 2016-07-20, Bergmeier (obs).

*Bupleurum affine* Sadler
Umgebung von Vronderon. Quercus-Niederwälder mit Lichtungen; Weiderasen mit Kalkfelsdurchrasungen, 1200 m. 1986-08-22, Raus & al. 11291 (B). – E of Vrondero, *Juniperus excelsa* open woodland and pas-
tures, together with *B. apiculatum*. 2016-07-21, Bergmeier 16/134 (Be).

**Bupleurum apiculatum** Friv.

**Bupleurum praecatum** L.

**Bupleurum trichopodum** Boiss. & Spruner

**Carum appuanum** (Viv.) Grande
Reported by Pavlides in an unpublished addition to his 1985 publication. No details are available and no voucher seems to exist in the Pavlides herbarium. The species is otherwise scattered in northern Greece and the record is feasible.

**Carum meoides** (Griseb.) Halácsy
Mt Triklario, area called Agioneri at northern part of summit area, 1550–1740 m. Rocky limestone slopes with grassland and scattered deciduous woodland. 2016-06-07, Strid 58462 (G, St).

**Chaerophyllum temulum** L.

**Dichoropetalum oligophyllum** (Griseb.) Pimenov & Kljuykov
Mt Varinous: Near the windmills above the pass of Pissodeni, at upper edge of *Fagus* forest, 1800 m. Meadow on rocky granitic slope. 2016-08-10, Strid 58574 (G, St).
A syntype of *Peucedanum oligophyllum* Griseb. is from Mt Pelister, just N of the present border.

**Eryngium amethystinum** L.

**Eryngium palmatum** Pančić & Vis.
Above the village of Oxia, along forest road to the abandoned settlement of Sfika. Deciduous woodland over limestone. 2012-09-13, Strid 57632 (seed collection). – Near the summit of Mt Devas along forest road from the chapel of Agios Georgios. Rocky limestone slopes with open woodland of *Quercus trojana* and *Juniperus*. 2014-07-12, Strid 58096 (G, St). – Mixed deciduous forests to the dirt road from Psarades to Pixos. 2011-07-04, Fotiadis 8113 (Fo). – These records confirm a report by Pavlides (1985: 259) which had previously been doubted.
The Greek sites for this Balkan endemic form only a slight extension of the previously southernmost known localities in Albania and FYROM (cf. Wörz 2006: 227). Reports of *E. palmatum* from elsewhere in Greece probably refer to the somewhat similar *E. wiegandii* Adamović. There are confirmed records of the latter in the foothills of mountains from Voras to Olimbos, but it is probably absent from the Prespa area.

*Eryngium serbicum* Pančić
Reported by Pavlides (1985: 259), based on a record from Kalo Nero by Zaganiaris (1940).

This species is endemic to a small area in the C & N Balkan Peninsula (cf. Wörz 2006: 225). The record from the Prespa area is likely to refer to *E. palmatum* (see above).

*Foeniculum vulgare* Mill.

*Hellenocarum strictum* (Griseb.) Hand

*Heracleum orphanidis* Boiss.

*H. orphanidis* is not known elsewhere in Greece. The type collection is from the same massif, north of the border: "Legi in regione superiori monti Pelister Macedoniae alt 6000’, 1862-07-31, Orphanides 385” (G-BOIS). It is common in this area, mainly as undergrowth in *Pinus peuce* forest over granite at 1600–1800 m (2012-07-07, Strid 57529, herb. St and photo).

*Laser trilobum* (L.) Borkh.

*Malabaila aurea* (Sm.) Boiss.

*Oenanthe banatica* Heuffel

*Oenanthe banatica* is not known elsewhere in Greece. The type collection is from the same massif, north of the border: "Legi in regione superiori monti Pelister Macedoniae alt 6000’, 1862-07-31, Orphanides 385” (G-BOIS). It is common in this area, mainly as undergrowth in *Pinus peuce* forest over granite at 1600–1800 m (2012-07-07, Strid 57529, herb. St and photo).

*Peucedanum aegopodioides* (Boiss.) Vandas

*Peucedanum oreoselinum* (L.) Moench

*P. oreoselinum* is not otherwise known in Greece and is mainly a species of C & N Europe.

*Peucedanum palustre* (L.) Moench

*Physospermum cornubiense* (L.) DC.

See under *Peucedanum oreoselinum*. – Fotiadis &
Vrahnikas observed *Physospermum cornubiense* in *Quercus* forest and thermophilous *Fagus* forests at Lefkonas (1160–1250 m), Devas (1100–1350 m), Daseri (860 m) and Oxia (870 m).

**Sanicula europaea** L.
Along forest road between the village of Oxia and the deserted village of Sfika, 1200 m. Damp, shady place in *Fagus* forest. 2016-08-11, Strid 58682 (St).

**Scaligeria napiformis** (Spreng.) Grande
Along walking trail between Psarades and Roti, 900 m. Rocky limestone slopes with mixed deciduous/evergreen scrub. 2016-06-06, Strid 58424 (St).

**Scandix stellata** Banks & Sol.
Sandy flats between the lakes just east of Koula, 860 m. 2016-04-26, Strid 58278 (G, St).

**Seseli annuum** L.
This species was reported by Pavlides (1985: 261) from Falakra Triklariou (1500 m), which may be just outside the PNP. It was also reported by Quézel & Contandriopoulos (1968: 29) from Mt Vermio. Both records are dubious and it remains to be established whether *S. annuum* occurs in Greece.

**Seseli montanum** subsp. *tommasinii* (Rchb. f.) Arcang.
SE of Psarades, by road ascending from the sandy spit between Prespa lakes to a small pass, 900–1000 m. Rocky limestone slopes with woodland of *Juniperus excelsa* and *Quercus trojana*. 2006-10-14, Strid 56181 (B, St).


**Sium latifolium** L.

**Smyrnium olusatrum** L.
Ajios Germanos village area, 1040 m. Fresh places by the stream. 1972-07-09, Haristos 4069 (ATH).

**Torilis arvensis** (Huds.) Link subsp. *recta* Jury
Near Vrontero, wheat field, 1090 m. 2016-07-20, Bergmeier 16/114 (Be). – Fotiadis observed the species also in Daseri (890 m), Psarades (880–930 m), Agathoto (870 m), Oxia (870 m) and Kranies (880 m).

Records of subsp. *arvensis*, which occurs in W Europe, are likely to refer to subsp. *recta*.

**Torilis japonica** (Houtt.) DC.
In grassland above Ag. Germanos village, 1280 m. Fotiadis & Kazoglou (obs).

**Torilis leptophylla** (L.) Rchb. f.
Above the village of Vrontero, in open *Juniperus* woodland and grassland, 1000–1200 m. Fotiadis & Kazoglou (obs). – Along road from Pili to Daseri, 860–890 m. 2010-06-10, Fotiadis & Vrahnikas 7122 (Fo). – Hill WNW of Lefkonas, near eastern shore of Lake Mikri Prespa, 860–900 m. Rocky limestone slopes with grassland and scattered deciduous shrubs. 2016-06-06, Strid 58395 (St).

**Torilis nodosa** (L.) Gaertn.
*Juniperus excelsa* woodland near Psarades, 910 m. Fotiadis (obs).

**Turgenia latifolia** (L.) Hoffm.
*Juniperus excelsa* woodland near Psarades, 910 m. Fotiadis (obs).

**ARACEAE**

**Arum cylindraceum** Gasp.
Lake Mikri Prespa, island of Agios Achilleos, NW end, near the basilica. Meadows and open deciduous woodland, 870 m. 2011-05-19, Strid (photo). – Along walking trail from Psarades to Cape Roti. Rocky limestone slopes with mixed scrub including abundant *Buxus sempervirens*, 860–900 m. 2016-04-26, Strid (obs).

**Biarum tenuifolium** subsp. *abbreviatum* (Schott) K. Richt.
Mt Devas, summit area. Rocky limestone flats in opening of deciduous woodland. 1350 m. 2010-06-04, Strid s.n. Cultivated in Oerbaek, Denmark, phot. 2012-08-26.
**ARISTOLOCHIACEAE**

*Asarum europaeum* L.

This collection was long the only Greek record for a widespread, C European species. Recently Constantinidis (pers. comm., 2016) has reported it from one more locality in nom. Pellis.

**APOCYNACEAE**

*Vinca balcanica* Pénzes
Reported by Pavlides (1985: 161) from field margins near the village of Mileona. Plants in the Pavlides herbarium are rather small-flowered but otherwise match *V. major* L. and are probably not specifically different. For notes on this group, see also Meyer (2011: 117).

**ASTERACEAE**

*Achillea clypeolata* Sm.

*Achillea collina* (Wirtg.) Heimerl
Mt Devas, summit area c. 2 km N of Pili, 1200–1350 m. Rocky limestone slopes and flats in opening of mixed woodland. 2010-06-04, Strid 57187 (LD).

*Achillea distans* Willd.
In austro-orientali verticum Bela Voda vocatorum, 2000–2050 m. In megaphorbietis clivorum solo granitico. 1976-08-01, Greuter 14141 (Gr, St).

*Achillea holosericea* Sm.

*Achillea pannonica* Scheele
Near summit of Mt Devas, 1300–1370 m. Rocky limestone flats in openings of deciduous woodland. 2016-06-03, Strid 58338 (G, St).

*Anthemis altissima* L.
WSW Lemos, 860 m, Krautfluren zwischen Feldern. 2004-05-11, Willing 127044 (B).

Somewhat out of range. Perhaps casual introduction, but confusion with *A. austriaca* or a similar species is also possible.

*Anthemis macedonica* Boiss. & Orph.

*Anthemis orientalis* (L.) Degen
Quézel & Contandriopoulos (1968: 34) reported this species at "arènes granitiques et pelouses du Bela Voda". The record needs confirmation. [The presence of *A. orientalis* was confirmed by Bergmeier in 2017].

*Anthemis triumfetti* (L.) DC.

*Arctium minus* (Hill) Bernh.

*Artemisia absinthium* L.
Reported by Pavlides (1985: 179) from Perivolaki; however, the specimen in the Pavlides herbarium is *A. vulgaris*. – *A. absinthium* was subsequently confirmed at Vrondero, village site, 2016-09-04, Bergmeier & Fotiadis (obs). One collection of *A. absinthium* (Snogerup 15849, LD) is from Pissoderion just outside PNP.

*Bellidiastrum michelii* Cass.
A specimen in the Pavlides herbarium labeled *Aster bellidiastrum* (L.) Scop. (a synonym of *Bellidiastrum michelii*) is in poor condition and cannot be identi-
fied with certainty. There is no confirmation from the Prespa area, but a report by Parent (2005: 222) from Mt Vasilitsa ("Hêtraie avec mégaphorbiaie au torrent, 1650 m") rendering some credibility to Pavlides’ collection.

**Bidens cernuus** L.
Sandy spit between Prespa lakes, eastern end, Megali Prespa side, near Ag. Germanos stream, 860 m. 2006-10-15, Strid 56187 (ATH, G, LD, St). – By the village of Mikroloini, 860 m. Wetland by Lake Mikri Prespa. 2012-09-13, Strid 57603 (G, St). – Lake Mikri Prespa, W shore, SE of Pili, reedbed margin. 2016-09-03, Bergmeier 16/224 (Be).

This species is rare in Greece, but was collected at “Saloniki: Katharine, in humidis” already by Sintenis (1889-09-09, no 1882, LD; see Halácsy 1890: 39), and subsequently by Baldacci at the northern shore of Limni Pamvotida [Lake Ioanninon] (see Halácsy 1902: 39).

**Bidens frondosus** L.
Lake Megali Prespa, near stream mouth, together with *B. tripartitus*. 2016-08-30, Bergmeier 16/149b (Be). – Mikri Prespa, lake shore at Mikrolimni. 2016-09-05, Bergmeier 16/265 (Be). – Lemos, ditch. 2016-09-06, Bergmeier 16/292 (Be).

A late-flowering neophyte of North American origin, only recently reported from Greece (Raus & Witting 2015: 451). In the Prespa area it is fully established, occurs in several sites, and is probably spreading.

**Carduus acicularis** Bertol.
Reported by Pavlides (1985: 180) from Triklario, which may be just outside the PNP. The specimen in the Pavlides herbarium labeled *C. acicularis* belongs to *C. tmoleus*.

**Carduus candicans** Waldst. & Kit.
Between the 12th and 13th pyramid of the Greek-Albanian frontier, W of the village of Vrondero, place named Vroatseria, 1300–1400 m. Stony calcareous ground. 1972-06-23, Stamatiadou 15920 (ATH). – Also collected by Snogerup (15795, LD) at Pissoderi just outside the PNP border.

**Carduus kernerii** Simonk.

**Centaurea adami** Willd.
By the village of Vrondero, 1100 m. Fallow fields around the military posts. 1972-06-22, Stamatiadou 15877 (ATH). – W of Mikra Prespa. By the village of Vronderon (Vrondero), 1040 m. Weed at edge of a field. 1985-07-30, Strid 24801 (C, G, GOET). – Near place called Pixos sheepfolds, c. 3 km WNW of Pili, 950 m. Semi-cultivated cereal fields with many weeds. 2014-07-12, Strid 58100 (St). – Near Vrondero, wheat field, 1090 m. 2016-07-20, Bergmeier 16/107 (Be, GOET).

Often cited as *C. solstitialis* subsp. *adami* (Willd.) Nyman. In our opinion, supported by that of the *Centaurea* specialist G. Wagenitz, it is better regarded as a separate species, differing from *C. solstitialis* L. in important characters of phyllary appendages and achenes as well as general habit and ecology. In Greece it is restricted to a few localities in the north west, whereas *C. solstitialis* is widespread.

**Centaurea diffusa** Lam.
Between Vrondero and the abandoned village of Agatho, dry grassland along walking trail. 2016-07-20, Bergmeier 16/127 (fl. white) and 16/133 (fl. pale yellow) (Be, GOET), det. G. Wagenitz.

**Centaurea finazzeri** subsp. *kozanii* (Routsi & T. Georgiadis) Greuter
Along main road between Lefkonas and Karies, 930 m. Roadside in deciduous scrub. 2016-06-08, Strid 58477 (G, St).

Previously known from a few localities in NC & NW Greece and recently reported also from the Albanian side of the Prespa National Park (Shuka & Tan 2013: 6).

**Centaurea graeca** Griseb.

**Centaurea grisebachii** (Nyman) Heldr.

Strid & Kit Tan 47606 has been identified as subsp. *confusa* (Halácsy) Dostál, Strid 57315 as *occidentalis* E. Gamal-Eldin & Wagenitz.

**Centaurea jacea** subsp. *angustifolia* (DC.) Gremli
Meadow just S of the village of Oxia, 900 m. 2016-08-11, Strid 58610 (G, St). – Between Oxia and Mikrolimni, wet-dry hay meadow. 2016-09-05, Bergmeier 16/253 (Be, GOET; conf. G. Wagenitz: “vergens ad subsp. *weldeniana* (Rchb.) Greuter”). – Willing 250155 (B) from the same area (“S Karyes. Krautfluren, Straßensrand”) was reported as subsp. *weldeniana*.

**Centaurea prespana** Rech. f.
This species was described in 1974, based on Stamatiadou 15927 (ATH, St, W) collected “between the 12th and 13th pyramid of the Greek-Albanian frontier, W of the village of Vrotondo, place named Vroatseria, 1300–1400 m, stony calcareous ground”. There are several subsequent confirmations from the Prespa area, but unfortunately the name can not be retained since *C. prespana* is clearly conspecific with *C. soskeae* Košanin, described in 1926 from Ohrid in F.Y.R. Makedonija. The species is probably restricted to limestone hills around the lakes of Prespa and Ohrid, extending also into Albania (Shuka, Malo & Kit Tan 2011: 160). It is related to *C. pelia* DC. which occurs from Attiki to c. 40°N in north central Greece.

**Centaurea rufidula** Bornm.
Reported from PNP by Pavlides (1997a: 36), no details available. *C. rufidula* is a member of sect. *Acrolophus* described from “Macedonia centralis, Doiransee-Gebiet, südlich von Bogdanci” and listed as endemic to Mk in Flora Europaea (4: 281, 1976) as well as Euro+Med PlantBase. The record from the Prespa area needs confirmation. No material was found in the Pavlides herbarium.

**Centaurea soskeae** Košanin
See under *C. prespana*.

**Centaurea spurneri** subsp. *guicciardii* (Boiss.) Hayek
Reported by Pavlides (1985: 182) from the vicinity of Ag. Germanos. A specimen in the Pavlides herbarium is fragmentary, but represents a different species. Willing 250154 (B) from Karies, originally identified as *C. spurneri*, is in fact *C. graeca*.

**Cirsium brachycephalum** Jur.
Reported by Pavlides (1985: 183) from the vicinity of Lemos. A specimen in the Pavlides herbarium belongs to *C. arvense* (L.) Scop. *C. brachycephalum* is a species of East Central Europe not confirmed south of Serbia.

**Cirsium candelabrum** Griseb.
Koula, by the isthmus between Megali and Mikri Prespa, 860 m. Roadside and rocky limestone slopes. 2014-07-12, Strid (obs).

**Cirsium canum** (L.) All.
This species was reported by Pavlides (1985: 183), based on Zanganiaris (1940). It is not otherwise known in Greece, and the record needs confirmation.

**Cirsium creticum** (Lam.) d’Urv.
W. shore of Mikri Prespa, NW of the island of Ag. Achilles, 850 m. Wet meadows, swamps and *Phragmites* thickets. 1985-07-21, Strid 24827 (St). – Vromolimni, flood plain. 2016-09-03, Bergmeier 16/205 (Be). – The species was reported by Pavlides (1985: 183) from Ag. Germanos, Pili, Vromolimni and Koula, and by Quézel & Contandriopoulos (1968: 35), always erroneously identified as *C. palustre* (see below).

**Cirsium tymphaeum** Hausskn.
Just W of Vigla pass, 1300 m. Wet place by the road. 2016-08-10, Strid 58594 (St). – The locality is near the border of PNP.
Crepis micrantha Czerp.
Reported by Pavlides (1985: 183) from a locality between Koula and Pili. *C. micrantha* is an Aegean species unlikely to occur in the Prespa area.

Crepis pulchra L.
Along main road between Lefkonas and Karies, 930 m. Roadside in deciduous scrub. 2016-06-08, Strid 58471 (St).

Crepis reuteriana Boiss.
Between the villages of Pili and Vrondero, near the lake Mikri Prespa, 900 m, in *Quercus* woodland. Lime-stone. 1990-05-05, Phitos & Kamari 21404 (UPA).


Crepis tectorum L.
Reported by Pavlides (1985: 184) from the vicinity of Vrondero. *C. tectorum* is not otherwise known in Greece and the record needs confirmation.

Crepis vesicaria L.
In grassland on the island of Agios Achilleios, 860 m. 2010-06-11, Fotiadis & Vrahakis 7503 (Fo).

Crepis viscidula Froel.

Lippert 18431 has been identified as subsp. *geracioides* (Hausskn.) Kamari, the others as subsp. *viscidula*.

Crupina crupinastrum (Moris) Vis.
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of *Juniperus excelsa* and *Quercus trojana*. 1999-05-31, Strid & al. 49117 (G, Kit).

*C. vulgaris* Cass. is more common in the Prespa area, but both species are widespread on the Greek mainland.

Doronicum hungaricum Rchb. f.
Pavlides (1985: 184) cited a record from Pissoderi, just outside the PNP. It certainly refers to *D. austriacum* Jacq. which is common in this area.

Erigeron annuus (L.) Desf.
2 km SW of the village of Lemos, 880 m. Damp scrub on roadside. 2016-06-08, Strid 58483 (St).

Erigeron canadensis L.

Filago eriocephala Guss.
Listed by Fotiadis & al. (2012b) from Mt Trikalino. No details are available, but the record is feasible.

Filago pyramidata L.
NW Andartiko, 1280 m. Straßenrand, Buchenwald. 1998-08-01, Willing 71073 (B).

