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Additions and amendments to the flora of Albania

Abstract

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Floristic results mainly of four field trips to Albania in 2007 are presented. The trips touched the surroundings of the towns Vlorë, Gjirokastër and Kërçë, the region Dumre as well as Thatë, Vallamarë and Korab Mts. Altogether 24 angiosperm taxa, of which 9 are new for the flora of the country, are reported and discussed. Several taxa of rare or questionable occurrence are confirmed for the country, and taxonomy and distribution are clarified for other taxa. For each taxon also the distribution in the neighbouring countries is given.

Additional key words: angiosperms, taxonomy, chorology, species inventory, Balkan peninsula

Introduction

Three inventories of the Albanian vascular plants were published in the recent past. The field guide by Demiri (1983) lists 3688 taxa, of which 207 are cultivated. The 4-volume Flora e Shqiperise (Paparisto & al. 1988; Qosja & al. 1992, 1996; Vangjeli & al. 2000) comprises 3757 taxa, including 173 cultivated species. The field guide by Vangjeli (2003), based on the four volumes of the Flora e Shqiperise, provides minor corrections and contains 3758 taxa. Recently many new vascular plant species were reported from Albania by Dimitrov (1997, 1998, 2001a-b), Greuter & Raus (2000), Tan & Mullaj (2000), Rakaj (2006), Shuka & Jahollari (2007), Barina & Pifkó (in press) while the reports of others were corrected as erroneous (Polatschek 1983; Raus 1987; Niketić 2005). Our additions and amendments to the flora of Albania highlight that the distribution of species is still insufficiently known and also that further taxa may be members of the Albanian flora.

Material and methods

The results given in the present contribution are based on our field trips in 2007 with a few additions from earlier years.

The geographic coordinates of the collecting localities were recorded using a Garmin eTrex Venture cx GPS and the data were downloaded with the program Ozi Explorer (Newman & Newman 2005). The data were processed and the map in Fig. 1 was generated with ArcView 3.0 (ESRI 1991).

The names of localities are based on the Russian topographic maps of Albania of 1: 50 000 scale (Generalnyj Shtab 1986) the geographical map of Albania (Anon. 1983) and Lafe & Kabo (2002).

The plants were determined by the first author if not stated otherwise. The collected plants are deposited in the Herbarium of Hungarian Natural History Museum (BP).

In the species list only the codes (numbers 1-45) of the collecting localities and the first author's collection numbers are given. The locality data, collecting dates and collector teams (in italics) to these codes are given in the following list of localities.

List of localities

District of Dibër (Rrethi i Dibrës), Korab Mts (Mali i Korabit), Z. Barina, Gy. Pinke & D. Schmidt

1. c. 1.8 km N of Peshkopi and c. 700 m N of Starevec; at the shore of a pond, 41.703780°N, 20.439400°E, 981 m, 29.6.2007
2. 41.704030°N, 20.439430°E, 981 m, 29.6.2007
3. c. 3.5 km ENE of Peshkopi and c. 600 m N of Bellovë; in flush, 41.703170°N, 20.476330°E, 1107 m, 25.6.2007
4. c. 3.6 km NE of Peshkopi, between Cerjan and Bahutaj, c. 2.1 km W of Cerjan and c. 1.8 km ESE of Bahutaj, on the southwestern ridge of Mt 'Maja e Gramës' (2345 m) towards Peshkopi; in cereal field, 41.713590°N, 20.459830°E, 1533 m, 29.6.2007
5. c. 4.9 km E of Peshkopi, between Bellovë and Zagradi, c. 700 m W of Zagradi; in hay-field, 41.705730°N, 20.494260°E, 1357 m, 30.6.2007
6. c. 4.9 km NE of Peshkopi, between Cerjan and Bahutaj, on the southwestern ridge of Mt 'Maja e Gramës' (2345 m); in flush, 41.722540°N, 20.473100°E, 1746 m, 26.6.2007
7. c. 5.4 km E of Peshkopi, S of Zagradi; along a footpath, 41.700700°N, 20.500150°E, 1202 m, 30.6.2007
8. c. 6.2 km NNE of Peshkopi, on the western ridge of Mt 'Maja e Gramës' (2345 m), c. 2.6 km ENE of Bahutaj; in beech forest, on limestone, 41.737230°N, 20.467540°E, 1624 m, 27.6.2007
9. c. 6.8 km NE of Peshkopi, on the western ridge of Mt 'Maja e Gramës' (2345 m), c. 3.3 km NNW of Cerjan and c. 3.1 km ENE of Bahutaj; in beech forest, 41.740560°N, 20.475250°E, 1649 m, 27.6.2007
10. c. 7.3 km NE of Peshkopi, on the northern slope of Mt 'Maja e Gramës' (2345 m), above the valley of the brook 'Pr. i Gramës', c. 4.2 km ENE of the Bahutaj, 41.741030°N, 20.486750°E, 1632 m, 27.6.2007
11. 41.740970°N, 20.486620°E, 1567 m, 27.6.2007
12. 41.741490°N, 20.483570°E, 1720 m, 27.6.2007
13. c. 9.3 km NE of Peshkopi and c. 4.8 km NNE of Cerjan, area 'Bixhka e Zonjave', at the western foot of an elevation of '2439 m', c. 1.2 km W of the Albanian-Macedonian border; in flush, 41.752060°N, 20.508390°E, 1914 m, 28.6.2007