Galinsoga parviflora Cav.

*Galinsoga parviflora* is an alien of S American origin, widespread and common in much of Europe as a weed of gardens, potato fields, etc., but only relatively recently observed in Greece where the first collections appear to be Haristos (1971-09-24, no 1648; ATH) from the vicinity of Naousa, and Strid & al. (1977-07-28, no 13396; ATH, St) = Stamatiadou 20537 (ATH) from the village of Dimarion in nomos Xanthis. In the Prespa area it was not known to Pavlides (1985), but is now an abundant weed of bean fields near the lakes.

Gnaphalium sylvaticum L.
Mt Varnous SE of Ag. Germanos, 1600 m. Granitic gravel on embankment of a forest road. 2012-09-13, Strid 57621 (ATH, G, St).
Hedypnois rhagadioloides (L.) F. W. Schmidt
Reported by Pavlides (1985: 185) from Mt Devas, 1000–1100 m, as H. cretica (L.) Dum-Cours. In the Pavlides herbarium is a poor specimen under this name. It cannot be identified with certainty but does not appear to be Hedypnois.

Helianthus lactiflorus Pers.
Village of Lemos, vegetation of tall herbs near stream. 2016-09-06, Bergmeier 16/290 (Be).
An alien of North American origin, naturalized in N Greece but late-flowering and probably under-represented in the records; in the Prespa area observed only in Lemos.

Hieracium chalcidicum Boiss. & Heldr.
OSO Karye, 1050 m. Sandige Hänge, Eichenbuschwald. 1998-07-30, Willing 71390 (B); det. G. Gottschlich. – 1,9 km E Straßenabzweig nach Mikrolimni am Talrand des Mikro Prespa, Straßenböschung, 860 m. 2009-08-05, Gregor & Meierott 5784b (FR); det. G. Gottschlich.

Hieracium heldreichii Boiss.
1,9 km E Straßenabzweig nach Mikrolimni am Talrand des Mikro Prespa, Straßenböschung, 860 m. 2009-08-05, Gregor & Meierott 5784a (FR); det. G. Gottschlich.

Hieracium jankae subsp. macranthelophorum Rech. f. & Zahn
Aufstieg zur Kiwaniza (östl. Vorgipfel des Kalo Nero = Bela Voda) vom Kataphygion des Alpine Club Florina bei Pissoderi, 1800–2130 m. 1982-07-08, Lippert 18492 (M, St); det. G. Gottschlich.

Hieracium neodivergens Gottschl.
Between Karyes and Andartiko, steep and rocky declivity near the road, 1110 m. 2016-07-22, Bergmeier 16/138 (Be); det. G. Gottschlich.

Hieracium pyrgosense Rech. f. & Zahn
Auf der Bela Voda, 2000 m; Blockwerk, Felsen, Silikat. 1978-07-05, Krendl s.n. (Gott, W); det. G. Gottschlich.

Hieracium retyezatense Degen & Zahn
Aufstieg zur Kiwaniza (östl. Vorgipfel des Kalo Nero = Bela Voda) vom Kataphygion des Alpine Club Florina bei Pissoderi, 1800–2130 m. 1982-07-08, Lippert 18416 (M, St); det. G. Gottschlich.

Hypochaeris cretensis (L.) Bory & Chaub.
By the chapel of Agios Georgios halfway between Koula and Psarades, 1050 m. Rocky limestone slopes with Juniperus woodland. 2016-06-03, Strid 58329 (St). – Observed by Fotiadis & Vrahnikis in the same area and also near Vrondero.

Hypochaeris glabra L.
In grassland near the village of Plati, 890 m. Fotiadis (obs).

Inula salicina subsp. aspera (Poir.) Hayek
Along forest road from the chapel of Ag. Georgios to Mt Devas, 1100–1200 m. Rocky limestone slopes with mixed woodland. 2012-09-12, Strid 57609 (G, St). – Same area, 1300 m. 2016-08-13, Strid 58655 (St).

Jacobaea erratica (Bertol.) Fourr.
Reported by Pavlides (1985: 188), sub nom. Senecio aquaticus subsp. barbareifolius (Wimmer & Grab.) Walters. A specimen in the Pavlides herbarium seems to represent Senecio rupestris.

Jacobaea vulgaris Gaertn.
Reported by Pavlides (1985: 188), sub nom. Senecio jacobaea L. A specimen in the Pavlides herbarium represents Senecio rupestris.

Klasea radiata subsp. cetinjensis (Rohlena) Greuter & Wagenitz
Mt. Devas, near the summit along forest road from the chapel of Agios Georgios, 1200–1300 m. Rocky limestone slopes with open woodland of Quercus trojana and Juniperus. 2014-07-12, Strid 58098 (ATH, G, St). – First observed in this locality 2006-10-14 (Strid 56178, seed collection).
The only locality in Greece; see Strid (2013: 241).

Lactuca aurea (Vis. & Pančić) Stebbins
Mt Varnous: Near the windmills above the pass of Pissoderi, at upper edge of Fagus forest, 1800 m. Meadow on rocky granitic slope. 2016-08-10, Strid 58573 (G, St).
A rare Balkan endemic. In Greece there are few and scattered localities from the northwestern borders southwards to Mt Timfristos.

Lactuca perennis L.
Along road between Koula and the chapel of Agios Georgios, above the sandy spit between Mikri and Megeli Prespa, 900–950 m. Rocky limestone slopes

Otherwise very rare in Greece, reported only from Mts Vermio and Vourinos.

**Lactuca serriola** L.

**Lactuca tuberosa** Jacq.
Along walking trail from Mikrolimni to ruins of Kranies settlement. Rocky limestone slopes, mostly with deciduous woodland. 2010-06-06, Strid (obs).

**Leucanthemum vulgare** (Vaill.) Lam.
Lake Prespa area, alluvial plain between Lemos and Koula, 860 m. 1971-07-29, Stamatiadou 13620 (ATH).

**Petasites hybridus** (L.) G. Gaertn., B. Mey. & Scherb.

**Picris hieracioides** (Guss.) Arcang.

Strid 57629 has been identified as subsp. *spinulosa* (Guss.) Arcang.

**Pilosella caespitosa** (Dumort.) P. D. Sell & C. West

**Pilosella rhodopea** (Griseb.) Szeläg
This species was reported from Mt Varnous, without precise locality, already by Quézel (1969: 103, sub nom. *Hieracium alpico-la subsp. rhodopeum*), but this record was dismissed as probably incorrect and the taxon was not included in VPG (Dimopoulos & al. 2013). There is no confirmation for Mt Varnous, but several collections from the Voras range and Mt Gramos, confirmed as *Pilosella rhodopea* by G. Gottschlich. The *Hieracium alpico-la* (*Pilosella alpica*) group was revised by Szeläg (2008), who reported *P. rhodopea* from "Balkan Peninsula (Bulgaria, Greece, Macedonia)".

**Scolymus hispanicus** L.

**Scorzonera cana** (C. A. Mey.) Griseb.

**Scorzonera doriae** Degen & Bald.
A record from Mt Devas cited by Strid & al. (2012) is probably incorrect.

**Scorzonera mollis** M. Bieb.
Mt Devas, in *Juniperus excelsa* forest, 1100 m. 2010-05-20, Fotiadis & Vrahnakis 7522 (Fo). – Ditto, summit area, 1350 m. Dry meadow on rocky limestone flat. 2012-05-21, Strid 57388 (ATH, G, St). – Ditto, E of the summit, 1200 m. Dry meadow in opening of mixed woodland on rocky limestone slope. 2012-05-21, Strid 57382 (ATH, G, St).

**Senecio fluviatilis** Wallr.
Reported by Pavlides (1985: 188) from the stream just above Ag. Germanos. According to Euro+Med PlantBase *S. fluviatilis* Wallr. is a synonym of *S. sarracenicus* L., but a specimen in the Pavlides herbarium appears to represents *S. ovatus*, another taxon in this group (see below). A report from “Kalo Nero” by Quézel & Contandriopoulos cited by Pavlides probably refers to the same.

**Senecio lividus** L.
Specimens in the Pavlides herbarium labeled *S. lividus* probably represent *S. vernalis*. 
**Senecio ovatus** (G. Gaertn., B. Mey. & Scherb.) Willd. See under *S. fluviatilis*. Confirmed 2016-08-10 on Mt Varnous, near source of Kaloneri stream, 1750–1800 m, damp to dry meadows over granite. Strid 58583 (St). – Mt. Varnous, ESE of Ag. Germanos, 1900 m, *Juniperus nana* shrubland, granite. 2016-08-31, Bergmeier 16/178 (Be).

**Senecio scopoli**i Hoppe & Hornsch. Mt Triklario, 3 km S of the village of Oxia, 1450 m. Rocky limestone slope in opening of *Fagus* forest. 2009-05-18, Strid (photo).


**Symphytrichum novi-belgii** (L.) G. L. Nesom (s.l.) Village of Lemos, vegetation of tall herbs. 2016-09-06, Bergmeier 16/288 (Be).

Locally naturalized garden escape; in the Prespa area observed only in Lemos. Species delimitation in this group of closely related North American taxa is unresolved.

**Tanacetum parthenium** (L.) Sch. Bip. *Quercus* forests in Mt Devas, 1200 m. Fotiadis & Vrahnakis (obs).


This specimen has been annotated by Richards as “*Taraxacum magniterminale* A. J. Richards”, a species otherwise recorded from Mt Olimbos and Mt Dirfis (Evia). Apparently the name was never published.

**Tephroseris integrifolia** (L.) Holub Pavlides reported *Senecio integrifolius* subsp. *integrifolius*. There are several records from Mt Varnous which are all likely to represent *T. integrifolia* subsp. *aucheri* (DC.) B. Nord.

*T. integrifolia* subsp. *aucheri* has recently been reported from the Albanian side of the Prespa National Park (Shuka & Tan 2013: 10).


Records of *X. strumarium* may belong here or should be confirmed.

**Xeranthemum inapertum** (L.) Mill. Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of *Juniperus excelsa* and *Quercus trojanana*. 1999-05-31, Strid & al. 49112 (G, Kit, St). – Near the village of Pili, 900 m. Rocky calcareous slopes in deciduous oak woodland. 2010-06-04, Strid 57126 (G, St).

**BALSAMINACEAE**

**Impatiens balfourii** Hook. f. Between the villages of Agios Germanos and Lemos, 950–1000 m. Shady places by a small stream. 2010-10-14, Strid (obs). – Ag. Germanos. 2016-09-02, Bergmeier (obs).

An introduced, late-flowering species now spreading rapidly in damp habitats in villages of northern Greece.
BORAGINACEAE

**Alkanna corcyrensis** Hayek
This species was reported by Pavlides (1985: 161) but a specimen in the Pavlides herbarium belongs to *A. pindicola* Haussk.

**Alkanna pindicola** Haussk.

**Anchusa arvensis** L.
Records of this species are dubious. At least one specimen in the Pavlides herbarium labeled *Anchusa arvensis* belongs to *Anchusella cretica*.

**Anchusa azurea** Mill.
W of Mikri Prespa, by the village of Vrondero (Vrondero), 1040 m. Deciduous oak scrub, dry meadows in the vicinity of the filakion just SW of the village. 1985-07-20, Strid 24804 (C).

**Anchusella cretica** (Mill.) Bigazzi, E. Nardi & Selvi
Pavlides (1985: 162) reported *Anchusa variegata* (L.) Lehmb. “between Ag. Georgios and Psarades, 1050 m”, but a specimen in the Pavlides herbarium belongs to *A. variegata* is restricted to S Greece with its northernmost locality on Kerkira. In spite of its name, *A. cretica* does not occur in Kriti.

**Buglossoides incrassata** (Guss.) I. M. Johnst.
C. 2 km SW of Psarades along forest road to Pyli, 980–1040 m. Rocky limestone slopes with mixed woodland dominated by deciduous oaks. 2016-06-04, Strid 58271 (St).

These specimens have pale blue corolla and match *B. incrassata* subsp. *splitgerberi* (Guss.) E. Zippel & Selvi, a taxon of uncertain status more or less intermediate between *B. arvensis* and *B. incrassata*. It has been reported from scattered localities in W Greece and recently also from the island of Rodos (Kleinsteuber & al. 2016: 244).

**Cynoglossum columnae** Ten.

**Cynoglossum montanum** L.
Prespa, area of village Lemos, 940 m. 1972-07-07, Haristos 3957 (ATH). – Ajios Germanos village area, 1040 m. 1972-07-09, Haristos 4010 (ATH).

**Cynoglossum barrelieri** (All.) Vural & Kit Tan
Several records from the area including: Lake Prespa, near and SW of the frontier post of Koula, 860–900 m.
Stony calcareous ground. 1972-06-22, Stamatiadou 15816 (ATH, C). – By the Greek-Albanian frontier, SW of the village of Vrondero, between the 13th and 15th pyramid, 1350–1450 m. Forest of Quercus, Buxus and Ostrya. 1975-05-09, Stamatiadou 18462 (ATH). – Mt Devas, summit area c. 2 km N of Pili, 1200–1350 m. Rocky limestone slopes and flats in opening of mixed woodland. 2010-06-04, Strid (obs). – Along walking trail from Mikrolimni to ruins of Kranies settlement, 860–950 m. Rocky limestone slopes, mostly with deciduous woodland. 2010-06-06, Strid (obs). – In openings of mixed woodlands to the area of Roti (W of Psarades) and Agios Georgios. 2015-04-20, Fotiadis & Vrahnakis 9612 (Fo). All records are likely to represent subsp. serpentinica (Rech. f.) Vural & Kit Tan.

**Heliotropium halacsyi** Riedl
Lake Prespa area, alluvial plain between Lemos and Koula, 860 m. 1971-07-29, Stamatiadou 13617 (ATH). This species is locally common in western Greece and currently listed as a Greek endemic. It is likely to extend into southern Albania, but may have been overlooked due to its late-flowering habit (mainly September-October).

**Lithospermum officinale** L.

**Myosotis alpestris** subsp. **suaveolens** (Willd.) Strid
Mt Bella Voda, S of the summit of Toumba, 1900–1950 m. Stony ground with meadows between prominent rocks. 1972-06-25, Stamatiadou 16109 (ATH, C). – Area called Moutsara c. 4 km SE of Agios Germanos, 1900–2000 m. Alpine meadow over granite. 2010-06-07, Strid 57168 (G, St).

**Myosotis discolor** Pers.
By NE shore of Lake Mikri Prespa, 860 m. Sandy, somewhat elevated spot in wet meadow. 2009-05-18, Strid 56806 (G, St).

**Myosotis incrassata** Guss.

**Myosotis scorpioides** L.
Reports of this species by Pavlides (1985: 164) as well as elsewhere in Greece refer to *M. nemorosa* Besser. The latter is not uncommon along streams and in seepage areas on Mt Varnous at 1300–2000 m.

**Myosotis sicula** Guss.
Lake Prespa, plain of Koula, NE of the frontier post, 855 m. Marshy places. 1972-06-21, Stamatiadou 15746 (ATH). – Sandy spit between Megali and Mikri Prespa, western end, on Megali Prespa side, 855 m, swampy area. 1998-08-07, Strid & Kit Tan 47600 (G, St). – Marshy places in Mikri Prespa near Karies, 855 m. 2010-07-20, Kazoglou (obs).

**Neatostema apulum** (L.) I. M. Johnst.
Grassland near the village of Lefkonas, 1000 m. Fotiadis & Vrahnakis (obs).

**Onosma echiioides** L.
Records of this species from the vicinity of Agios Germanos and Psarades (Pavlides 1985: 164) as well as elsewhere in Greece probably all refer to *O. heterophyllum* Griseb.

**Onosma visianii** Clementi
Scattered in grassland of Mt Triklario 1310–1760 m. 2010-06-12, Fotiadis & Vrahnakis 7155 (Fo). – Place called Agioneri 4 km SSW of the village of Oxia, 1400 m. Patches of meadow over limestone in opening of Fagus forest. 2016-06-07, Strid 58442 (St).

**Symphytum ottomanum** Friv.
Along walking trail from Mikrolimni to ruins of Kranies settlement, 860–950 m. Rocky limestone slopes,
mostly with deciduous woodland. 2010-06-06, Strid (obs). – Inside Quercus forest 1 km SSW of Oxia, 990 m. 2010-06-10, Fotiadis & Vrahnakis (obs).

**BRASSICACEAE**

**Alyssum chalcidicum** Janka
Rocky limestone slopes in Agathoto area, 870 m. 2010-08-05, Fotiadis & Vrahnakis 7412 (Fo).

**Alyssum doerfleri** Degen
Between the lake of Mikri Prespa and the Albanian frontier, valley SE of the village of Vrondero, near place named Cave Zahariadi, 900–950 m. Rocky calcareous ground. 1975-05-09, Stamatiadou 18496 (ATH, St). – Between the village of Vronderou and western shore of Lake Mikri Prespa, near the “hospital cave”, 950 m. Rocky limestone slopes with mixed deciduous woodland. 2009-05-20, Strid 56830 (St).

**Arabis allioni** DC.
This species was reported by Pavlides (1985: 195) from an altitude of 1700–1900 m om Mt Varnous. The record probably refers to *A. sudetica*.

**Arabis auriculata** Lam.

**Arabis collina** Ten.
1.5 km SW of the village of Oxia, 1150 m. Damp deciduous woodland on rocky limestone slopes. 2016-04-27, Strid 58289 (St).

**Arabis sudetica** Tausch
Mt Varnous, area called Moutsara c. 4 km SE of Agios Germanos, 1900–2000 m. Alpine meadow over granite. 2010-06-07, Strid 57166 (St).

**Aurinia sinuata** (L.) Griseb.
This species was reported by Pavlides (1985: 194), sub nom. *Alyssoides sinuata* (L.) Medik., from Perivolaki and Sfika as well as Kristallopigi (the latter cited from Zaganari 1940). Specimens in the Pavlides herbarium appear to represent *Aurinia saxatilis* subsp. *orientalis* (Ard.) T. R. Dudley which is common in the area, e.g., occurring in large quantity around Psarades.

**Barbarea bracteosa** Guss.
Flora Hellenica Database records are from Pissodomi just outside PNP.

**Barbarea sicula** C. Presl
Flora Hellenica Database records are from Pissodomi just outside PNP.

**Berteroa mutabilis** (Vent.) DC.
In isthmo lacus Prespa. 1972-06-21, Rechinger 44942 (G).

**Brassica nigra** (L.) W. D. J. Koch
Prespa, E of the village Lemos area. 1972-07-08, Haristos 4005 (ATH).

**Brassica rapa** L.

**Calepina irregularis** (Asso) Thell.

**Camelina microcarpa** Andrz. ex DC.

**Capsella grandiflora** (Fauché & Chaub.) Boiss.
A database record is from ruins of Sfika village just outside PNP. The species is likely to occur also inside the borders.

**Cardamine amara** subsp. *barbaraeoides* (Halácsy) Maire & Petitm.
Cardamine graeca L.
Quercus forests at Vrondero, 990 m. Fotiadis (obs).

Cardamine hirsuta L.

Cardamine pratensis L.
Reported by Pavlides (1985: 197). However, a specimen in the Pavlides herbarium represents C. hirsuta.

Conringia austriaca (Jacq.) Sweet

Descurainia sophia (L.) Prantl

Diplotaxis muralis (L.) DC.

Erucastrum gallicum (Willd.) O. E. Schulz
Village of Vrondero, near the military post, 1100 m. Semi-cultivated fields and openings in woodland. 1985-07-20, Stamatiadou 22894 (ATH, C). – First record in Greece. Subsequently collected by Willing at a few localities in nomos Kastorias.

Erysimum crassistylum C. Presl
Several records including: In isthmo lacus Prespa, 860 m. 1972-06-21, Rechinger 44931 (G, W). – Lake Prespa, plain of Koula, NE of the frontier post, 860 m. Alluvial plain and marshy ground. 1972-06-21, Stamatiadou 15752 (ATH, G). – Berg Devas südlich von Psarades, 1200 m. Juniperus-Quercus-Buschwälder mit felsigen Lichtungen über Kalkgestein. 1986-08-23, Raus 11405 (B). – 3 km SSW of Andartiko, 950 m. Dry grassy meadows and open deciduous scrub over gran-
The records confirm reports by Pavlides (1985: 199) which had subsequently been doubted and disregarded by Jonsell in Flora Hellenica (2: 175, 2003).

**Rorippa pyrenaica** (All.) Rchb.
Just above the village of Oxia, 900 m. Pastures and edge of deciduous oak woodland. 2016-04-27, Strid 58284 (St).

**Sisymbrium irio** L.
Pavlides (1985: 199) reported this species from Lemos-Ag. Germanos, but the specimen in the Pavlides herbarium represents *Sisymbrium orientale* L.

**Sisymbrium loeselii** L.

**Teeesdalia nudicaulis** (L.) R. Br.
A specimen in the Pavlides herbarium labeled *Teeesdalia nudicaulis* is *Lepidium* sp. There are no confirmed records of the former from Greece.

**Thlaspi goesingense** Halácsy
See under *Noccaea ochroleuca*.

**Thlaspi praecox** Wulfen
Pavlides reported this species in an unpublished addition to his catalogue of 1985. The record is likely to refer to *Noccaea ochroleuca* (Boiss. & Heldr.) F. K. Mey., which is common on Mt Varnous.

**CALLITRICHACEAE**

**Callitriche palustris** L.
Mt. Varnous, ESE of Ag. Germanos, place called Moutsara, spring, 1960 m. 2016-08-31, Bergmeier 16/191 (Be, BM), conf. R. Lansdown.

*C. palustris* s. str. is a widespread species but apparently rare or overlooked in Greece where it was previously recorded only from the Timfi area in northern Pindos (Lansdown, in litt.).

**CAMPANULACEAE**

**Asyneuma pichleri** (Vis.) D. Lakušić & F. Conti

This species was previously known as *Campanula trichocalycina* auct., non Ten. (see Lakušić & Conti 2004).

**Campanula bononiensis** L.
Village of Vrondero, near the military post, 1100 m. Semi-cultivated fields and openings in woodland. 1985-07-20, Stamatiadou 22900 (ATH).

**Campanula trachelium** subsp. *athoa* (Boiss. & Heldr.) Hayek
W Andartiko, 1000 m. Ruderalfluren, Kautfluren, Kiefernwald. 1998-07-29, Willing 71349 (B). – *Fagus* and *Quercus* forests above Lefkonas, 1250–1500 m, and in Mt Triklario, 940–1210 m. Fotiadis & Vrahnakis (obs).

**Campanula wanneri** Rochel
In an unpublished addition to his catalogue of 1985, Pavlides reported this species from "Garlini-Triklariou". However, a specimen in the Pavlides herbarium has been identified as *Campanula persicifolia*. In Greece *C. wanneri* is known only from Mt Koula in nomos Xanthi near the Bulgarian border.

**Legousia hybrida** (L.) Delarbre
SO Karie, Eichenwald, Kraut fluren, 1030 m. 2004-05-11, Willing 126847 (B).

**Legousia pentagonia** (L.) Druce
Recorded by Pavlides (1985: 166) from Isthmos and Agioneri-Dikorfo. However, a specimen in the Pavlides herbarium represents *L. speculum-veneris* (L.) Chaix.

**CAPRIFOLIACEAE**

**Lonicera caprifolium** L.
Few individuals in *Quercus* forest edge at Agineri, 1300 m. 1985-06-30, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his 1985 publication).

**Lonicera implexa** Aiton
Records by Pavlides (1985: 167) are out of range and probably incorrect.

**Viburnum lantana** L.
Place called Ag. Pavlos near the Greek-Albanian border, 900 m. 1985-06-24, Pavlides (specimen seen in
the Pavlides herbarium, apparently collected too late to be included in his 1985 publication). – 2 km SW of Psarades along forest road to Pyli, 980–1040 m. Rocky limestone slopes with mixed woodland dominated by deciduous oaks. 2016-06-04, Strid 58347 (G, St).

**Viburnum opulus** L.

A widespread C European species which in Greece is known only from a few localities near the northern borders.

**CARYOPHYLLACEAE**

*Arenaria filicaulis* subsp. *graeca* (Boiss.) McNeill
This species was reported by Pavlides (1985: 167) from Dafnomilis, but a specimen in the Pavlides herbarium represents a different species (a small annual).

*Cerastium arvense* L.
This species was reported by Pavlides (1985: 167) from Lemos and Ag. Germanos, but a specimen in the Pavlides herbarium belongs to *C. holosteoides*.

*Cerastium cerastoides* (L.) Britton
This species was reported by Pavlides in an unpublished addition to his catalogue of 1985. No details are available, but the locality is likely to be on Mt Varnous.

*Cerastium holosteoides* Fr.

Often treated as *C. fontanum* subsp. *vulgare* (Hartm.) Greuter & Burdet.

*Cerastium illyricum* subsp. *comatum* (Desv.)
P. D. Sell & Whitehead was reported by Pavlides (1985: 168) from three localities in the PNP, but specimens in his herbarium appear to represent *C. brachypetalum* subsp. *roeseri* (Boiss. & Heldr.) Nyman.

*Corrigiola litoralis* L.

*Cucubalus baccifer* L.

Sometimes included in *Silene*, but very different in flowers, fruits and seeds.

*Dianthus carthusianorum* L.
Pavlides (1985: 168) reported this species from Karies, Vromolimni and Perivolaki, but specimens in the Pavlides herbarium under this name represent *D. pinifolius* Sm.

*Dianthus corymbosus* Sm.
Specimens in the Pavlides herbarium under this name represent *D. viscidus* Bory & Chaub.

*Dianthus cruentus* subsp. *turcicus* (Velen.) Stoj. & Acht.
Pavlides reported this taxon from Karies, Gofilos and Mazi, but specimens in the Pavlides herbarium under this name represent *Dianthus giganteus* d’Urv.

*Dianthus degenii* Bald.
Pavlides (1985: 169) reported this species from the vicinity of the village of Oxia (900 m) which is an unlikely locality. *D. degenii* is
now regarded as a subspecies of *D. deltoides* occurring from the vicinity of the Katara Pass northwards to the Albanian border. There are several collections of *D. deltoides* from 1400–2100 m on Mt Varnous, all representing subsp. *deltoides* (see below).

**Dianthus deltoides** L. subsp. *deltoides*

This taxon was collected already by Pavlides in 1984 (close to the last-mentioned locality), apparently too late to be included in his 1985 publication.

**Dianthus gracilis** Sm.
Ad radices or. montis Kalo Nero supra pagum Plati, 1000 m. 1973-08-03, Greuter 11451 (ATH, C, Gr). – In Juniperus woodland in Agathoto area, 850 m. Fotiadis & Vrahnakis (obs).

**Dianthus monadelphus** subsp. *pallens* (Sm.) Greuter & Burdet

**Dianthus pelviformis** ["perviformis"] Heuffel
This is a Balkan endemic described from Serbia. It was reported from PNP by Pavlides (1985: 169), but a specimen in his herbarium from Mt Triklario matches *D. stenopetalus* Griseb. Reports of *D. pelviformis* from elsewhere in Greece are likely to refer to *D. cruens* Griseb.

**Dianthus stenopetalus** Griseb.

**Gypsophila muralis** L.
Sandy spit between Megali and Mikri Prespa, eastern end, on Megali Prespa side, partly swampy, 860 m. 1998-08-07, Strid & Kit Tan 47613 (G). – By the deserted village of Sfika, 1200 m. Semi-cultivated fields and wet spots. 2016-08-11, Strid 58623 (G, St).

**Minuartia attica** (Boiss. & Spruner) Vierh.
Plants referable to the *M. attica/verna* complex are common in the area. Many are ± intermediate between *M. attica* subsp. *attica* and *M. verna* subsp. *collina* (Neilr.) Domin, and the taxonomy is unsettled.
Minuartia glomerata subsp. velutina (Boiss. & Orph.) Mattf.
A collection in the Pavlides herbarium from the lower slopes of Mt Devas near Ag. Georgios labeled *M. glomerata* subsp. *velutina* matches subsp. *macedonica* (Degen & Dörfl.) McNeill. There are several subsequent collections of the latter from the area of PNP.

Minuartia hamata (Hausskn. & Bornm.) Mattf.

Minuartia hybrida (Vill.) Schischk.

Minuartia mediterranea (Link) K. Malý
SW Lemos, 860 m. Sandige Krautfluren. 2004-05-11, Willing 127062 (B).

Minuartia recurva (All.) Schinz & Thell.

Moenchia graeca Boiss. & Heldr.
1 km S of the village of Oxia, 950–1000 m. Edge of mixed deciduous woodland. 2016-04-27, Strid 58288 (St).

Petrorhagia graminea (Sm.) P. W. Ball & Heywood
By the chapel of Agios Georgios at pass on road from Koula to Psarades, 1000 m. Woodland of *Juniperus excelsa* and *Quercus trojana* over limestone. 2010-08-07, Strid & Kit Tan 47583 (ATH, G, Kit, LD, St). – Several records in Slogi island, 856 m. 2010-06-10, Fotiadis & Kazoglou 7096 (Fo). – Grosser Prespa-See, SO-Ufer W Lemos, 860 m. Stillwasserbereich im *Phragmites australis*-Röhricht. 2011-06-25, Raus & al. 32533 (B). – Spit between Lakes Megali and Mikri Prespa, W of Lemos, open grassland on sand. 2016-08-30, Bergmeier 16/140 (Be).

Silene dichotoma Ehrh.
Lake Prespa, plain of Koula, NE of the frontier post, 860 m. Alluvial plain and marshy ground. 1972-06-21, Stamatiadou 15794 (ATH).

Silene frivaldszkyana Hampe

Silene gallinyi Heuff. ex Rchb.

Silene graeca Boiss. & Spruner
Silene melzheimeri Greuter
A record from Mt Devas cited by Strid al. (2012) is probably incorrect. S. melzheimeri is endemic to the serpentine mountains of N Pindos.

Silene noctiflora L.
Reported by Pavlides (1985: 173) from mixed Fagus-Abies forest above Ag. Germanos. However, a specimen in the Pavlides herbarium is S. latifolia Poir.

Silene parnassica subsp. serbica (Adamović & Vierh.) Greuter
Along walking trail between Psarades and Roti, 900 m. Rocky limestone slopes with mixed deciduous/evergreen scrub. 2016-06-06, Strid 58422 (St).

Silene radicosa Boiss. & Heldr.

Silene subconica Friv.
Just above the village of Agios Germanos, 1100 m. Granitic slope by a road. 2012-05-19, Strid (obs and photo).

Silene subintegra (Hayek) Greuter

Silene tenuiflora Guss.

Silene viridiflora L.
Fagus forests in the area of Pervali, 1350 m. Fotiadis (obs). – Quercus forest at Daseri. 2010-06-10, Fotiadis 7118 (Fo). – Quercus forest between Lefkonas and Karies, 930 m. 2010-08-07, Fotiadis & Vrahnikis 7214 (Fo).

Silene waldsteinii Griseb.
Several collections from Mt Varnous, including: Mt Bella Voda, summit of Toumba, 2050–2170 m. 1972-06-26, Stamatiadou 16155 (ATH, St). – Stony ground with meadows and prominent rocks. S. side of summit 2177, c. 3 km SSE of Kortsa Toumba (peak 2334), 1900–2150 m. Alpine grassland dominated by Festuca and patches of Vaccinium myrtillus. Granite. 1981-06-27, Strid & al. 18218 (B, C). – SE-facing slopes S of the summit Peneriga, 1900–2050 m; meadows and rocky, granite ground with Juniperus sp. and Vaccinium myrtillus. 1992-07-26, Anagnostopoulos & Athanasiou 3284 (UPA).
**CELASTRACEAE**

*Euonymus verrucosus* Scop.
Near the village of Pili, in mixed deciduous forest, 880 m. 2010-08-05, Fotiadis & Vrahnakis 7234 (Fo). – 2 km SW of the village of Psarades, 880 m. By a walking trail near lake Megali Prespa, mixed deciduous/evergreen woodland over limestone. 2011-06-26, Strid (obs and photo). – SE of Vrondero, between Vrondero and the abandoned village of Agathoto, 1030 m, deciduous *Carpinus orientalis*-Ostrya carpinifolia-woodland. 2016-07-20, Bergmeier 16/131 (Be).

**CHENOPODIACEAE**

*Atriplex hortensis* L.
Mikrolimni. 2016-09-05, Bergmeier 16/259 (Be).
Locally naturalized, formerly cultivated.

*Blitum virgatum* L.

*Chenopodium strictum* Roth
Karyes. Krautfluren am Ort, 935 m. 2014-10-09, Willing 250217 (B).
Specimens with red-striate stem, narrow subentire leaves and only slightly mealy inflorescence, thus matching *C. strictum* which was reported from Samothraki as new for the country by Biel & Kit Tan (2011: 249) and has subsequently been confirmed from a few other localities in N Greece. Most of the unpublished records by Willing identified as *C. strictum* refer to forms of *C. album*, however.

*Chenopodium opulifolium* Schrad.

*Dysphania ambrosioides* (L.) Mosyakin & Clemants
Sandy spit between Megali and Mikri Prespa, western end, on Megali Prespa side, 860 m. 1998-08-07, Strid & Kit Tan 47583a (G, Kit). – Vromolimni, N edge of Lake Mikri Prespa, livestock fold. 2016-09-03, Bergmeier 16/207 (Be).

*Dysphania pumilio* (R. Br.) Mosyakin & Clemants
By Zachariadis cave just W of Pili, 950 m. In roadside gravel. 2010-10-16, Strid 57244 (G, St). – Psarades. 2016-09-06, Bergmeier 16/280 (Be).

A xenophyte of Australian origin, first reported in Greece by Bergmeier (1988: 40). It appears to be spreading rapidly and has now been reported from several localities in the north as well as isolated sites in Attiki, N Peloponnisos and on the island of Samos.

*Lipandra polysperma* (L.) S. Fuentes, Uotila & Borsch
By the ruins of Sfika village, 1200 m. Semi-cultivated fields and wet spots. 2016-08-11, Strid 58617 (St). – Mikrolimni, village edge, on the shore of Lake Mikri Prespa. 2016-09-05, Bergmeier 16/264 (Be).

*Oxybasis rubra* (L.) S. Fuentes, Uotila & Borsch
Mikrolimni, village edge, on the shore of Lake Mikri Prespa. 2016-09-05, Bergmeier 16/263 (Be).

Apparently the first confirmed record for Greece. Koumpli-Sovantzi (1983: 103) reported this species (as *Chenopodium rubrum* L.) from the shore of Lake Amvrakia (Etolias-Akarnanias), but according to Uotila (in litt.) this is likely to refer to *Oxybasis chenopodioides*. An old record of *Chenopodium rubrum* from the island of Poros (Friedrichsthal 1838: 274) is probably incorrect.

*Oxybasis urbica* (L.) S. Fuentes, Uotila & Borsch
Vromolimni, N edge of Lake Mikri Prespa, livestock fold. 2016-09-03, Bergmeier 16/207 (Be).

**CISTACEAE**

*Cistus creticus* L.
E of Mikra Prespa, 2 km NNW of Karyes, open oak forest, 950 m. 1998-07-01, Snogerup 15873 (UPS). – Confirmed in this locality by Vrahnakis et al. (2011) and by Strid, 2016-06-08. Apparently rare and local in the Prespa area.

*Helianthemum apenninum* (L.) Mill.
Recorded by Pavlides (1985: 177) from Agathoto-Vrodero. However, specimens in the Pavlides herbarium represent *H. nummularium* (L.) Mill. In Greece *H. apenninum* is now believed to be restricted to the south.

*Helianthemum ledifolium* (L.) Mill.
Between the 12th and 13th pyramid of the Greek-Albanian frontier, W of the village of Vrodero, place
named Vroatseria, 1300–1400 m. Stony calcareous ground. 1972-06-23, Stamatiadou 15913 (ATH). – 3 km SSW of Andartiko, 950 m. Dry grassy meadows and open deciduous scrub over granite. 1998-06-15, Strid & al. 46630 (ATH, G, Kit, LD, St).

*Helianthemum nummularium* (L.) Mill.
This species was not reported by Pavlides, but there are several subsequent records from the area of the Prespa National Park.

*Tuberaria guttata* (L.) Fourr.
Thermophilous grassland above Ag. Germanos. 2010-06-13, Fotiadis & Kazoglou 7116 (Fo).

**COLCHICACEAE**

*Colchicum cupanii* Guss.
Records of the species (Pavlides 1985: 281) are out of range and probably incorrect.

*Colchicum doerfleri* Halácsy
Mt Devas: Near the summit, 1350 m. Rocky limestone flats in opening of mixed deciduous/evergreen woodland. 2016-04-25, Strid 58259 (St, fruiting).

*Colchicum haynaldii* Heuff.
Near the village of Pili, grassland by Lake Mikri Prespa, 870 m. 2012-09-12, Strid 57612 (G, GB, St); also cultivated in Oerbaek, Denmark.

**COMMELINACEAE**

*Commelina communis* L.
Mikrolimni, disturbed site on the shore of Lake Mikri Prespa. 2016-09-05, Bergmeier 16/248 (Be).

Not native in S Europe and considered casual in Greece by Dimopoulos & al. (2013), but spreading and perhaps naturalized in N Greece.

**CONVOLVULACEAE**

*Cuscuta brevistyla* A. Rich.
2 km SW of Psarades, 860–900 m. Rocky limestone hills just above shore of Lake Megali Prespa. 2011-06-26, Strid 57316 (St).

*Cuscuta campestris* Yunck.

*Cuscuta epithymum* (L.) L.
Grosser Prespa-See, 2 km W Psarades, 860 m. Auf *Centaurea salonitana*. 2011-06-26, Raus 32556 (B).

*Cuscuta europaea* L.
In the village of Lemos, 950 m. Ruderal habitats. Parasitic on various herbs. 2010-10-12, Strid 57242 (St). – Villages of Ag. Germanos, 2016-09-02, Vrondero, 2016-09-04, and Lemos, 2016-09-06 (all Bergmeier, obs). – Ag. Germanos Potamos, 0.5 km from mouth, streamside with tall herb vegetation. 2016-08-30, Bergmeier (obs).

*Cuscuta planiflora* Ten.
Prespa, area of village Lemos, 940 m. 1972-07-07, Haristos 3906 (ATH).

**CORNACEAE**

*Cornus sanguinea* L. subsp. *sanguinea*
Between Karyes and Oxia, *Alnus* riparian forest. 2016-09-05, Bergmeier 16/248 (Be).

In Dimopoulos & al. (2013) only *C. sanguinea* subsp. *australis* (C. A. Mey.) Jáv. was reported from Greece. In fact, there are some previous reports also of subsp. *sanguinea* (including some by Pavlides from PNP). Gutermann observed plants from Kerkira to be more or less intermediate between the two subspecies – see Flora Ionica Working Group (2016 onwards).

**CRASSULACEAE**

*Hylotelephium telephium* (L.) Ohba
Sandy grassland in Slogi island (Mikri Prespa), 856 m. 2010-06-10, Fotiadis 7253 (Fo).

*Sedum aetnense* Tineo ex Guss.
Sandy grassland in Slogi island (Mikri Prespa), 856 m. 2010-06-10, Fotiadis 7253 (Fo).

**Sedum alpestre** subsp. *erythraeum* (Griseb.) ’t Hart
A specimen from Mt Varnous was seen by ’t Hart for Mountain Flora of Greece (see Strid 1986: 348, no details available).
Sedum caespitosum (Cav.) DC.

Sedum magellense subsp. olympicum (Boiss.) Greuter & Burdet
Reported from Mt Varnous in Strid (1986: 353), no details available.