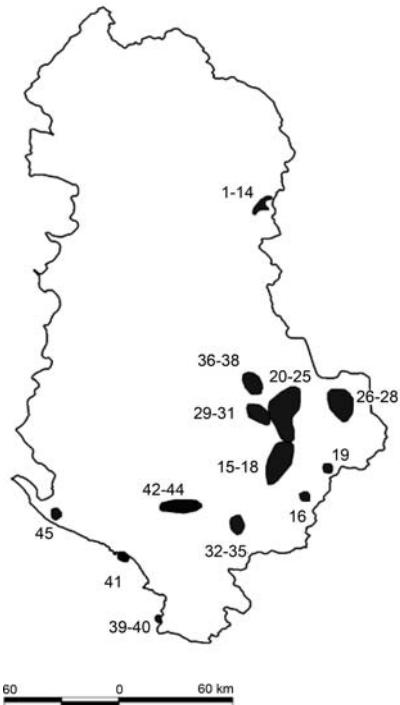


Fig. 1. Collecting sites of taxa listed in the present paper; the numbers refer to the List of localities.

14. E part of Peshkopi in the valley of the brook ‘Pr. i Banjës’; at the foot of a bridge, 41.685990°N, 20.446880°E, 725 m, 30.6.2007
 District of Kolonjë (Rrethi i Kolonjës), *Z. Barina, G. Király, Cs. Németh, & D. Pifkó*
15. 1 km N of Qesara; at the shore of a pond, 40.422010°N, 20.532320°E, 1275 m, 21.7.2006
 16. Ersekë, in the centre of the town, 20.7.2006
 District of Korçë (Rrethi i Korçës), *Z. Barina, Cs. Németh, & D. Pifkó*
17. c. 1.15 km NNW of ‘Vithkuq’, on an elevation of ‘1391 m’; on shady limestone rock, 40.537670°N, 20.579240°E, 1395 m, 27.5.2007
 18. c. 4.2 km S of Voskopojë, c. 800 m W of Mt ‘Mustafalari’ (1466 m), near the road towards Gjergjevicë; in flush, 40.594910°N, 20.597070°E, 1465 m, 19.5.2007
 19. Grammos Mts (Mali i Grammozit), c. 6. km SW of Dardhë, c. 2 km ESE of the peak of Mt Lofka (Maja e Lofkes, 1877 m); in serpentine scree, 40.479680°N, 20.781140°E, 1630 m, 21.5.2007
- Region ‘Moker Gore’, *Z. Barina, Cs. Németh & D. Pifkó*
20. between Zvarisht and Strelcë, above the valley of River Devoll, on Mt ‘Proseh’ (932 m); in dry grassland, on serpentine, 40.721520°N, 20.542440°E, 780 m, 23.5.2007
 21. c. 2.15 km E of Strelcë, near the peak of Mt ‘Rrumbulaja’ (1047 m); in open grassland, on serpentine, 40.736340°N, 20.535410°E, 960 m, 23.5.2007
 22. c. 1.9 km NE of Strelcë in the limestone gorge of the brook ‘Verba’, between Mt ‘Mele-nice’ (1213 m) and cliff ‘Selca’; on shady limestone rock, 40.748200°N, 20.521810°E, 933 m, 23.5.2007
 23. c. 2.2 km ENE of ‘Osnat’, c. 400 m SE of the peak of Mt ‘Guri i Kamjës’ (1461 m); in open, acidophilous grassland, on conglomerate, 40.834000°N, 20.617150°E, 1391 m, 24.5.2007
 24. c. 2.9 km NE of ‘Osnat’, c. 750 m NW of the peak of Mt ‘Guri i Kamjës’ (1461 m); in acidophilous, open grassland, on conglomerate, 40.843180°N, 20.620420°E, 1337 m, 24.5.2007
 25. c. 4.5 km S of Voskopojë, c. 700 m W of Mt ‘Mustafalari’ (1466 m), near the road towards Gjergjevicë; in an open flush, on serpentine base rock, 40.592610°N, 20.598490°E, 1470 m, 19.5.2007
- Thatë Mts (Mali i Thatë)