Sedum rubens L.
Reported by Stephenson & Stephenson (2000: 16) from several localities in PNP (Karies, Mikrolimni, Koula and NW of Prasino).

Sedum tuberiferum Stoj. & Stef.

Sedum urvillei DC.
Above Oxia, 1480 m. Dry grassland over limestone. 1999-07-05, Schuler 99/850 (B, Schu). – Place called Koula at western end of sandy spit between the two lakes, 860 m. Sandy flats and limestone cliffs. 2016-06-03, Strid 58314 (St). – Also reported by Stephenson & Stephenson (2000: 16) from Koula, Mikrolimni and Oxia.

Sempervivum ciliosum Craib
Mt Triklario: Area called Agioneri at northern part of summit area, 1550–1740 m. Rocky limestone slopes with grassland and scattered deciduous woodland. 2016-06-07, Strid 58451 (St).

Sempervivum heuffelii Schott

CUCURBITACEAE

Bryonia alba L.

CYPERACEAE

Blysmus compressus (L.) Panzer ex Link
Mt Varnous: Near source of Kaloneri stream, 1800 m. Seepage meadow. 2016-08-10, Strid 58578 (G, St).

Bolboschoenus maritimus (L.) Palla (aggr.)
Vromolimni, 1984-04-15, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his 1985 publication). – In reedbeds 1.5 km WSW of Lefkonas. 2010-07-20, Kazoglou (obs).

Pavlides referred to this species the wide sense adopted at his time. However, B. maritimus s. str. is rather unlikely to occur in this inland locality. B. glaucus (Lam.) S. G. Sm. is most likely, but another species of Bolboschoenus cannot be ruled out. Careful examination of fruiting material is needed (cf. Hroudová & al. 2007).

Carex acuta L.
Peristeri de Macédoine, suintements et mégaphorbiaie sous la piste qui longe la crête dominant à l’W de lac de Mikri Prespa. Reported by Parent (2005: 230). Alston & Sandwith 809 (K) from the same area was reported as C. kurdica Kük. ex Hand.-Mazz. by Jiménez-Mejías & al. (2014: 71). The latter is otherwise an Irano-Turanian species and its presence in the W Balkans needs confirmation.

Carex acutiformis Ehrh.
E of Mikri Prespa, NE of Oxia, 860 m, wet fields. 1998-06-27, Snogerup 15647 (LD). See also Snogerup & Sno-
Carex atrata L.
A record from “Oros Kalo Nero” (Varous) by Pavlides (1985: 265), based on Zaganari (1940) is feasible but needs confirmation. The only confirmed Greek locality for this arctic-alpine species is in the summit area of Mt Vardousia.

Carex depauperata Curtis ex With.
By Pixos sheepfolds, c. 3 km WNW of Pili, 1000 m. Open mixed woodland dominated by deciduous oaks. 2013-05-11, Strid 57690 (G, St). – E of the summit of Mt Devas, in open mixed woodlands, 1200 m. 2010-05-20, Fotiadis & Vrahnakis 7016 (Fo).

Carex echinata Murray

Carex ericetorum Pollich
Reported by Pavlides (1985: 266) from a swampy area by lake Megali Prespa near Koula. There is no subsequent confirmation from this locality nor elsewhere in Greece, and the species was not included in Dimopoulos & al. (2013). A specimen in the Pavlides herbarium is too young to be identified with certainty, but is not likely to be C. ericetorum.

Carex flacca Schreb.
Quercus forests in the area of Mt Devas, 1100–1200 m. 2010-05-20, Fotiadis & Vrahnakis 7115 (Fo). Probably representing subsp. serrulata (Spreng.) Greuter.

Carex nigra (L.) Reichard
5 km S-SSE of the peak of Kortsa Toumba (peak 2334), 1700–1800 m. Wet meadows near a spring known as Vrisi Kalo Nero. Granite. 1981-06-26, Strid & al. 18142 (ATH, B, C, G). – Several records near springs, 5–6 km E of Agios Germanos (area called Giovanitsa), 1500–1800 m. 2010-07-02, Fotiadis & Kazoglou 7120 (Fo).

Carex otrubae Podp.

Carex pallescens L.

Carex remota L.
Between Karies and Oxia, 870 m, Alnus riparian forest. 2016-09-05, Bergmeier & Fotiadis (obs).

Carex tomentosa L.
3 km ENE of Mikrolimni, 900 m. wet meadow. 1998-07-01, Snogerup 15869 (LD).

Carex vulpina L.
Reported by Pavlides (1985: 266); however, specimens in the Pavlides herbarium represent C. otrubae. All other Greek records of C. vulpina are also likely to be incorrect.

Cladium mariscus (L.) Pohl
This species was reported by Pavlides (1985: 266), but a specimen in the Pavlides herbarium is Scirpus sylvaticus. The presence of true Cladium mariscus by Lake Prespa is feasible but unlikely as it has not been found in intensive surveys over the last 20 years (Kazoglou).

Cyperus longus L.

Eleocharis acicularis (L.) Roem. & Schult.

Eriophorum angustifolium Honck.
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**Pycreus flavescens** (L.) Rchb.
Sandy spit between Megali and Mikri Prespa, eastern end, on Megali Prespa side, 860 m. Partly swampy. 1998-08-07, Strid & Kit Tan 47616 (G). – By mouth of Agios Germanos stream, 860 m. Wet sand. 2010-10-10, Strid 57237 (St).

**Schoenoplectus supinus** (L.) Palla

**Scirpus sylvaticus** L.

**DIOSCOREACEAE**

**Tamus communis** L.
Near Oxia, 870 m, *Alnus* riparian forest. 2016-09-05, Bergmeier & Fotiadis (obs). Treated by Dimopoulos & al. (2013) as *Dioscorea communis* (L.) Caddick & Wilkin.

**DIPSACACEAE**

**Cephalaria flava** (Sm.) Szabo
SO Karye. Laubgebüsch, nasser Straßengraben. 1998-07-30, Willing 71411 (B). – Approximately same locality. 2006-10-13, Strid 56169 (seed collection) and Strid 58630 (St).

**Knautia albanica** Briq.
Reported by Pavlides in an unpublished addition to his catalogue of 1985 (no details available). The species is not otherwise known in Greece, and the record needs confirmation.

**Knautia orientalis** L.
Near place called Pinox sheepfolds, c. 3 km WNW of Pili, 950 m. Semi-cultivated cereal fields with many weeds. 2014-07-12, Strid 58101 (G, St).

**Lomelosia brachiata** (Sm.) Greuter & Burdet

**Lomelosia rotata** (M. Bieb.) Greuter & Burdet
Mt Devas, summit area, 1350 m. Rocky limestone flats and slopes in opening of mixed deciduous/evergreen woodland. 2011-06-25, Strid 57307 (ATH, B, G, St).

**Scabiosa columbaria** L. subsp. *columbaria*

**Scabiosa triniifolia** Friv.

**DROSERACEAE**

**Aldrovanda vesiculosa** L.
Fragma area at southern end of Lake Mikri Prespa, by the Albanian border, 853 m. In shallow water. 1984-07-14, Pavlides s.n. There is a specimen in the Pavlides herbarium, but the record was too late to include in his publication of 1985. This rare species was rediscovered in the same locality 2011-06-26; scarce, floating in 1–2 m deep water at outer edge of reed beds, with *Utricularia vulgaris* & minor, *Myriophyllum spicatum*, etc. (Raus & al. 32544, B). It was subsequently confirmed in Lake Mikri Prespa: SW of Lefkonas, reedbed, shallow water. 2016-07-19, Bergmeier 16/85 (Be), and Vromolimni, shallow water at landward edge of reedbed. 2016-09-03, Bergmeier 16/211 (Be). Mikri Prespa is the only extant locality in Greece (see photo in Dimopoulos & al. 2013: 337).

**ERICACEAE**

**Monotropa hypopitys** L.
*Fagus* forests in Mt Triklario, 1230 m. – Above Lefkonas village, 1350 m. – Above Ag. Germanos village, 1500–1900 m. – Pervali area, 1230 m.

All field observations by Fotiadis, Kazoglou &
Vrahnakis. Treated by Dimopoulos & al. (2013) as Hypopitys monotropa Crantz.

Orthilia secunda (L.) House
Kalo Nero, 1600–1630 m. Opening in mixed Fagus/Abies forest. 1999-08-24, Schuler 99/1426 (B). – Fagus forests above the village of Lefkonas, 1500 m. 2010-08-06, Fotiadis & Kazoglou 7268 (Fo).

Pyrola minor L.
Fagus forests above the village of Ag. Germanos, 1500–1800 m. 2010-08-06, Fotiadis & Kazoglou 7271 (Fo).

Euphorbiaceae

Euphorbia phymatosperma Boiss. & Gaill.
Reported from Mt Devas by Pavlides (1985: 203), sub nom. E. segetalis (specimen seen in the Pavlides herbarium).

Euphorbia prostrata Aiton
Psarades, village, trampled site. 2016-09-06, Bergmeier 16/282 (Be). – Lemos, roadside. 2016-09-06, Bergmeier 16/291 (Be).

Euphorbia rigid M. Bieb.
Reports by Pavlides (1985: 203) from Vromolimni and Devas are incorrect. Specimens in the Pavlides herbarium match E. verrucosa.

Euphorbia segetalis L.
See under E. phymatosperma.

Euphorbia stricta L.

Euphorbia taurinensis All.

Euphorbia verrucosa L.

Fabaceae

Astragalus angustifolius Lam.
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of Juniperus excelsa and Quercus trojana. 1999-05-31, Strid & al. 49137 (G, Kit, St). – Mt Devas, summit area, 1300 m. Rocky limestone slopes with open woodland of Juniperus excelsa, J. oxycedrus, Quercus trojana, Acer monspessulanum, etc. 2006-10-14, Strid (obs). – See also under A. parnassii. In the Pavlides herbarium is one collection from Dikorfo-Moutsara, gathered 1985-06-30, apparently too late to be included in his 1985 publication.

Astragalus hamosus L.

Astragalus mayeri Micevski

Reported from the Albanian side of the Prespa National Park by Shuka & Tan (2013: 15).

Astragalus parnassii Boiss.
Pavlides (1985: 216) reported this species from the vicinity of Psarades, Pili and Koula, but specimens in the Pavlides herbarium represent A. angustifolius.
Astragalus physocalyx Fisch.
In the Pavlides herbarium is one collection from Mt Triklario, 1400–1700 m (border of PNP), gathered 1984-06-06, apparently too late to be included in his 1985 publication. This rare species is known only from a few localities in N Greece, FYROM and SW Bulgaria.

Astragalus sericophyllus Griseb.
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of Juniperus excelsa and Quercus trojana. 1999-05-31, Strid & al. 49104 (ATH, G, Kit, LD, UPA). Pavlides (1985: 216) reported this species from the road between Agios Georgios and Devas at 1000–1300 m, but a specimen in the Pavlides herbarium represents the subsequently described A. mayeri.

Both species appear to occur in the area which is consistent with their overlapping general distribution. The difference is not always clear. One collection (Strid 58331 from the chapel of Agios Georgios half-way between Koula and Psarades, 2016-06-03; G, St) has leaves like A. mayeri, but not the characteristic zebra-striped legumes. Other collections from this area (Schuler 99/829, Raus & al. 32511 and Fotiadis & Vrahnikas 7232) have been identified as A. mayeri – see above.

Astragalus sirinicus Ten.
Lake Prespa, S of the military post of Koula and above road to village of Pili, 950 m. Barren, stony calcareous ground. 1975-05-10, Stamatiadou 18531 (ATH, G).

Chamaecytisus austriacus (L.) Link
Plain of Koula, NE of the frontier post, 855 m. Alluvial plain and marshy ground. 1972-06-21, Stamatiadou 15803 (ATH). – By the Greek-Albanian frontier, SW of the village of Vrontero to the 13th pyramid, 1200–1300 m. Forest with Quercus and Buxus on stony and rocky calcareous ground. 1975-05-09, Stamatiadou 18447 (ATH, G). – 2 km WNW of Trigono, c. 6 km E of Mikrolimni, sandy slope, 1100 m. 1998-07-01, Snogerup 15862 (LD). – SE of Megali Prespa, SW of Lemos, 860 m, dry hillside. 1998-07-01, Snogerup 15897 (LD, UPS). – SO Karye, 1030 m. Laubgebüsch, nasser Strassengraben. 1998-07-30, Willing 71406 (B). Stamatiadou 18447 has been identified as subsp. heuffelii (Griseb. & Schenk) K. I. Chr.

Cytisus procumbens (Willd.) Spreng.

Dorycnium germanicum (Greml) Rikli
OSO Karye, 1050 m. Sandige Hänge, Eichenbuschwald. 1998-07-30, Willing 71368 (B).

Genista carinalis Griseb.
Just above the village of Oxi, 950 m. Calcareous road embankment in deciduous woodland. 2016-06-07, Strid 58432 (G, St).

Genista depressa M. Bieb.

Genista sagittalis L.
Pavlides (1985: 216) reported this species from “Oros Kalo Nero”, citing Zaganiaris (1940), sub nom. Chamaespartium sagittale (L.) P. E. Gibbs. In the Pavlides herbarium is also a specimen collected 1984-06-21 (too late to be included in his 1985 publication) “between Potistra and Dikorfo, 2000 m”.

Genista sericea Wulfen
Fagus forest in area called Garlini, 1300 m. 1985-07-05, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his
1985 publication). – National park of Mikri Limni Prespa, above Oxia, 1400 m. Dry grassland over limestone. 1999-07-05, Schuler 99/842 (B). – In Juniperus woodland 1.5 km west of Ag. Achilleios island, 920 m. Fotiadis & Vrahnakis (obs).

**Hippocrepis ciliata** Willd.
Open woodland on a small hill called Goritsa 2 km west of Lefkonas village, 870 m. Fotiadis & Kazoglou 7318 (Fo).

**Hippocrepis comosa** L.
Mt Triklario: Area called Agioneri at northern part of summit area, 1550–1740 m. Rocky limestone slopes with grassland and scattered deciduous woodland. 2016-06-07, Strid 58441 (St).

With glabrous legumes, thus matching *H. glauca* Ten. (ex descr.). However, all such plants from NW Greece are likely to represent forms of *H. comosa*.

**Lathyrus hirsutus** L.
Lake Prespa, plain of Koula, NE of the frontier post, 860 m. Alluvial plain and marshy ground. 1972-06-21, Stamatiadou 15773 (ATH).

**Lathyrus inconspicuus** L.
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of *Juniperus excelsa* and *Quercus trojanana*. 1999-05-31, Strid 49093 (G). – Grassland near the village of Plati, 870 m. Fotiadis & Vrahnakis (obs). – Openings in *Quercus* forests in the area of Pixos sheepfolds, 1000–1100 m. Fotiadis & Vrahnakis (obs).

**Lathyrus nissolia** L.
NW Andartiko, 1280 m. Straßenrand, Buchenwald. 1998-08-01, Willing 72074 (B). – Openings in *Quercus* forests near the village of Karies, 970 m. 2010-07-17, Fotiadis & Vrahnakis 7169 (Fo).

**Lathyrus pallescens** (M. Bieb.) K. Koch
A specimen in the Pavlides herbarium labeled *L. pallescens* can scarcely be identified. Other Greek records of this species are from a small area in Southern Pindos. Occurrence in the Prespa area needs confirmation.

**Lathyrus saxatilis** (Vent.) Vis.

**Lathyrus setifolius** L.
SO Psarades, 860 m. Felswand, Krautfлен am See. 2004-05-11, Willing 127104 (B).

**Lathyrus sphaericus** Retz.

**Lathyrus tuberosus** L.

**Lathyrus vernus** (L.) Bernh.
This species, as well as *L. venetus* (Mill.) Wohlf., were reported by Pavlides (1985: 218) from *Fagus* forest in the Prespa area. A rather poor specimen in the Pavlides herbarium labeled *L. vernus* can scarcely be identified with certainty. There are several subsequent records of *L. venetus* in the PNP, but no confirmation of *L. vernus*.

**Lens nigricans** (M. Bieb.) Godr.
Lotus angustissimus L.
Vromolimni, flat N of Lake Mikri Prespa, wet to dry pasture. 2016-09-03, Bergmeier 16/209b (Be).

Lotus tenuis Willd.

Lupinus angustifolius L.

Lupinus luteus L.
The records are likely to refer to cultivated or semi-naturalized plants.

Medicago arabica (L.) Huds.

Medicago monspeliaca (L.) Trautv.

Medicago tuberculata (Retz.) Willd.

Melilotus indicus (L.) All.
Lake Prespa, plain of Koula, NE of the frontier post, 860 m. Alluvial plain and marshy ground. 1972-06-21, Stamatiadou 15765 (ATH).

Onobrychis oxyodonta Boiss.

Ornithopus compressus L.

Oxytropis purpurea (Bald.) Markgr.
Mt Triklario (Sfika). Open, rocky calcareous slopes on summit ridge, 1600–1700 m. 2010-06-05, Strid 57132 (G, St). A rare endemic of the C Balkan Peninsula (NC Greece, FYROM and Albania).

Pisum sativum subsp. biflorum (Raf.) Soldano
Between the lake of Mikri Prespa and the Albanian frontier, valley SE of the village of Vrondero, near place named Cave Zahariadi, 900–950 m. Rocky calcareous ground. 1975-05-09, Stamatiadou 18497 (ATH). – Mt Triklario, eastern side, along a forest road above the village of Kotas, 1000–1100 m. Gravelly road embankments in deciduous oak woodland. Sandstone. 2010-06-06, Strid 57143 (St).

Trifolium aurantiacum Boiss. & Spruner
Records of this species refer to T. aureum Pollich.

Trifolium campestre Schreber
Oddly, this common species was not listed by Pavlides (1985). There are several subsequent records from the area of PNP, from grassland, shrubland and woodland at 855–1500 m.

Trifolium glomeratum L.
In thermophilous grassland above Ag. Germanos, 1100 m. 2010-06-13, Fotiadis & Kazoglou 7103 (Fo).

Trifolium grandiflorum Schreb.
SW of the village of Psarades, above shore of Lake Megali Prespa, 860–900 m. Rocky limestone slopes with woodland of Buxus sempervirens and Juniperus oxycedrus. 2009-05-20, Strid 56827 (St).

Trifolium heldreichianum Hausskn.
Thermophilous Fagus and Quercus forests in Pervali area, 1220–1350 m. Fotiadis & Vrahnakis (obs). – Between Karies and Lefkonas, 1000 m. 2010-07-17, Fotiadis & Vrahnakis 7248 (Fo).

Trifolium leucanthum M. Bieb.
Along forest road between Psarades and Pili, near place called Pixos sheepfolds, 1020 m. Open deciduous oak
woodland and cultivated fields with many weeds. 2016-06-04, Strid 58373 (G, St).

**Trifolium lucanicum** Guss.
Halfway between the chapel of Agios Georgios and the summit of Devas, 1200 m. Rocky limestone slopes with mixed deciduous/coniferous woodland. 2016-06-03, Strid 58332 (G, St).

**Trifolium michelianum** Savi

**Trifolium micranthum** Viv.
Village of Psarades, 860 m. Wet meadow by lake Megali Prespa. 2012-05-20, Strid 57373 (G, St). – In a small rivulet along the road, just above Agios Germanos village, 1070 m. 2012-06-08, Fotiadis 8914 (Fo).

**Trifolium ochroleucon** Huds.
3 km SSW of Andartiko, 950 m. Dry grassy meadows and open deciduous scrub over granite. 1998-06-15, Strid & al. 46625 (G, Kit, LD). – By NE shore of Lake Mikri Prespa, 855 m. Wet meadows. 2009-05-18, Strid 56812 (St).

**Trifolium pannonicum** Jacq.
Reported by Pavlides (1985: 222) from Lemos-Mileonas. A specimen in the Pavlides herbarium belongs to **Trifolium vesiculosum** (see below).