26. c. 1.2 km ENE of Podgorije, in the valley at the eastern foot of Mt ‘Shipripani’ (1463 m); in grazed grassland, on limestone, 40.820340°N, 20.817530°E, 1474 m, 20.5.2007, *Z. Barina, Cs. Németh & D. Pifkó*
 27. c. 1.4 km N of ‘Zvezda’, c. 1.9 km SSE of the peak of Mt ‘Zvezda’ (1833 m); in bushland, on limestone, 40.745220°N, 20.866030°E, 1375 m, 25.5.2007, *Z. Barina, Cs. Németh & D. Pifkó*
 28. c. 2.15 km WNW of ‘Liqenas’, c. 2.4 km E of the peak of Mt ‘Buz e Korutes’ (2028 m), on the southern ridge of an elevation of 2034 m; in karstic shrubland, 40.795610°N, 20.879640°E, 1235 m, 22.5.2007, *Z. Barina & D. Pifkó*
- Vallamare Mts (Mali i Vallamares), *Z. Barina, & D. Pifkó*
29. c. 1.2 km N of Polichisti, towards the peak ‘maja e Lenies’ (2012.2 m), at the shore of a shallow mountain lake, 40.717360°N, 20.498980°E, 1133 m, 15.8.2007
 30. c. 2.9 km NNE of Nikollarë and 2.2 km SW of Shales, on the northeastern slope of an elevation of ‘1785 m’, above the valley of a brook, 40.728860°N, 20.471320°E, 1653 m, 15.8.2007
 31. qafa Mushka, c. 3.6 km N of Moglice and c. 3.5 km E of Shenepremte; in flush, 40.751310°N, 20.435910°E, 1806 m, 15.8.2007
- District of Përmet (Rrethi i Përmetit), *Z. Barina & D. Pifkó*
32. Nemercke Mts (Mali i Nemerckes); northern slope of Mt ‘Policanı’ (maja e Policanit, 2138 m), 900 m E of pass Dhembeli (qafa Dhembelit, 1456 m); in *Carpinus* forest, 40.200860°N, 20.345950°E, 1294 m, 24.5.2006

- 33. Përmet, southern part of the town; by the roadside, 40.230420°N, 20.352970°E, 270 m, 26.5.2006
- 34. 40.231460°N, 20.349690°E, 270 m, 26.5.2006
- 35. 40.230120°N, 20.351490°E, 287 m, 26.5.2006

District of Pogradec (Rrethi i Pogradecit), Vallamare Mts (Mali i Vallamares), *Z. Barina & D. Pifkó*

- 36. in the dry bottom of lake ‘Guri i Topit’, c. 750 m, WNW of the peak of Mt ‘Guri i Topit’ (2119 m), c. 5.9 km NNE of Grabove, 40.841270°N, 20.446820°E, 1847 m, 18.8.2007
- 37. on the eastern slope of Mt Lukova (1976 m), c. 1.6 km WSW of Shpellë; on shady serpentine rocks, 40.900280°N, 20.415890°E, 1421 m, 19.8.2007
- 38. on the eastern slope of Mt Lukova (1976 m), c. 7. km NNE of Gribë and c. 1.8 km WSW of Shpellë; in stony beach forest, 40.900420°N, 20.410900°E, 1621 m, 18.8.2007