**Trifolium patens** Schreb.

**Trifolium phleoides** Willd.
SE of Megali Prespa, SW of Lemos, 860 m, dry hillside. 1998-07-01, Snogerup 15903 (LD, UPS). – 1.5 km SW of Psarades in mixed woodland. 2010-05-10, Fotiadis & Vrahnakis (obs).

**Trifolium physodes** M. Bieb.

**Trifolium retusum** L.
3 km SSW of Andartiko, 950 m. Dry grassy meadows and open deciduous scrub over granite. 1998-06-15, Strid & al. 46625 (G, Kit, LD, St).

**Trifolium spumosum** L.
Dry grassland near the village of Oxia, 900 m. Fotiadis & Vrahnakis (obs).

**Trifolium stellatum** L.

**Trifolium subterraneum** L.
Grassland above the village of Karies, 940 m. 2010-07-17, Vrahnakis (obs).

**Trifolium sylvaticum** Gérard
3 km SSW of Andartiko, 950 m. Dry grassy meadows and open deciduous scrub over granite. 1998-06-15, Strid & al. 46624 (G, Kit, LD). – By NE shore of Lake Mikri Prespa, 855 m. Wet meadows. 2009-05-18, Strid 56812 (St).

**Trigonella corniculata** subsp. **balansae** (Boiss. & Reut.) Lassen
Grassland near the ruins of village Kranies, 880 m. 2010-08-08, Fotiadis & Vrahnakis (obs).

**Trigonella gladiata** M. Bieb.

**Vicia grandiflora** Scop.

Vicia incana Gouan

Vicia incana subsp. incana (Gouan) Rouy.

Vicia incana L. (s. l.)
The species were recorded in Bela Voda and Moutsara area in the 1950s and since then was thought to be extinct (Pavlides 1985, Pavlides 1997a). Pavlides (op. cit.: 38) refers to “the plundering overcollection of Gentiana lutea in the winter of 1956 by the locals to almost complete eradication for acquiring their fleshy roots”. In 2010 Daikopoulos & Zografou found a few individuals at Giovanitsa, and in 2015 and 2016 Kazoglou & Vrahnikis found about 200

Vicia incana L.
Along main road between the villages of Karies and Lefkonas, 900 m. Patch of meadow in deciduous scrub. 2016-04-28, Strid 58308 (St). – Also reported by Oberdorfer (1954: tab. 2) from two localities just S of PNP.

Vicia oroboides Wulfen
A report by Pavlides (1985: 224), citing Zaganiaris (1940) needs confirmation. The species is not otherwise known from Greece.

Vicia onobrychoides L.
Edge of Fagus forest above Ag. Germanos, 1300 m. 1985-05-25, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his 1985 publication). – Summit area of Devas, c. 2 km N of Pili, 1200–1350 m. Rocky limestone slopes and flats in opening of mixed woodland. 2010-06-04, Strid (obs and photo). – Also collected on Mt Triklario (Boutsi), just S of PNP. – 1 km S of Mikrolimni, in Juniperus woodland. Kazoglou & Vrahnikis (obs).

FUMARIACEAE

Corydalis blanda Schott
Mt Kibanitsa, among boulders on open granite slopes near the summit, 1900 m. Alston & Sandwith 692 (GB). The locality is probably in Mt Varnous.

Corydalis cava (L.) Schweigg. & Körte
Mt Bella Voda (Kalo Nero) NW of the military post of Vigla, 1700–1800 m. Fagus forest. 1975-05-11, Stamatiadou 18579 (ATH, G.) – SE of the village of Agios Germanos, 1600–1700 m. Edge of Fagus forest over granite. 2011-05-20, Strid (obs and photo).

Fumaria kralikii Jordan
Reports by Pavlides (1985: 229) from Opagia and between Agioneri and Kerasies Rema need confirmation.

Fumaria rostellata Knaf

GENTIANACEAE

Gentiana lutea L. (s. l.)
The species were recorded in Bela Voda and Moutsara area in the 1950s and since then was thought to be extinct (Pavlides 1985, Pavlides 1997a). Pavlides (op. cit.: 38) refers to “the plundering overcollection of Gentiana lutea in the winter of 1956 by the locals to almost complete eradication for acquiring their fleshy roots”. In 2010 Daikopoulos & Zografou found a few individuals at Giovanitsa, and in 2015 and 2016 Kazoglou & Vrahnikis found about 200
individuals near the summit of Bela Voda (Siroka valley). Because of the time of collection is not clear if they represent *Gentiana lutea* s. str. or *G. sympyandra* (Murb.) Halácsy; biogeographically the former is most likely.

**GERANIACEAE**

*Erodium acaule* (L.) Bech. & Thell.
Pavlides (1985: 205) reported this species from three localities in the Prespa area, but specimens in his herbarium appear to fall within the range of variation of *E. cicutarium* (L.) L ’Hér.

*Geranium asphodeloides* Burm. f.
Near Pixos sheepfolds 3 km WNW of Pili, 950 m. Deciduous oak woodland. 2011-05-21, Strid (obs and photo).

*Geranium bohemicum* L.
Mt Varnous, rochers de la crête près de la frontière, 2150 m. Parent (2005: 206).

*Geranium brutium* Gasp.

*Geranium columbinum* L.
Lake Prespa, plain of Koula, NE of the frontier post, 860 m. Alluvial plain and marshy ground. 1972-06-21, Stamatiadou 15764 (ATH). – Mt Sfika (Trikliaro), 2 km S of the village of Oxia, 1250 m. By a small road in mixed deciduous woodland; limestone. 2009-05-18, Strid (obs and photo). – Woodyland opening in the area of Daseri, 890 m. 2010-05-20, Fotiadis & Vrahnikis 7037 (Fo). – Open shrubland near the village of Karies, 970 m. 2010-05-07, Fotiadis & Vrahnikis 7038 (Fo).

*Geranium dissectum* L.
Forest opening on Mt Devas, 1100 m. 2010-05-20, Fotiadis & Vrahnikis 7039 (Fo). – Just above the village of Oxia, 900 m. Pastures and edge of deciduous oak woodland. 2016-04-27, Strid (obs).

*Geranium macrostylum* Boiss.

*Geranium phaeum* L.
Reported by Pavlides (1985: 206) from the vicinity of Agios Germanos. However, a specimen in his herbarium belongs to *G. reflexum* L.

*Geranium purpureum* Vill.
Juniperus excelsa woodland between the island of Agios Achilleios and the village of Pili, 890 m. 2010-05-08, Fotiadis & Vrahnikis 7040 (Fo).

In the Prespa area this species appears to be less common than the closely related *G. robertianum*.

*Geranium pusillum* Burm. f.
W Andartiko, 1000 m. Ruderalfluren, Krautfluren, Kiefernwald. 1998-07-29, Willing 71312 (B).

*Geranium tuberosum* L.
Reported by Pavlides (1985: 207). However, a specimen in his herbarium belongs to *G. macrostylum*.

**GESNERIACEAE**

*Ramonda serbica* Pančić
Pavlides (1985: 207) cited a report by Zaganiaris from “Kalo Nero”. In the Pavlides herbarium is also a specimen collected 1985-06-29 at “Potistres-Dikorfo”. There appears to be no recent confirmation and the species is undoubtedly rare in the Prespa area.

**GLOBULARIACEAE**

*Globularia bisnagarica* L.
Mt Devas: Halfway between the chapel of Agios Georgios and the summit, 1200 m. Rocky limestone slopes with mixed deciduous/evergreen woodland. 2016-04-25, Strid 58258 (St).

*Globularia cordifolia* L.
Pavlides listed this species in an unpublished addition to his 1985 catalogue (“Agioneri, 1300 m”). Fotiadis observed it in the Šfika area at the border of PNP.
**HALORAGACEAE**

*Myriophyllum heterophyllum* Michx.

Reports by Pavlides (1985: 208) from the Prespa area are apparently incorrect (cf. Lebreton 2013). A specimen in the Pavlides herbarium represents *M. verticillatum* L.

**HYACINTHACEAE**

*Ornithogalum brevistylum* Wolfner

National park of Mikri Limni Prespa, above Oxia, 1480 m. Dry grassland over limestone. 1999-07-05, Schuler 99/849 (B).

*Ornithogalum comosum* L.

Records from the Prespa area need confirmation.

*Ornithogalum divergens* Boreau


A member of the *O. umbellatum* group. Taxonomy is unsettled and all Greek records are in need of revision.

*Ornithogalum gussonei* Ten.

Mt Varnous, Mt Bella Voda, between place named Knoitsata and the summit of Toumba, 1950–2000 m. Stony ground with meadows. 1972-06-26, Stamatiadou 16125 (ATH) = Strid 18139 (St).

These collections were identified as *O. gussonei* by W. T. Stearn, 1988. They correspond to *O. collinum* sensu Fl. Eur., non Guss. The group is in need of critical revision.

*Ornithogalum kochii* Parl.

Mt Bella Voda, between place named Knoitsata and the summit of Toumba, 1950–2000 m. Stony ground with meadows. 1972-06-26, Stamatiadou 16133 (ATH).


*Ornithogalum narbonense* L.

2 km SW of the village of Psarades. By a walking trail near lake Megali Prespa, mixed deciduous/evergreen woodland over limestone, 880 m. 2011-06-26, Strid (photo).

*Ornithogalum nutans* L.

Hill by western shore of Lake Mikri Prespa just NW of the island of Agios Achilleos, 860–900 m. Grassland with scattered deciduous shrubs. Limestone. 2016-04-25, Strid 58250 (St).

*Ornithogalum orthophyllum* Ten.

A record by Pavlides (1985: 283) probably refers to *O. kochii*.

*Ornithogalum pannonicum* Chaix ex Vill.


**HYDROCHARITACEAE**

*Elodea canadensis* Michx.


Prespa represents the only occurrence of this introduced waterplant in Greece. It appears to have been first gathered by Zervas & Poulis, 2015-09-03, 484a (in lake Megali Prespa, very close to the border with FYROM, in the easternmost part of the Greek sector, at a depth of 2 m). See Poulis & Zervas (2017).

**HYPERICACEAE**

*Hypericum cerastioides* (Spach) N. Robson

Records by Pavlides (1985: 207) from the Prespa area are incorrect. The specimens cited belong to *H. olympicum* (Greuter 11519) and *H. rumeliacum* subsp. *apollonis* (Boiss. & Heldr.) N. Robson & Strid (Pavlides’ own collections) Reference to Strid (1985) is also incorrect.

**IRIDACEAE**

*Crocus cancellatus* subsp. *mazziaricus* (Herb.) B. Mathew

By the chapel of Agios Georgios at pass on road from Koula to Psarades, 1000 m. Woodland of *Juniperus excelsa* and *Quercus trojana* over limestone. 2010-10-10, Strid 57238 (G, St). – Upper part of Mt Devas, 1300 m. Rocky
limestone slopes with open woodland of Juniperus excelsa, J. oxycedris, Quercus trojana, Acer monspessulanum, etc. 2006-10-14, Strid (obs) – NO Pili, 870 m. Felsiger Hang, Juniperus. 2014-10-09, Willing 250319 (B).

Crocus chrysanthus (Herb.) Herb.
Mt Triklario, place called Agioneri 4 km SSW of the village of Oxia, 1400 m. Patches of meadow over limestone in openings of Fagus forest. 2016-04-27, Strid 58304 (corms collected, cultivated in Oerbaek, Denmark, flowering January 2017).

**JUNCACEAE**

Juncus acutiflorus Ehrh. ex Hoffm.
Isthmus between the Prespa lakes, 860 m. Mud community on alluvial deposits. 1999-08-23, Schuler s.n. (see Schuler 2007: 237).

Juncus alpinoarticulatus Chaix
Apparently based on Stamatiadou 13640 (ATH) which tentatively has been identified as J. alpinoarticulatus × J. articulatus.

Juncus compressus Jacq.
Shore of lake Mikri Prespa by Mikrolimni, 855 m. 2011-06-26, Strid 57312 (G, St). – SE Pili, W shore of Lake Mikri Prespa. 2016-09-03, Bergmeier 16/223 (Be).

Juncus gerardi Loisel.
Records by Pavlides (1985: 279) probably refer to J. compressus.

**LAMIACEAE**

Ajuga chamaepitys subsp. chia (Schreb.) Arcang.
Pavlides (1985: 209) reported this subspecies from Agathoto and Agioneri, but a specimen in the Pavlides herbarium belongs to subsp. chamaepitys.

Ajuga laxmannii (L.) Benth.
Mt Triklario (also known as Sfika). Open, rocky calcareous slopes on summit ridge, 1600–1720 m. 2010-06-05, Strid 57127 (St). This collection renders credibility to a report by Pavlides (1985: 209) from “Oros Kalo Nero”, based on the otherwise unreliable Formánek (1892). Formánek’s record is probably from a locality north of the present national border. A. laxmannii has recently been reported from the Korce district in Albania (Barina & al. 2015) which represents the westernmost extension of the species.

Ajuga orientalis L.

Ballota hispanica subsp. macedonica (Vandas) Strid & Kit Tan
Reported by Pavlides (1985: 209) from the vicinity of Agios Germanos, sub nom. B. macedonica Vandas. However, specimens in his herbarium belong to B. nigra.

Betonica alopecuros L.
Mt Bella Voda, summit of Toumba, 2050–2170 m. Stony ground with meadows and prominent rocks. 1972-06-26, Stamatiadou 16143 (ATH, C). – Also a few other collections and observations from the same or similar localities.

Betonica officinalis L.
A report by Pavlides (1985: 214) from “Oros Kalo Nero”, based on Zaganiaris (1940), sub nom. Stachys officinalis (L.) Trevis., has not been confirmed and may refer to B. alopecuros.

Galeobdolon luteum subsp. montanum (Pers.) Dvoráková
Above Ag. Germanos, 1600 m. By a small road in Fagus forest. Granite. 1998-06-17, Strid 46705 (ATH, G, St). – 2.5 km NW of Vigla, 1685 m, beech coppice. 2016-09-01, Bergmeier (obs). – Mt. Varnous, beech forest near treeline with Acer heldreichii. 2016-09-01, Bergmeier (obs).

Galeopsis bifida Boenn.
3.5 km NW of Vigla, 1695 m, opening in beech forest. 2016-09-01, Bergmeier 16/196 (Be).

Glechoma hederacea L.
In the village of Agios Germanos, 950 m, at base of a wall of a building. 2011-05-22, Strid 57269 (ATH, G, St).

Glechoma hirsuta Walst. & Kit.
Mt Varnous: Fagus forest and mixed Fagus-Abies forests above the village of Agios Germanos, 1630–1840 m. 2010-08-06, Fotiadis & Kazoglou 7321 (Fo).

Hyssopus officinalis subsp. aristatus (Godr.) Briq.
SE of Psarades, by road ascending from the sandy spit between Prespa lakes to a small pass, 900–1000 m. Rocky limestone slopes with woodland of Juniperus excelsa and Quercus trojana. 2006-10-14, Strid 56179 (ATH, G, Kit, LD, St).
Very rare in Greece (Strid 2007). For occurrence in FYROM, see Teofilovski & al. (2012: 29).

*Lamium bifidum* subsp. *balcanicum* Velen.

*Leonurus marrubiastrum* L.
Reported by Pavlides (1985: 210) from “Prespa National Park, S of Koula”. This record was subsequently doubted and the species not included in VPG (Dimopoulos & al. 2013). In fact it has been confirmed from several localities in N Greece, and Sakellarakis found a specimen in the Pavlides herbarium which indeed represents *L. marrubiastrum*.

*Melissa officinalis* L.
Ajios Germanos village area, 1040 m. 1972-07-09, Haristos 4154 (ATH).

*Mentha pulegium* L.

*Mentha suaveolens* Ehrh.
Karyes. Krautfluren am Ort, 935 m. 2014-10-09, Willing 250189 (B).

*Salvia verticillata* L.
Vrondero, village roadside. 2016-09-04, Bergmeier 16/242 (Be).

*Salvia viridis* L.
Reported from Mt Devas by Strid & al. (2012) and Mt Triklario by Fotiadis & al. (2012b). No details are available, but the records are feasible.

*Sideritis raeseri* Boiss. & Heldr.
Mt Devas, near the summit along forest road from the chapel of Agios Georgios. Rocky limestone slopes with open woodland of *Quercus trojana* and *Juniperus*. 2014-07-12, Strid (obs and photo). – Woodland opening above the village of Vrondero. 2010-08-05, Fotiadis & Vrahnakis 7328 (Fo). The population on Mt Devas is variable with some plants matching *S. rae-seri* and some *S. scardica* Griseb. (the two meet in this area).

*Sideritis syriaca* L.
This species was reported by Pavlides (1985: 213), but specimens in the Pavlides herbarium belong to *Sideritis raeseri* Boiss. & Heldr.

*Stachys alpina* L.
4 km NW of Vigla, 1855 m, beech forest. 2016-09-01, Bergmeier 16/194 (Be).

*Stachys serbica* Pančić
Near the shore of Lake Megali Prespa SW of Psarades. Mixed woodland on rocky limestone slope. 2011-05-21, Strid 57270 (ATH, G, St).

*Stachys sylvatica* L.
E of Mikri Prespa, NE of Oxia, 850 m, wet fields. 1998-06-27, Snogerup 15642 (LD).

*Teucrium divaricatum* subsp. *graecum* (Čelak.) Bornm.
This was reported by Pavlides (1985: 214), but is a Mediterranean species unlikely to occur in the Prespa area. The records probably refer to *T. chamaedrys*.

*Teucrium montanum* L.
National park of Mikri Limni Prespa, above Oxia, 1400 m. Dry grassland over limestone. 1999-07-05, Schuler 99/852 (B).

*Thymus cherlerioides* Vis.
Records of this species probably refer to *Th. boissieri* Halácsy which occurs on Mt Devas and Mt Triklario.

*Thymus dolopicus* Formánek
NO Pili, 870 m. Felswand. 2004-05-11, Willing 127136 (B). – Mt Triklario (also known as Sfika). Open, rocky calcareous slopes on summit ridge, 1600–1720 m. 2010-06-05, Strid 57135 (G, St).

*Thymus longicaulis* C. Presl
A specimen in the Pavlides herbarium was collected 1985-07-05, too late to be included in his 1985 publication. There are several subsequent confirmations from Mt Varnous.

*Thymus parnassicus* Halácsy
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes
with woodland of *Juniperus excelsa* and *Quercus trojana*. 1999-05-31, Strid & al. 49102 (G, Kit).

*Thymus pulegioides* L.
Records by Pavlides (1985: 215) are probably incorrect.

*Thymus striatus* Vahl
Mt Devas, summit area c. 2 km N of Pili, 1200–1350 m. Rocky limestone slopes and flats in opening of mixed woodland. 2010-06-04, Strid 57185 (G, St).

*Thymus thracicus* Velen.

**LEMNACEAE**

*Lemna gibba* L.
Ag. Germanos Potamos, near mouth to Lake Megali Prespa, together with *L. minor*. 2016-08-30, Bergmeier (obs).

*Lemna trisulca* L.
Lake Megali Prespa, Psarades, shallow water landward of reedbeds. 2016-09-04, Bergmeier 16/236 (Be). – Lake Mikri Prespa in reedbeds at Daseri area, and W of Karies village, Kazoglou (obs).

**LENTIBULARIACEAE**

*Pinguicula balcanica* Casper
In the Pavlides herbarium is a specimen of *P. balcanica* from Mt Varnous, “E of Ag. Germanos, 1800 m, 30.6. 1985“. Pavlides (1985: 225) reported *P. vulgaris* L. from the same area, based on Zaganiaris (1940); this record almost certainly refers to *P. balcanica* and so does a record of *P. hirtiflora* Ten. by Quézel & Contandriopoulos (1968) from “Oros Kalo Nero”.

*Utricularia australis* R. Br.
Sandy spit between Megali and Mikri Prespa, eastern end, on Megali Prespa side, 855 m. Submerged in shallow water. 1998-08-07, Strid & Kit Tan 47263 (G, St). – Grosser Prespa-See, S-Ufer, Koula, 855 m. Stillwasser-lagune im *Phragmites australis*-Röhricht. 2011-06-25, Raus & al. 32536 (B).