District of Sarandë (Rrethi i Sarandës), *Z. Barina, A. Csóka, D. Pifkó, B. Pintér*

- 39. c. 2.3 km SW of ‘Ksamil’, near the military observation post; in grazed Mediterranean bushland, on limestone, 39.754810°N, 19.980770°E, 85 m, 19.4.2007
- 40. 39.753720°N, 19.980450°E, 88 m, 19.4.2007
- 41. near bay ‘Grava’, c. 1.8 km SW of Qeparo; in salty marsh at the seashore, 40.053550°N, 19.813650°E, 1 m, 17.4.2007

District of Tepelenë (Rrethi i Tepelenës)

- 42. c. 3.5 km W of Këlcyrë, in the valley of river Vjosë (Lumi i Vjosës), near the monastery; in a brooklet, 40.298010°N, 20.153670°E, 168 m, 21.4.2007, *Z. Barina, A. Csóka, D. Pifkó & B. Pintér*
- 43. Griba Mts (Mali i Gribës), c. 2.5 km S of Tepelena, between the ‘Bridge Bença’ and the prison of Tepelena, in the valley of river Bença; limestone gorge, 40.280270°N, 20.014120°E, 168 m, 4.5.2005, *Z. Barina & G. Király*
- 44. Shendelise Mts, eastern foot of Mt ‘Beçishti’ (1230 m), c. 2.5 km SSE of Mezhgoran, near the valley of river Vjosë (Lumi i Vjosës); in limestone rock flow, 40.295710°N, 20.105480°E, 174 m, 21.4.2007, *Z. Barina, A. Csóka, D. Pifkó, B. Pintér*
- 45. District of Vlorë (Rrethi i Vlorës), ‘Rreze e Kanalit’, c. 1.5 km SSW of Dukat i Ri, on the northeastern slope of Mt ‘Vili’ (1362 m); in *Carpinus orientalis* forest, 40.257350°N, 19.501950°E, 794 m, 14.4.2007, *Z. Barina & D. Pifkó*

Results

Altogether 24 taxa of angiosperms (listed alphabetically by genus name) are reported, of which 9 were not recorded before from Albania. A second group of taxa listed concerns such with contradictory treatments in the different Albanian floras and floristic contributions, for which we clarify distribution and/or taxonomy. A third group concerns very rare taxa in Albania, the occurrence of which is confirmed or the known distribution of which is significantly extended.

Camelina microcarpa Andrz. ex DC. – loc. 28: 11580, loc. 4: 12381

Albanian floras (Demiri 1983; Paparisto & al. 1988; Vangjeli 2003) discuss only *Camelina rumelica* Velen. despite Dörfler’s record of *C. microcarpa* (in Hayek 1924: 594) from NE Albania (‘lichte Stellen buschiger Hänge in der Skoza-Schlucht bei Džuri’). According to Tan (2001: 247-248) *C. microcarpa* is widespread in Greece and “*C. rumelica* merges into *C. microcarpa* and cannot be maintained as a separate species”. However, the two taxa in Central Europe seem distinguishable by the colour (Jávorka 1925: 428; Săvulescu 1955: 382; Pignatti 1982: 440; Smejkal 2003) and size of the sepals (Jávorka 1925: 428; Săvulescu 1955: 382; Jovanović-Dunjić 1972; Pignatti 1982: 440; Meikle 2002; Smejkal 2003), the hair types on stem and leaves (Jávorka

1925; Săvulescu 1955: 382; Smejkal 2003), the duration of the basal leaves (Săvulescu 1955: 382; Meikle 2002; Smejkal 2003) and the length of the peduncle of the silicula (Pignatti 1982: 440). The sepals of our plants are c. 2-3.5 mm long and the basal leaves are more or less withered at anthesis. The leaves and stem are covered with short, branched and stellate hairs and sparsely with simple, somewhat longer hairs. Our plants therefore belong to *C. microcarpa*, and the Albanian *C. rumelica* records need revision. It is notable that also from Macedonia only *C. rumelica* is listed in the most recent flora (Micevski 1995: 701-702), despite he considers both taxa clearly distinguishable.

***Carex davalliana* Sm. – loc. 13: 12317a, loc. 18: 11328**

The European species is rare in the South and known in Greece only from the N Pindhos (Hartvig 1991b: 848). New for the flora of Albania.