The similar *U. vulgaris* L. was reported by Pavlides (1985: 225) from Vromolimni and Mikrolimni at the N and E side, respectively, of Mikri Prespa. It has subsequently been confirmed both in this area and at Fragma (S tip of Mikri Prespa).

*Utricularia minor* L.
Kleiner Prespa-See, S-Ende an der albanischen Grenze, Fragma, 855 m. Stillwasser im *Phragmites australis*-Röhricht. 2011-06-26, Raus 32545 (B). – Photo by Strid, same place and date.

**LILIACEAE**

*Fritillaria graeca* Boiss. & Spruner subsp. *graeca*
Pavlides reported (1985: 281) this subspecies from Dikorfo, but a specimen in the Pavlides herbarium represents *F. graeca* subsp. *thessala*.

*Fritillaria graeca* subsp. *thessala* (Boiss.) Rix
By the Greek-Albanian frontier, SW of the village of Vrontero, between the 13th and 15th pyramid, 1350–1450 m. Forest of *Quercus*, *Buxus* and *Ostrya*. 1975-05-09, Stamatiadou 18491 (ATH). – Pass between isthmus of Prespa and the village of Psarades, 1050 m. Woodland of *Juniperus excelsa*. 1995-05-07, Strid 38945 (G, St). – Mt Triklario (Sfika), summit ridge c. 5 km NNE of Kristallopigi, 1600–1700 m. Limestone. 2010-06-05, Strid (photo). – 1.5 km SW of the village of Oxia, 1150 m. Damp deciduous woodland on rocky limestone slopes. 2016-04-27, Strid (obs).

*Fritillaria gussichiae* (Degen & Dörfl.) Rix
Zaharof F-18 (St) was collected “between Pissoderion and Antartikon”. The locality may be just inside the PNP.

Although first described as a variety of *F. graeca*, *F. gussichiae* is a distinct species endemic to mountains of the C Balkan Peninsula.

*Fritillaria messanensis* Raf.
Reported by Pavlides (1985: 282) from Dikorfo-Trikario, but a specimen in the Pavlides herbarium represents *F. montana* Hoppe ex W. D. J. Koch.

*Fritillaria montana* Hoppe ex W. D. J. Koch
By the Greek-Albanian frontier, SW of the village of Vrontero, between the 13th and 15th pyramid, 1350–1450 m. Forest of *Quercus*, *Buxus* and *Ostrya*. 2012-06-08, Raus 32545 (B). – Photo by Strid, same place and date.
Gagea lutea (L.) Ker Gawl.
Above the pass E of Pissoderion, 1600–1800 m. Fagus forest over granite. 1989-05-11, Strid & al. 19332 (St); det. J.-M. Tison.
The locality is just outside the border of PNP, but the species is likely to occur also inside.

Lilium candidum L.

This frequently cultivated species is definitely native in the Prespa area where it was reported also by Sfikas (2000: 19).

Lilium jankae A. Kern.
Pavlides (1985: 282) reported this species based on a record by Quézel & Contandriopoulos (1968) from “Kalo Nero, 2100 m”. Plants from this area are in fact rather typical L. albanicum (several collections by Stamatiadou, Greuter, Strid and others). See also Strid (2015: 125) for observations on L. jankae and other members of the L. carniolicum group.

LINACEAE

Linum austriacum L.

Linum corymbulosum Rchb.
Along walking trail between Psarades and Roti, 900 m Rocky limestone slopes with mixed deciduous/evergreen scrub. 2016-06-06, Strid 58415 (G, St).

Linum elegans Spruner ex Boiss.
Mt Triklario: Area called Agioneri at northern part of summit area, 1550–1740 m. Rocky limestone slopes with grassland and scattered deciduous woodland. 2016-06-07, Strid 58464 (G, St).

Linum hologicynum Rchb.
Mt Triklario: Area called Agioneri at northern part of summit area, 1550–1740 m. Rocky limestone slopes with grassland and scattered deciduous woodland. 2016-06-07, Strid 58450 (G, St).

Linum tenuifolium L.
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of Juniperus excelsa and Quercus trojana. 1999-05-31, Strid & al. 49130 (ATH, G, Kit). – By the chapel of Agios Georgios halfway between Koula and Psarades, 1000 m. Rocky limestone slopes with Juniperus woodland. 2016-06-03, Strid 58330 (St).

This species was collected already by Pavlides (“Edge of forest road, Agioneri”), but too late to be included in his 1985 publication.

MALVACEAE

Abutilon theophrasti Medik.

Malope malacoides L.
Area called Ag. Pavlos near the Greek/Albanian border, 880 m. 1985-06-24, Pavlides.

Specimen seen in the Pavlides herbarium, collected too late to be included in his 1985 publication.

MORINACEAE

Morina persica L.
Listed by Fotiadis & al. (2012b) from Mt Triklario.
No details are known but the record is feasible. The species is known from Mt Boutsi, immediately to the south (see Tan & al. 2016: 279).

**OLEACEAE**

*Fraxinus angustifolia* ssp. *oxyarpa* (Willd.) Franco & Rocha Afonso
*Fagus* forests in Mt Triklario, 1260 m. Fotiadis (obs).

**ONAGRACEAE**

*Epilobium dodonaei* Vill.
Just above Koula along road to the chapel of Agios Georgios, 1000 m. Rocky limestone slopes with open mixed woodland. 2012-09-12, Strid 57607 (St).

*Epilobium obscurum* Schreb.
By the deserted village of Sfika, 1200 m. Wet spots in formerly cultivated fields. 2016-08-11, Strid 58620 (St). – Also collected near Pissoderi, just outside PNP, Strid & al. 18319 (C, G, UPA) and Sno gerup 15818 (LD, UPS).

This species was reported already by Vandas (1909: 205), based on a collection from “M. Peristeri in Macedonia”; the locality could be on either side of the present border.

*Epilobium palustre* L.
Mt. Varnous, ESE of Ag. Germanos, place called Moutsara, 1950 m, seepage grassland, together with *E. vernonicum*. 2016-08-31, Bergmeier 16/186 (Be). – Also reported from “Kalo Nero” by Pavlides in an unpublished addition to his catalogue of 1985.

*Epilobium vernonicum* Sno gerup
Mt Varnous: Near source of Kaloneri stream, 1200 m. Seepage meadow over granite. 2016-08-10, Strid 58581 (G, St). – Mt. Varnous, ESE of Ag. Germanos, place called Moutsara, 1950 m, seepage grassland, together with *E. palustre*. 2016-08-31, Bergmeier 16/186 (Be).

**ORCHIDACEAE**

*Anacamptis morio* (L.) R. M. Bateman, Pridges on & M. W. Chase

*Anacamptis papilionacea* (L.) R. M. Bateman, Pridges on & M. W. Chase
Along forest road between Karies and Lefkonas. Opening inside deciduous forest. 2011-05-29, Antonopoulos (obs).

*Anacamptis pyramidalis* (L.) Rich.
Along forest road between Psarades and Pili, near place called Pixos sheepfolds, 1020 m. Open deciduous oak woodland and cultivated fields with many weeds. 2016-06-04, Strid (obs).

*Cephalanthera damasonium* (Mill.) Druce

*Cephalanthera rubra* (L.) Rich.
Reported from the same localities as *C. damasonium* by Hopp & Petridis (loc. cit.). – A specimen in the Pavlides herbarium collected “between Agioneri and Kerasies Rema, 1200–1300 m” labeled *C. rubra* belongs to *C. damasonium*.

*Corallorhiza trifida* Châtel.
Two records in the Flora Hellenica Database are from the vicinity of the Vigla pass just outside PNP. The species is to be expected in *Fagus* forest also inside the borders of the park. “[confirmed by Bergmeier in 2017 above Ag. Germanos].

*Dactylorhiza cordigera* (Fr.) Soó

*Dactylorhiza saccifera* (Brongn.) Soó
A record in the Flora Hellenica Database is from the
Vigla pass, just outside PNP. The species has been reported from Ag. Germanos by Hopp & Petridis (1987: 76).

**Epipactis helleborine** (L.) Crantz
Near the road from Agios Georgios to Devas, 1100 m, 1987-06-14 and 1987-06-30 (Hopp & Petridis 1987: 75). – Near road to Agioneri, 1050 m. 1987-07-16 (loc. cit.).

Reported as *E. persica* (Soó) Hausskn. ex Nannf. Records of *E. persica* from the Prespa area and elsewhere in NW Greece may refer either to *E. helleborine* or to *E. persica* subsp. *exilis* (P. Delforge) Kreutz.

**Epipactis microphylla** (Ehrh.) Sw.
Along walking trail from Mikrolimni to ruins of Kraines settlement. Rocky limestone slopes, mostly with deciduous woodland. 2010-06-06, Strid (obs).

**Epipogium aphyllum** Swartz.
Mt Varnous: Mixed forest of *Fagus* and *Abies* above the village of Agios Germanos, 1670 m. 2010-08-06, Fotiadis, Vrahnakis & Kazoglou 7992 (Fo).

Rare in Greece, with scattered localities in moun-
tains of the northern mainland and a somewhat dubious record from W Kriti.

**Himantoglossum jankae** Somlyay, Kreutz & Óvári
Near Vrondero, 1300 m. 1985-05-29, Pavlides s.n. (specimen seen in Pavlides herbarium, collected too late to include in 1985 publication). – 2 km SW of the village of Psarades, 880 m. By a walking trail near lake Megali Prespa, mixed deciduous/evergreen woodland over limestone. 2011-06-26, Strid (obs and photo).

**Limodorum abortivum** (L.) Sw.

**Listera ovata** (L.) R. Br.
Mt Varnous: *Fagus* forests above the village of Ag. Germanos, 1690 m. Fotiadis & Kazoglou (obs).

**Neotinea ustulata** (L.) R. M. Bateman, Pridgeon & M. W. Chase
Mt Devas, summit area and just W of the summit, 1250–1350 m. Rocky limestone slopes and flats in openings of deciduous oak woodland. 2009-05-17, Strid (obs and photo).

**Ophrys apifera** Huds.
2 km SW of Psarades along forest road to Pili, 980–1040 m. Rocky limestone slopes with mixed woodland dominated by deciduous oaks. 2016-06-04, Strid (obs and photo).

**Ophrys scolopax** subsp. *cornuta* (Steven) E. G. Camus
Prespa area, halfway between the chapel of Agios Georgios and the summit of Devas. Rocky limestone slopes with mixed deciduous/coniferous woodland. 2016-06-03, Strid (obs and photo). – Also reported by Antonopoulos (obs 2011-05-29), sub nom. *O. oestrifera*.

**Ophrys sphegodes** Mill.
0.8 km W Oxia, 850 m. Schmaler Busch-Wiesenstreifen unter Felsen. 1988-05-09, Willing (obs – subsp. *mammosa*). – Mt Devas, Halfway between the chapel of Ag. Georgios and the summit, 1200 m. Rocky limestone ridge with open woodland of *Quercus trojana* and *Juniperus excelsa*. 2009-05-17, Strid (obs and photo – subsp. *sphegodes*).

Several forms in the *O. sphegodes* complex occur in the Prespa area. Adopting a narrow species concept, Antonopoulos (obs, 2011 and 2015) reported *O. epirotica*, *O. grammica*, *O. leucophthalma* and *O. zeusii*.

**Orchis mascula** (L.) L.
Mt Devas, halfway between the chapel (at saddle on main road Koula-Psarades) and the summit, 1200 m. Rocky limestone ridge with open woodland of *Quercus trojana* and *Juniperus excelsa*. 2009-05-17, Strid (obs and photo). Also observed by Antonopoulos, 2011-05-29, at the same locality.

**Orchis purpurea** Huds.
**Orchis quadripunctata** Cirillo ex Ten.
1 km WSW of the village of Psarades, 900 m. Mixed deciduous/evergreen scrub 2–3 m tall, with much *Buxus sempervirens*. Rocky limestone hills. 1995-05-08, Strid 38952 (LD). – Mt Devas, halfway between the chapel (at saddle on main road Koula-Psarades) and the summit, 1200 m. Rocky limestone ridge with open woodland of *Quercus trojana* and *Juniperus excelsa*. 2009-05-17, Strid (obs and photo). – Also observed by Antonopoulos, 2011-05-29, at the same locality.

**Orchis simia** Lam.
Halfway between the chapel (at saddle on main road Koula-Psarades) and the summit of Mt Devas. Rocky limestone ridge with open woodland of *Quercus trojana* and *Juniperus excelsa*. 2009-05-17, Strid (obs and photo). – Observed by Antonopoulos in the same area, 2011-05-29.

**Platanthera bifolia** (L.) Rich.
Near Vrondero. 1985-05-29, Pavlides s.n. (specimen seen in the Pavlides herbarium, collected too late to be included in his 1985 publication). – Also observed by Antonopoulos, 2011-05-29, at Psarades dirt road near Cape Roti on the way to Vrondero.

**Platanthera chlorantha** (Custer) Rchb.
Between the villages of Pili and Vrondero, 1000–1050 m. *Quercus* forest. 1975-05-08, Stamatiadou 18441a (ATH). – Mt Devas, halfway between the chapel (at saddle on main road Koula-Psarades) and the summit, 1200 m. Rocky limestone ridge with open woodland of *Quercus trojana* and *Juniperus excelsa*. 2009-05-17, Strid (obs).

**Spiranthes spiralis** (L.) Chevall.
In the graveyard of Psarades village, 860 m. 2016-09-28, Sakellarakis (photo).

**OROBANCHACEAE**

**Euphrasia liburnica** Wettst.
Mt Varnous, near source of Kaloneri stream, 1750–1800 m. Grassland and wet meadows over granite. 2016-08-10, Strid 58579 (St). – Mt Varnous, SE of Ag. Germanos, 1800 m. Subalpine grassland over granite. 2012-09-13, Strid 57622 (St).

**Orobanche elatior** Sutton
Halfway between the chapel of Agios Georgios and the summit of Devas, 1200 m. Mixed deciduous/evergreen woodland on rocky limestone slope. 2011-06-25, Strid 57306 (St) = Raus 32509 (B). – Mt Devas, near the summit along forest road from the chapel of Agios Georgios, 1200–1300 m. Rocky limestone slopes with open woodland of *Quercus trojana* and *Juniperus*.

**Orobanche gracilis** Sm.
Above Agios Germanos, 1300 m. 2015-07-02, photo by M. Malakou.

**Orobanche pancicii** Beck

**Pedicularis brachyodonta** subsp. *grisebachii* (Wettst.) Hayek
In latere meridionale montis Gavran montium Varnous (Kalo Nero), 2200–2300 m. In pratis alpinis, clavis
saxosis et rupestribus, solo granitico. 1976-08-03, Greuter 14245 (C).

Pedicularis graeca  Bunge
2–3 km S-SSW of summit of Gortsa Toumba (peak 2334) on ridge WNW of place called Knoitsata. Alpine pastures and rocky slopes. Granite and schist, 1900–2175 m. 1981-06-27, Stamatiadou 22163 (ATH). – Strid & al. (2012) cited this species also from Mt Devas, but no details are available.

Pedicularis leucodon  Griseb.

Phelipanche mutelii  (F. W. Schultz) Pomel
Along walking trail between Psarades and Roti, 900 m. Rocky limestone slopes with mixed deciduous/evergreen scrub. Parasitic on Silene parnassica. 2016-06-06, Strid 58414 (St).

Phelipaea boissieri  (Reut.) Stapf
This spectacular species occurs in pastures near the summit of Mt Devas where it was discovered c. 1990, apparently by several persons independently. On 24.5. 2011, Andrea Bonetti found it at somewhat lower elevation on Mt Devas, by a viewpoint from which the pelican colonies in Vromolimnmi are easily seen. There are a few localities in FYROM where it was discovered already in 1916 and still occurs (Stevanović, pers. comm.). It has recently been found also in S Albania, including one locality on Mt Gramos close to the Greek border (Barina & al. 2015). The population on Mt Devas comprises c. 200 individuals; it is probably parasitic on roots of Centaurea salonitana Vis.

In VPG (Dimopoulos & al. 2013) the Greek plant was called Phelypaea coccinea (M. Bieb.) Poir., following Flora of Turkey (7: 2, 1982) where Ph. boissieri was listed as a synonym of Ph. coccinea. However, Cullen (2010) and Barina & al. (2015) regarded them as separate species, based on differences in corolla lobes and anthers. Cullen recognized three species: Ph. coccinea in the Caucasus, the Crimea and possibly N Iran, Ph. tournefortii Desf. in E Turkey and adjacent Georgia and Armenia, and Ph. boissieri in S and E Turkey and adjacent NW Iran as well as the Balkans. Thus, all European plants are referable to Ph. boissieri.

Rhinanthus mediterraneus  (Sterneck) Adamović

Rhinanthus ovifugus  Chabert
Reported by Pavlides (1985: 252), based on a record by Quézel & Contandriopoulos (1968) from Pissoderi, just outside the PNP. R. ovifugus is a species of the Alps, very unlikely to occur in Greece; four other species of Rhinanthus have been reported from nomos Florinis.

Tozza alpina  subsp. carpatica  (Wol.) Dostál
6 km S of the peak of Kortsa Toumba (= peak 2334), 1800–1850 m. Shady place by a stream at upper edge of Fagus forest. Granite. 1981-06-27, Strid & al. 18184 (B, EGE, G, KOR, St). – Same area. 2016-06-05, Strid 58386 (G, St).

PAPAVERACEAE

Papaver albiflorum  (Elkan) Pacz.

Papaver apulum  Ten.

Papaver dubium subsp. lecoqii  (Syme) Lamotte

Papaver pinnatifidum  Moris
A report by Pavlides (1985: 229) from Mt Triklario is probably incorrect.
**PLANTAGINACEAE**

*Plantago albicans* L.
A report by Pavlides (1985: 230) from “Gofilos-Mazi” is out of range and probably incorrect.

*Plantago alissima* L.
Records of this species probably refer to *P. lanceolata*.

*Plantago crassifolia* Forssk.
A report by Pavlides (1985: 230), “between Perivolaki and Dinas” is probably incorrect.

*Plantago major* subsp. *intermedia* (Gilib.) Lange
Ajios Germanos village area, 1040 m. 1972-07-09, Haristos 4155 (ATH). – Psarades, trampled site above the pier. 2016-09-06, Bergmeier 16/284 (Be). – Also observed recently by Fotiadis in the Sfika and Vrontero areas.

*Plantago media* L.
OSO Karye, 1040 m. Sandige Hänge, Eichenbuschwald. 1998-07-30, Willing 71396 (B).

*Plantago subulata* L.
As used by Greek authors, including Pavlides (1985: 230), this name refers to *P. holostem*.

**PLUMBAGINACEAE**

*Armeria canescens* (Host) Boiss.
Forest opening between Provolos and Ntina, 1400 m. 1985-06-25, Pavlides (specimen seen in the Pavlides herbarium, collected too late to be included in his 1985 publication). – Several subsequent confirmations from Mt. Varnous.

This is probably the only species of *Armeria* in the Prespa area. Records of *A. rumelica* Boiss. and *A. undulata* (Bory & Chaub.) Boiss. are likely to refer to *A. canescens*.

*Goniolimon tataricum* (L.) Boiss.
Lake Prespa, near and SW of the frontier post of Koulia, 850–900 m, stony calcareous ground. 1972-06-22, Stamatiadou 15821 (ATH). – S of Megali Prespa, Ag. Georgios on the hill SE of Psarades, 1000–1050 m. 1998-06-27, Snogerup 15659 (LD). – From the last-mentioned locality also Strid 57231 (St), Strid 57304 (St) and Raus 32501 (B).

Plants of Snogerup 15659 have densely short-pubescent bracts, thus matching *G. tataricum*. Some other plants from the same area have glabrous bracts and have been keyed out as *G. dalmaticum* (C. Presl) Rchb. f. According to Buzurović & al. (2013, 2016) the latter is endemic to Croatia and grows on saline ground near the sea, whereas *G. tataricum* is Pontic-Mediterranean and grows in xerophilous pastures in hilly regions. All Greek records of *G. dalmaticum* are likely to refer to *G. tataricum*.

**POACEAE**

*Aegilops biuncialis* Vis.

Pavlides reported *Aegilops lorentii* Hochst. which is probably a synonym of *A. biuncialis*.

*Agrostis castellana* Boiss. & Reut.

*Aira caryophyllea* L.
A report by Pavlidis (1985: 268) from an area east of Mikri Prespa needs confirmation.

*Alopecurus utriculatus* Sol.
A report by Pavlidis (1985: 260) certainly refers to *A. rendlei* Eig.

*Arundo donax* L.
A small stand (expanding very slowly over the last 15 years) is present on the margins of the road leading to the isthmus between Mikri and Megali Prespa. The stand was probably planted (rhizomes brought from S-C Greece where it is common) by a local farmer for producing sticks used in the bean cultivation of the area (Kazoglou, obs).

*Brachypodium rupestre* (Host) Roem. & Schult.
Between Vrondero and the abandoned village of Ag-
Bromus benekenii (Lange) Trimen
Between Oxia and the abandoned settlement of Sfika, deciduous oak woodland. 2016-09-05, Bergmeier 16/274 (Be). – Between Vrondero and the abandoned Agathoto, deciduous woodland. 2016-07-19, Bergmeier (obs).

Bromus cappadocicus Boiss. & Balansa
Near Vrondero, wheat field, 1090 m. 2016-07-20, Bergmeier 16/107 (Be). Previous records of B. secalinus from the area likely refer to the similar B. commutatus subsp. decipiens.

Bromus ramosus Huds.
4 km NW of Vigla, 1855 m, beech forest, roadbank. 2016-09-01, Bergmeier 16/195 (Be). – Mt Triklario, in Fagus forest, 1360 m. Fotiadis & Vrahnakis (obs). – Alnus glutinosa forests near mouth of Ag. Germanos river, 870 m. Fotiadis (obs).

Bromus riparius Rehmann
A record from “Kalo Nero” (Pavlides 1985: 270, cited from Quézel 1969) needs confirmation. It is likely to refer to B. cappadocicus Boiss. & Balansa.

Bromus rubens L.
Thermophilous grassland above the village of Lemos, 950–1200 m. Fotiadis & Vrahnakis (obs).

Catapodium rigidum (L.) C. E. Hubb.

Crypsis alopecuroides (Piller & Mitterp.) Schrad.
Mikrolimi. 1984-07-13, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his 1985 publication).

Cynosurus effusus Link

Digitaria sanguinalis (L.) Scop.
Sandy spit between Prespa lakes, eastern end, Megali Prespa side, near Ag. Germanos stream, 855 m. 2006-10-15, Strid 56190 (ATH, G, St). – Lemos, bean field. 2016-08-30, Bergmeier 16/163 (Be). – Mikrolimi, garden. 2016-09-05, Bergmeier 16/267 (Be).

Echinarhia capitata (L.) Desf.
Lake Prespa, near and SW of the frontier post of Koula, 850–900 m. Stony calcareous ground. 1972-06-22, Stamatiadou 15814 (ATH).

Elymus panormitanus (Parl.) Tzvelev
Between Oxia and the abandoned settlement of Sfika, deciduous oak woodland. 2016-09-05, Bergmeier 16/275 (Be).

Eragrostis cilianensis (All.) Janch.
NW Andartiko, 1280 m. Straßenrand, Buchenwald. 1998-08-01, Willing 72047 (B). – Lemos, bean field. 2016-08-30, Bergmeier 16/164 (Be).

Eragrostis minor Host
Lake Megali Prespa W of Lemos, sandy shore. 2016-08-30, Bergmeier 16/145 (Be).

Eragrostis pilosa (L.) P. Beauv.
Sandy spit between Megali and Mikri Prespa, eastern end, on Megali Prespa side, 855 m. Partly swampy. 1998-08-07, Strid & Kit Tan 47612 (G, St). – Same locality. 2006-10-15, Strid 56186 (G, St). – Ag. Germanos, bean field S of the village. 2016-09-02, Bergmeier 16/200 (Be).
**Festuca drymeja** Mert. & W. D. J. Koch  
National park of Mikri Limni Prespa, above Oxia, 1300 m. *Fagus* forest over limestone. 1999-07-05, Schuler 99/859 (B).

**Festuca hirtovaginata** (Acht.) Markgr.-Dann.  
S side of summit 2177, c. 3 km SSE of Kortsa Toumba (peak 2334), 1950–2150 m. Alpine grassland dominated by *Festuca* and patches of *Vaccinium myrtillus*. Granite. 1981-06-27, Strid & al. 18226 (G, M, St).

**Festuca koritnicensis** Hayek & J. Vetter  

**Festuca pratensis** Huds.  

**Helictochloa aetolica** (Rech. f.) Romero Zarco  
Along walking trail between Psarades and Roti, 900 m. Rocky limestone slopes with mixed deciduous/evergreen scrub. 2016-06-06, Strid 58423 (G, St).

**Helictotrichon convolutum** (C. Presl) Henrard  
Between the village of Oxia and ruins of Sfika settlement, 900–1100 m. Rocky slopes in open deciduous woodland. Limestone. 2010-06-06, Strid 57154 (G, St).

**Hordelymus europaeus** (L.) Harz  
National park of Mikri Limni Prespa, above Oxia, 1200 m. *Fagus* forest over limestone. 1999-07-05, Schuler 99/863 (B). – 2.5 km NW of Vigla, 1685 m, beech coppice. 2016-09-01, Bergmeier (obs). – 2.5 km NW of Vigla, 1685 m, beech coppice. 2016-09-01, Bergmeier (obs). – 2.5 km NW of Vigla, 1685 m, beech coppice. 2016-09-01, Bergmeier (obs).

**Koeleria macrantha** (Ledeb.) Schult.  
Just NW of western end of sandy spit between Mikri and Megali Prespa. Rocky limestone slopes with woodland of *Juniperus excelsa* and *Quercus trojana*, 900–950 m. 1999-05-31, Strid & al. 49124 (ATH, G).

**Koeleria nitidula** Velen.  

**Lagurus ovatus** L.  
Thermophilous grassland near the village of Oxia and around ruins of the villages of Kranies and Agathoto, 860–900 m. Vrahnikas (obs).

**Leersia oryzoides** (L.) Sw.  
Sandy spit between Megali and Mikri Prespa, eastern end, on Megali Prespa side, 855 m. Partly swampy. Locally gregarious by the lake. 1998-08-07, Strid & Kit Tan 47617 (ATH, B, G, Kit, LD, St). See Willdenowia 29: 65–66 (1999). – Near Lake Megali Prespa, tall herb riparian vegetation 0.5 km from stream mouth. 2016-08-30, Bergmeier 16/159 (Be). This species is rare in Greece where it was first reported by Lavrentiades (1956: 83) from Lake Kerkini; see also Raus, Strid & Kit Tan (1999: 65-66) and Sno-gerup & Sno-gerup (2000: 269).

**Melica ciliata** L. subsp. ciliata  
Above Ag. Germanos, place known as Potistra, 1430 m, dry grassland. 2016-08-31, Bergmeier 16/172 (Be). Previous records of *M. ciliata* subsp. taurica from the area should be re-examined to verify the occurrence of both subspecies.

**Milium vernale** M. Bieb.  

**Paspalum distichum** L.  
**Phalaris aquatica** L.
Listed by Fotiadis (2012b) from Mt Triklario. No details are available, but the record is feasible.

**Phalaris arundinacea** L.
1–2 km E of the village of Ag. Germanos, 1050–1200 m. Gregarious by a stream. 1981-06-28, Strid & al. 18282 (B, G, KOR, St) = Stamatiadou 22202 (ATH, St).

**Phalaris exarata** Griseb. subsp. exarata
3 km SSW of Andartiko, 950 m. Dry grassy meadows and open deciduous scrub over granite. 1998-06-15, Strid & al. 46627 (ATH, G, LD). – Along walking trail between Psarades and Pili, near place called Pixos sheepfolds, 1020 m. Open deciduous oak woodland and cultivated fields with many weeds. 2016-06-04, Strid 58351 (G, St).

**Polypogon monspeliensis** (L.) Desf.
In den Großen Prespa-See aufgeschütteter Damm, am Damm zwischen den beiden Prespa-Seen, 860 m. 2009-08-05, Gregor & Meierott 5794 (FR).

**Polypogon viridis** (Gouan) Breistr.
Sandy spit between Megali and Mikri Prespa, western end, on Megali Prespa side, 855 m. Partly swampy. 1998-08-07, Strid & Kit Tan 47589 (ATH, G, Kit, LD).
Rostraria cristata (L.) Tzvelev
Reported from Mt Devas by Strid & al. (2012) and Mt Triklario by Fotiadis & al. (2012b). No details are available, but the records are feasible.

Secale strictum (C. Presl) C. Presl

Sesleria caerulea (L.) Ard.
Pavlides (1985: 277) reported this species from Triklario. It is not otherwise known in Greece and the record is likely to refer to S. robusta.

Sesleria robusta Schott, Nyman & Kotschy
Mt Triklario: Place called Agioneri 4 km SSW of the village of Oxia, 1400 m. Meadow with rocky limestone outcrops in opening of Fagus forest. 2016-04-27, Strid 58299 (G, St).

Setaria pumila (Poir.) Roem. & Schult.

Setaria verticillata (L.) P. Beauv.
W Pisoderi, 1430 m. Sandhaufen, sandiger Parkplatz. 2014-10-10, Willing 250517 (B). – Lemos, bean field. 2016-08-30, Bergmeier 16/162 (Be). – Milionas, bean field. 2016-09-06, Bergmeier 16/277 (Be).

Setaria viridis (L.) P. Beauv.
Near the village of Oxia, 880 m. Damp spot in a bean field. 2016-08-11, Strid 58602 (St). – Lemos, village. 2016-09-06, Bergmeier 16/293 (Be).

Stipa holosericea Trin.
Devas, südwärts unterhalb der Antennen-Station am Gipfel, 1340 m. Stipa-reiche Trockenrasen über Kalkgestein. 2011-06-25, Raus & al. 32524 (B).

Vulpia muralis (Kunth) Nees
WSW Lemos, 860 m. Krautfluren zwischen Feldern. 2004-05-11, Willing 127031 (B).

**POLYGALACEAE**

*Polygala nicaensis* subsp. *mediterranea* Chodat

**POLYGONACEAE**

*Fallopia dumetorum* (L.) Holub
Ag. Germanos, village. 2016-09-02, Bergmeier 16/204 (Be).

*Fallopia japonica* (Houtt.) Ronse Decr.
Ag. Germanos, roadside immediately W of the village towards Lemos, several small clonal colonies. 2016-09-02, Bergmeier 16/202 (Be). Not included in Dimopoulous & al. (2013), but apparently fully established locally.

*Persicaria lapathifolia* (L.) Delarbre

Subsp. *lapathifolia* is the most common subspecies in the area.

*Persicaria minor* (Huds.) Opiz
Lake Prespa area, alluvial plain between Lemos...
etation. Wassertiefe 20 cm. 1989-08-30, Raus 13595 (B).

**Polygonum arenarium** Waldst. & Kit.

**Polygonum arenastrum** Boreau

**Polygonum aviculare** subsp. neglectum (Besser) Ar
cang.
Prespa, E of the village Lemos area, 940 m. 1972-07-08. Haristos 3979 (ATH). – In colle inter vicum Koula et pagum Psaradhes, 1000 m. In silica rara Juniper
orum et Quercus trojanae, solo petroso calcareo. In
glareas calcareis ad marg. viae. 1976-08-02, Greuter 14203 (ATH, Gr, St). – Pili. Gemüsefelder am südli-
chen Ortsrand, 860 m. 1998-08-03, Raus 11466 (B). –

**Polygonum maritimus** L.
Reported by Lavrentiadis (1956: 57) from Lake Mikri Prespa. The record may refer to *R. palustris*.

**Rumex aquaticus** L.
Records of this species need confirmation. At least one specimen in the Pavlides herbarium represents *R. hydrolapathum* Huds.

**Rumex cristatus** DC.
E of Mikri Prespa, NE of Oxia, 855 m, wet fields. 1998-
06-27, Snogerup 15640 (LD). – Between the Prespa
lakes, 3 km SW of Laimos, 855 m. Among irrigated

**Rumex kerneri** Borbás
Pili, Gemüsefelder (*Phaseolus, Lycopersicon*) am südli-
chen Ortsrand, 860 m. 1986-08-23, Raus 11462 (B). –

**Rumex sanguineus** L.
Reports by Pavlides (1985: 233) from Vromolimni and Koula as well as a record by Babalonas & Pavlides (1989) from the eastern shore of Mikri Prespa need confirmation. No material was found in the Pavlides herbarium.

**Rumex stenophyllus** Ledeb.
NO Kotas, 860 m. Feuchte Talauen, Eichenwald, Acker. 1998-08-01, Willing 71692 (B).

The locality may be slightly outside the border of PNP.

**Rumex thyrsiflorus** Fingerh.
Hag. Germanos ad orientem isthmi lacus Pres-

**PORTULACACEAE**

**Montia arvensis** Wallr.
Seepage area above Ag. Germanos, 1200 m. 2012-05-
18, Strid (photo). – Mt Varnous, 5 km ENE of Ag. Ger-
manos, 1500–1600 m. Subalpine grassland and rocky granitic slopes above small stream. 2016-06-17, Kit Tan & al. 32214 (Kit).

This species was collected already by Formánek (see Vandas 1909: 209) at “M. Peristeri in Macedonia” (probably north of the present national border).

**Portulaca nitida** (Danin & H. G. Baker) Ricceri & Arrigoni
Psarades, margin of village, trampled site towards lake
shore. 2016-09-04, Bergmeier 16/231 (Be, PAL; det. G. Domina).

This widespread microspecies of the *P. oleracea* aggregate (Uotila 2011) is certainly undercollected; for earlier records in Greece where it is considered native, see Danin (2011: 132).
**POTAMOGETONACEAE**

*Potamogeton gramineus* L.
This species was collected by Pavlides from Paliorema at Prodania-Lemos, 1984-07-12, apparently too late to be included in his 1985 publication.

*Potamogeton trichoides* Cham. & Schltdl.
Reported by Papastergiadou & Babalonas (1993: 142).

*Stuckenia pectinata* (L.) Börner
S shore of lake Megali Prespa, 3 km W of Plati, 860 m. Small lagoon near the shore. 1998-07-01, Snogerup 15881 (LD). – Wetland near mouth of Ag. Germanos stream at the SE shore of Megali Prespa, 860 m. 2016-06-16, Kit Tan & al. 32191 (Kit). – Mikri Prespa, from the island of Agios Achilleios to isthmus between the two lakes. Fotiadis (obs).

**PRIMULACEAE**

*Lysimachia atropurpurea* L.

*Fagus-Quercus* forest openings between Perivolaki-Ntinias, 1100–1300 m. 1984-07-11, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his 1985 publication).

**RANUNCULACEAE**

*Adonis aestivalis* L.
Near Vrondero, wheat field, 1090 m. 2016-07-20, Bergmeier 16/112 (Be).

A nationally endangered cereal field weed. Plants in early flowering stage collected in the same area by Strid, 2016-06-04 (58264, St) were first identified as *A. flammea*, but are likely to represent *A. aestivalis*. The only other recent collection from W Greek Macedonia appears to be Willing 150077 (B), 2006-04-11, from nomos Kozanis, SW Goules, 350 m (det. S. Meyer, 2010).

*Adonis flammea* Jacq.
Reported by Pavlides (1985: 234) from “Prespa National Park, Agioneri”, as *A. aestivalis*. However, a specimen in the Pavlides herbarium appears to represent *A. flammea* which is much more common in N Greece. – Mt Devas, *Juniperus excelsa* woodland, 870–890 m. 2010-05-21, Fotiadis 7323 (Fo).

*Anemone apennina* subsp. *blanda* (Schott & Kotschy) Nyman
Mt Triklario: Place called Agioneri 4 km SSW of the village of Oxia, 1400 m. Meadow with rocky limestone outcrops in opening of *Fagus* forest. 2016-04-27, Strid 58303 (St).

*Clematis viticella* L.
2km SW of the village of Psarades, 860 m. In shingle by shore of lake Megali Prespa. 2011-06-26, Strid (obs and photo).

*Nigella damascena* L.

*Ranunculus aduncus* Gren.
Reported by Pavlides (1985: 235), based on a record from Antartiko by Lavrentiades (1956). *R. aduncus* is a species of the Alps, very unlikely to occur in the Prespa area. The record probably refers to a form of *R. sartorianus* Boiss. & Heldr.

*Ranunculus aquatilis* L.
Records from the Prespa area probably refer to *R. trichophyllus* Chaix.

*Ranunculus bulbosus* L.
A record from the vicinity of Agios Germanos (Pavlides 1985: 236, referring to Zaganiaris 1940) probably refers to *R. neapolitanus* Ten.

*Ranunculus demissus* DC.
Records from the Prespa area probably refer to *R. sartorianus* Boiss. & Heldr.

*Ranunculus ficarioides* Bory & Chaub.

*Ranunculus garganicus* Ten.
The first Greek record of this amphi-Adriatic species is a collection by Spreitzenhofer from Kerkira (1877-04-11, 61; B, G-BOIS, WU), subsequently described as *R. spreitzenhoferi* Heldr. It has recently been established that the species is fairly common in NC and NW Greece, extending southwards to the island of Lefkas (20 gatherings by Strid, 15 by Willing and several by other collectors).

**Ranunculus lanuginosus** L.
Reported by Pavlides (1985: 237) from two localities in the Prespa area. However, specimens in the Pavlides herbarium belongs to *R. polyanthemoides*.

**Ranunculus neapolitanus** Ten.
See under *R. bulbosus*. *R. neapolitanus* has subsequently been confirmed in PNP.

**Ranunculus ophioglossifolius** Vill.

**Ranunculus oreophilus** M. Bieb.
Reported by Pavlides (1985: 237) from Mt Varnous. However, a specimen in the Pavlides herbarium belongs to *R. sartorianus* Boiss. & Heldr.

**Ranunculus paludosus** Poir.
Reported by Pavlides (1985: 237) from the vicinity of Koula. However, a specimen in the Pavlides herbarium belongs to *R. garganicus*.

**Ranunculus platanifolius** L.

**Ranunculus polyanthemoides** Boreau
Mt Varnous, 5 km S-SSE of the peak of Kortsou Toumba (peak 2334). Meadows near a spring known as Vrisi Kalo Nero, 1800 m. Granite. 1981-06-26, Strid 18120 (B, C, G). – Same area. 2016-06-05, Strid 58385 (St). – Cave of Zacharidis, c. 1 km W of Pili, 930–1050 m, Deciduous oak woodland. 2016-06-16, Kit Tan & al. 32213 (Kit, St). – See also under *R. lanuginosus*.

**Ranunculus rionii** Lagger
SW of Lefkonas, on the E shore of Lake Mikri Prespa, reedbed. 2016-07-19, Bergmeier 16/99 (Be).

**Ranunculus sartorianus** Boiss. & Heldr.
Several collections from Mt Varnous where it is the most common *Ranunculus* at high altitude.

**Ranunculus velutinus** Ten.

**Thalictrum foetidum** L.
This species was reported by Pavlides (1985: 238) from the Sfi-ka area, but a specimen in the Pavlides herbarium identified as *T. foetidum* belongs to *T. minus* subsp. saxatile.

**Thalictrum minus** L. subsp. *saxatile* DC.
Just NW of western end of sandy spit between Mikri and Megali Prespa, 870 m. Rocky limestone slopes with woodland of *Juniperus excelsa* and *Quercus trojana*. 1999-05-31, Strid 49148 (G). – See also under *T. foetidum*. – Relatively common to the area of Agios Georgios and Cape of Roti. Fotiadis (obs).

**RESEDACEAE**

**Reseda tymphaea** Hausskn.
NO Pili, 870 m. Felswand, Kieferngebüschem. 1998-07-30, Willing 71591 (B).

**RHAMNACEAE**

**Frangula rupestris** (Scop.) Schur
Along walking trail from Mikrolimni to ruins of Kranies settlement, 860–950 m. Rocky limestone slopes, mostly with deciduous woodland. 2010-06-06, Strid 57173 (G).

**Rhamnus cathartica** L.
By NE shore of Lake Mikri Prespa, 855 m. At edge of wet meadow. 2009-05-18, Strid 56808 (G, St). – Along walking trail from Mikrolimni to ruins of Kranies settlement, 860–950 m. Rocky limestone slopes, mostly with deciduous woodland. 2010-06-06, Strid 57179 (G, St).
Rhamnus lycioides subsp. oleoides (L.) Jahand. & Maire
Reported by Pavlides (1985: 238) from the vicinity of Koula. The record is out of range and needs confirmation.

Rhamnus saxatilis subsp. rhodopea (Velen.) Aldén
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of Juniperus excelsa and Quercus troja-na. 1999-05-31, Strid & al. 49133 (G).

Pavlides (1985: 238) reported subsp. saxatilis from Mt. Devas.

ROSACEAE

Alchemilla alpina L.
A record from "Kalo Nero" by Pavlides (1985: 239, referring to Zaganiaris 1940) may refer to A. ampligryrea Buser.

Alchemilla flabellata Buser

Alchemilla gorcensis Pawl.

Alchemilla heterophylla Rothm.

Alchemilla lanuginosa Rothm.
5 km S-SSE of the peak of Kortsa Toumba (peak 2334), 1700–1800 m. Meadows near a spring known as Vrisi Kalo Nero. Granite. 1981-06-26, Strid & al. 18129a (C).

Alchemilla obtusa Buser

Alchemilla reniformis Buser
This species was reported by Pavlides (1985: 239), between Sfika and Mavrou Rachi. The record is feasible but the locality is just outside the PNP.

Alchemilla straminea Buser
Mt Varvourn, in cacumine Kryoneri, 2100 m, solo granitico. 1977-08-08, Phitos & Kamari 16110 (UPA).

Amelanchier ovalis subsp. integrifolia (Boiss. & Hohen.) Bornm.
Fagus forest, Dikorfo, 1400 m. 24-5-85, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his 1985 publication). – National park of Mikri Limni Prespa, above Oxia, 1150 m. Ostrya woods over limestone. 1999-07-05, Schuler 99/867 (B). – 2.5 km SW of the village of Oxia, 1200 m. Deciduous woodland on rocky limestone slope. 2012-05-21, Strid 57377 (G, St).

Aphanes arvensis L.
Grassland south of Mikrolimni, by ruins of Kranies settlement, 860 m. Fotiadis & Vrahnakis 7213 (Fo).

Cotoneaster parnassicus Boiss. & Heldr.
Ad radices or. montis Kalo Nero supra pagum Plati, 1000 m. 1973-08-03, Greuter 11524 (ATH).

Aphanes arvensis L.
Grassland south of Mikrolimni, by ruins of Kranies settlement, 860 m. Fotiadis & Vrahnakis 7213 (Fo).

Cotoneaster parnassicus Boiss. & Heldr.
Ad radices or. montis Kalo Nero supra pagum Plati, 1000 m. 1973-08-03, Greuter 11524 (ATH).

Cotoneaster tomentosus (Aiton) Lindl.
Pavlides (1985: 239) reported C. nebrodensis (a synonym of C. tomentosus) from the Prespa area, but specimens in his herbarium belong to C. integerrimus. It is quite possible that true C. tomentosus occurs in the area, but there are no confirmed records. It was listed for Mt Triklario by Fotiadis & al. (2012b), with no details available. [Confirmed by Bergmeier in 2017 for Mt Triklario].

Fragaria moschata Duchesne
Pavlides (1985: 240) reported this species from Kalo Nero, Dikorfo
and Elatia. It is not otherwise known in Greece, and the records need confirmation.

**Geum rivale** L.
Reported by Pavlides (1985: 240) from Mt Varnous, Gaidouritsa, 1500 m. However, a specimen in his herbarium belongs to *G. coccineum* Sm.

**Potentilla emilii-popii** Nyar.
This species was reported by Pavlides (1985: 241) from Mt Trikliario just outside the PNP. A specimen in the Pavlides herbarium identified as *P. emilii-popii* belongs to *P. detommasii* Ten. As currently understood *P. emilii-popii* is endemic to Bulgaria and Romania.

**Potentilla hirta** L.
Pavlides (1985: 241) reported this species from Trikliario and Falakra. It is not otherwise known in Greece, and the records need confirmation.

**Potentilla elaeagifolia** Pallas
Records by Pavlides (1985: 243) refer to *P. spinosa*. In Greece *P. elaeagifolia* is restricted to the far north east.

**Rosa agrestis** Savi
Hag. Germanos ad orientem isthmi lacus Prespa, 900–1000 m, substr. silic. 1972-06-21, Rechinger 44968 (St). – Above Ag. Germanos, place known as Potistra, 1430 m, dry grassland. 2016-08-31, Bergmeier 16/167 (Be).

**Rosa caesia** Sm.
A report by Pavlides (1985: 244) is probably incorrect. The species is not otherwise known in Greece.

**Rosa gallica** L.
Reported by Pavlides in an unpublished addition to his 1985 catalogue [no details available]. The record is feasible but needs confirmation. [Confirmed by Bergmeier in 2017].

**Rosa heckeliana** Tratt.

**Rosa pulverulenta** M. Bieb.
Mt Trikliario: Area called Agioneri at northern part of summit area, 1550–1740 m. Rocky limestone slopes with grassland and scattered deciduous woodland. 2016-06-07, Strid 58466 (G, St).

**Rosa turcica** Rouy
Hag. Germanos ad orientem isthmi lacus Prespa, substr. silic., 900–1000 m. 1972-06-21, Rechinger 44963 (St).

**Rosa villosa** L.

**Rubus candicans** Rchb.
Records by Pavlides (1985: 244) are probably incorrect and referable to another species of *Rubus* ser. Discolores.

**Rubus sanctus** Schreb.

**Rubus saxatilis** L.
Reported by Pavlides (1985: 244). However, a specimen in his herbarium belongs to *R. idaeus* L.

**Rubus schleicheri** Tratt.
Records by Pavlides (1985: 244) are probably incorrect.

**Sanguisorba officinalis** L.
Reported in Mountain Flora of Greece (1: 400, 1986) from Mt Varnous, based on an observation by Strid (no details available).

**Sorbus aucuparia** L.
4 km E of Agios Germanos, 1400 m. Damp meadows over granite in opening of *Fagus* forest. 2010-06-07, Strid (obs and photo). – Mt. Varnous, above Ag. Germanos, 1700–1800 m, margin of (beech-)fir forest. 2016-08-31, Bergmeier (obs).

**Sorbus graeca** (Spach) Lodd. ex S. Schauer (aggr.)
2.5 km SW of the village of Oxia, 1200 m. Deciduous woodland on rocky limestone slope. 2012-05-21, Strid 57378 (St). – Mt. Varnous, E of Ag. Germanos, 2–3 km SE of place called Potistra, single trees and bushes on
grassy slope near fir forest, 1760 m. 2016-08-31, Bergmeier 16/174 (Be).

Taxonomic delimitation in the *S. graeca* complex in the Balkans is not well understood. The similar *S. aria* has also been found in the PNP. Further examination is required.

*Sorbus umbellata* subsp. *koevessii* (Pénzes) Kárpáti
Pavlides (1985: 245) reported this subspecies from Trilkario. It is not otherwise known in Greece and the record needs confirmation.

**RUBIACEAE**

*Cruciata pedemontana* (Bellardi) Ehrend.

*Galium advenum* Krendl
Just NW of western end of sandy spit between Mikri and Megali Prespa, 900–950 m. Rocky limestone slopes with woodland of *Juniperus excelsa* and *Quercus trojana*. 1999-05-31, Strid & al. 49101 (G, St).

*Galium asparagifolium* Boiss. & Heldr.
4.5–5 km from spring known as Vrisi Kalo Nero along road to the village of Ajios Germanos, place called Ramma, 1400 m. Schist. 1981-06-28, Stamatiadou 222215 (ATH). – SE of Megali Prespa, SW of Lemos, 850 m, dry hillside. 1998-07-01, Snoegerup 15904 (LD).

*Galium cinereum* All.
A record by Pavlides (1985: 246) is certainly incorrect.

*Galium debile* Desv.

*Galium lucidum* All.
A record by Pavlides (1985: 246) is certainly incorrect.

*Galium oreophilum* Krendl
2–5 km from Pili towards Vrondero, by the hill of Velika Glavia, 950–1050 m. Forest with *Quercus, Fraxinus, Acer* and *Buxus*. Stony calcareous ground. 1972-06-22, Stamatiadou 15835 (ATH, St). – Between the 12th and 13th pyramid of the Greek-Albanian frontier, W of the village of Vrondero, place named Vroatseria, 1300–1400 m. Stony calcareous ground. 1972-06-23, Stamatiadou 15916 (ATH).

*Galium pseudaristatum* Schur

*Galium tricornutum* Dandy
NO Kotas, 900 m. Eichenwald, Feuchtwiese, Ackerrand. 2004-05-07, Willing 125633 (B). – Along forest road between Psarades and Pyli, near place called Pyxos sheepfolds, 1020 m. Open deciduous oak woodland and cultivated fields with many weeds. 2016-06-30, Strid 58367 (St). – Near Vrondero, wheat field, 1090 m. 2016-07-20, Bergmeier (obs).

*Rubia tinctorum* L.
Vrondero, village. 2016-09-04, Bergmeier 16/244 (Be).

**RUTACEAE**

*Haplophyllum coronatum* Griseb.
By the village of Vrondero, 1100 m. Fallow fields around the military posts. 1972-06-22, Stamatiadou 15869 (ATH, C). – Near isthmus of Prespa, on road to the village of Psarades, 900–950 m. Rocky limestone slopes with scrub of *Juniperus oxycedrus* and *J. excelsa*. 1995-05-07, Strid 38934 (G, LD). – Along walking trail from Mikrolimni to ruins of Kranies settlement, 860–950 m. Rocky limestone slopes, mostly with deciduous woodland. 2010-06-06, Strid (obs). – Island of Slogi (Mikri Prespa), grassland, 855 m. 2010-06-10, Fotiadis 7451 (Fo). – Near the shore of Lake Megali Prespa SW of

**SALICACEAE**

*Populus alba* L.
Shores of Megali Prespa, west of the village of Lemos, 860 m. A few individuals, together with *Populus nigra* and *Betula pendula*. Fotiadis & Vrahnakis (obs).

*Salix aurita* L.
A record by Pavlides (1985: 248) probably refers to *S. cinerea*.

*Salix lapponum* L.
A record by Pavlides (1985: 248) is certainly incorrect.

*Salix pentandra* L.
Pavlides (1985: 239) reported this species from Agios Germanos and Stara streams. It is not otherwise known in Greece and the records need confirmation.

**SANTALACEAE**

*Comandra umbellata* subsp. *elegans* (Spreng.) Piehl

*Thesium divaricatum* Mert. & W. D. J. Koch
National park of Mikri Limni Prespa, above Oxia, 1480 m. Dry grassland over limestone. 1999-07-05, Schuler 99/853 (B).

**SAXIFRAGACEAE**

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**SCROPHULARIACEAE**

*Scrophularia nodosa* L.

*Verbascum blattaria* L.
An unprecise record in Pavlides (1985: 253, based on Formánek) is feasible but needs confirmation.

*Verbascum eriophorum* Godr.
Reported from Mt Triklario by Fotiadis & al. (2012b). No details are available, but the record is feasible.

*Verbascum flavidum* (Boiss.) Freyn & Bornm.
Mt Devas, just E of the summit. Mixed woodland on rocky limestone slope. 2012-05-21, Strid 57384 (St).

*Verbascum gloeotrichum* Hausskn. & Heldr.
Sandy spit between Mikri and Megali Prespa, near western end, 855 m. Dry places. 1999-05-31, Strid & al. 49180 (Kit, St).

*Verbascum nigrum* L.
Quercus woodland in the upper part of Mt Devas, 1250–1350 m. Fotiadis & Vrahnakis (obs).

*Verbascum pulverulentum* Vill.
Records by Pavlides (1985: 253) need confirmation.
Verbascum sinuatum L.
Mt Devas, halfway between the chapel (at saddle on main road Koula-Psarades) and the summit, 1200 m. Rocky limestone ridge with open woodland of Quercus trojana and Juniperus excelsa. 2012-05-21, Strid (photo).

Verbascum thapsus L.
A record by Pavlides (1985: 253) is probably incorrect.

SOLANACEAE

Petunia × hybrida (Hook.) Vilm.
Mikrolimni, village. 2016-09-05, Bergmeier 16/260 (Be).
Casually occurring as an escape from ornamental flowerbeds. The nomenclature and status of the introduced plants in Europe is unsettled.

Solanum elaeagnifolium Cav.
Koula. See Babalonas & Pavlides (1989). – Subsequently observed by Kazoglou in flowerbeds of a gym east of the isthmus between the two lakes. This species is spreading aggressively along roads in N Greece, having been first introduced in Thessaloniki around 1940. It is apparently still rare in PNP.

Solanum physalifolium Rusby
Karyes. Krautfluren am Ort, 935 m. 2014-10-09, Willing 250207 (B). – Lemos, bean field. 2016-08-30, Bergmeier 16/165 (Be).
Common as a bean field weed. Plants seen are referable to var. nitidibaccatum (Bitter) Edmonds.

Solanum villosum Mill. subsp. villosum
Psarades, village green. 2016-09-06, Bergmeier 16/278 (Be).

SPARGANIACEAE

Sparganium emersum Rehmann

THYMELAEACEAE

Daphne laureola L.
This species occurs in the Prespa area according to a dot map in Boratyński, Browicz & Zieliński (1992: 91). No details are available, but the record is feasible.

Daphne oleoides Schreb.
Mt Triklario: Area called Agioneri at northern part of summit area, 1550–1740 m. Rocky limestone slopes with grassland and scattered deciduous woodland. 2016-06-07, Strid 58460 (St).

Thymelaea passerina (L.) Coss. & Germ.
Village of Vrondero, near the military post, 1100 m. Semi-cultivated fields and openings in woodland. 1985-07-20, Stamatiadou 22885 (ATH).

TILIACEAE

Tilia platyphyllos Scop.
Between the village of Oxia and ruins of Sfika settlement, 900–1100 m. Rocky slopes in open deciduous woodland. Limestone. 2010-06-06, Strid 57152 (G, St).

Tilia rubra DC.
Between Vrondero and the abandoned village of Agathoto, deciduous woodland. 2016-07-20, Bergmeier 16/130 (Be). – Between Oxia and the abandoned settlement of Sfika, deciduous oak woodland. 2016-09-05, Bergmeier 16/273 (Be).
Records of the similar T. cordata from the area are questionable and should be re-examined.

VALERIANACEAE

Valeriana italica Lam.
1 km WSW of the village of Psarades, 900 m. Mixed deciduous/evergreen scrub 2–3 m tall, with much Buxus sempervirens. Rocky limestone hills. 1995-05-08, Strid 38955 (C). – Along walking trail from Mikrolimni to ruins of Kranies settlement, 860–950 m. Rocky limestone slopes, mostly with deciduous woodland. 2010-06-06, Strid (obs).

Valerianella costata (Steven) Betcke
Reported by Pavlides (1985: 262) from the shores of Lake Megali Prespa. However, a specimen in his herbarium belongs to V. carinata Loisel.

Valerianella discoidea (L.) Loisel.
SW Lemos, 860 m. Sandige Krautfluren. 2004-05-11, Willing 127065 (B).

Valerianella pumila (L.) DC.
Along walking trail from Psarades to Cape Roti, 860–900 m. Rocky limestone slopes with mixed scrub including abundant Buxus sempervirens. 2016-04-26, Strid 58272 (St).
Valerianella turgida (Steven) Betcke

VERONICACEAE

Digitalis ferruginea L.
Mt Varnous, above Vigla pass along road to the windmills, 1600 m. Road embankment in Fagus forest. 2016-08-01, Strid (obs).

Digitalis lanata Ehrh.
A record by Pavlides (1985: 250) needs confirmation. A specimen in the Pavlides herbarium is very young and not possible to determine with certainty.

Digitalis viridiflora Lindl.
On the Fagus forest edge at Dikorfo-Kranias, 1600 m. 1984-06-21, Pavlides (specimen seen in the Pavlides herbarium, apparently collected too late to be included in his 1985 publication).

Veronica kindlii Adamović
A species of uncertain status, described from Mt Voras and also reported from Mt Varnous (cf. Pavlides 1985: 254).

Veronica orsiniana Ten.

Linaria angustissima (Loisel.) Borbás
Records by Pavlides (1985: 251) need confirmation.

Linaria simplex (Willd.) DC.

Veronica anagalloides Guss.
SW of Lefkonas, E shore of Lake Mikri Prespa, reedbed margin. 2016-07-19, Bergmeier 16/102 (Be). – Psarades, shore of Lake Megali Prespa. 2016-09-06, Bergmeier 16/285 (Be).

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VIOLACEAE

Viola allchariensis G. Beck
Reported by Pavlides (1985: 263) from Mt Varnous. The record is feasible but needs confirmation. V. allchariensis is now regarded as a synonym of V. frondosa (Velen.) Hayek.

Viola parvula Tineo
Listed from “Kalo Nero” in MFG (1: 638, 1986). No details available.
Viola riviniana Rchb.
Near the windmills above Vigla pass, 1800 m. Subalpine meadows and upper edge of Fagus forest. Granite. 2015-05-21, Strid (obs and photo).

Viola velutina Formánek
This is the most common violet on Mt Varnous (several collections), occurring both in violet and yellow forms and often in large quantity.

Results
About 610 species of vascular plants have been added to the area. On the other hand, some records listed by Pavlides (1985) have been found to be incorrect or dubious (as specified in smaller font in the list below). As a result, the number of species of native and naturalized vascular plants now stands at 1769, as compared to the 1249 listed for the same area by Pavlides. Further exploration is certain to increase the number, possibly to nearly 2000. In the north-east the borders of the PNP cut across the large, granitic massif of Mt Varnous, and some species now recorded only just outside the borders are likely to be found also inside the park. In the south are two similar and floristically rich mountains of karstic limestone: Triklario (1749 m), which for the larger part is inside the PNP, and Boutsi (1776 m), which is outside. Several species now recorded only for Boutsi may well occur also on Triklario, e.g., Anthyllis aurea, Asplenium ruta-muraria, Dianthus sylvestris, Geocaryum pindicolum, Laserpitium siler, Nepeta argolica, Paronychia macedonica, Scandix macrorhyncha and Verbascum baldaccii. A number of “trivial” lowland species are also certain to be added to the flora of the Prespa National Park in the future. New and excluded species records are listed below; within the three major groups (vascular cryptogams, gymnosperms and angiosperms) records are listed alphabetically according to family, genus and species. With few exceptions taxonomy and nomenclature follows Dimopoulos & al. (2013). Place names have been transliterated according to a simple, semi-phonetic system akin to what is used on Greek road signs; in direct citations the original spelling has been retained. Public herbaria are indicated by their standard abbreviations; Be, Fo, Gott, Kit, Schu and St stand for the private herbaria of Erwin Bergmeier, Georgios Fotiadis, Günter Gottschlich, Kit Tan, Andreas Schul-er and Arne Strid, respectively. Voucher specimens cited have been seen by at least one of the authors, unless otherwise indicated.

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References