***Carex lepidocarpa* Tausch – loc. 3: 12052, loc. 31: 12613**

Our records confirm the single earlier report by Markgraf (1931) of *Carex lepidocarpa* from Guri i Topit (CE Albania), which is not included in the recent Albanian floras (Demiri 1983; Vangjeli & al. 2000; Vangjeli 2003).

***Carex serotina* Mérat – loc. 6: 12088**

Alston & Sandwith (1940: 242) reported this species from the vicinity of Durrës. Based on their specimen Nelmes (1952) described a new species named *Carex dyrrachiensis*. Later also Qosja (1973: 370) mentioned it from the surroundings of Korçë ('ne moçale, e ralle' = in marshes, rare). Despite these records, the species is not included in recent Albanian floras (Demiri 1983; Vangjeli & al. 2000; Vangjeli 2003) and Desfayes (2004) reported it as new for the flora of Albania. Our record confirms its identity and presence. Hartvig (1991b: 854) mentions it from additional localities in Greece and notes that the species has constant morphological and ecological characters there.

***Carex tomentosa* L. – loc. 27: 11771**

Chater (1980: 313) records this species with question mark from Albania, whereas Albanian floras (Demiri 1983; Vangjeli & al. 2000; Vangjeli 2003) do not discuss it. Our record confirms its presence in Albania. According to Hartvig (1991b: 858) the species is present also in N Greece (N Pindhos, S Pindhos and North Central region).

***Eryngium sericum* Pančić – loc. 20: 11626, loc. 21: obs.**

The only report of this species from Albania is by Košanin (1939), who found it near Kukës (NE Albania). Stevanović & Vukojičić (2006) republished this ignored record and highlighted that this occurrence in Albania is c. 100 km far from the nearest localities of the species in C Serbia and N Macedonia. It has also a doubtful occurrence at Bela Voda in Greece (Hartvig 1986: 666). Our record is the second one of the species from Albania and the new occurrence is c. 150 km south from the earlier known locality. Between Kukës and Korçë there are several extensive serpentine areas, where other occurrences may be found.

***Filaginella uliginosa* (L.) Opiz – loc. 1: obs., loc. 36: 12728**

Holub (1976) mentions the species with question mark from Albania, Demiri (1983: 460) discusses it but without any exact location ('në vende me lagështirë' = 'in moist places'), Vangjeli & al. (2000) and Vangjeli (2003) do not mention it. Our records confirm its presence in Albania.

***Impatiens balfourii* Hook. f. – loc. 7: 12446, loc. 14: 12469**

This ornamental plant is planted in many places in the town of Peshkopi and occasionally escapes from gardens. According to Priszter (1965) the species became naturalised in Europe for the first time in Hungary and he supposes that the same case is probable for C and S Europe. Our records indicate the establishment of the species in semi-natural habitats.

Juncus tenageia L. f. – loc. 1: 12409, loc. 15: 10167 (in the personal herbarium of G. Király) The species is distributed in C and S Europe (Snogerup 1980), including also Greece (Snogerup 1991: 736). New for the flora of Albania.

Lathraea squamaria L. – loc. 32: 9368, loc. 45: 10865

The first record of this species from Albania by Rakaj (2006) comes from the northern part of the country (Malësia e Madhe). According to Tutin (1972: 281) *Lathraea squamaria* is absent in Greece. Our new records from the southern part of Albania make it likely that the species is present anywhere in the country and even in Greece (the occurrence in Nemerçke Mts is situated only 15 km from the Greek border).

Medicago ×varia Martyn – loc. 5: 12440, loc. 16: 10109a

This hybrid is not included in Albanian floras (Demiri 1983; Qosja & al. 1992; Vangjeli 2003) but may be not so rare in the country.

Melica nutans L. – loc. 8: 12268, loc. 10: obs., loc. 11: obs., loc. 12: 12226, loc. 22: 11650, loc. 37: obs., 38: obs.

A widespread Euro-Siberian species, which is present in most of Europe but very rare in the South and here for the first time reported for Albania. In Greece it is known from Smolikas, Athos and Olimbos (Strid 1991). It will be probably found in other parts of Albania as well, mainly in the North.

Montia fontana subsp. *chondrosperma* (Fenzl) Walters – loc. 23: 11679, loc. 25: 11332

This taxon is distributed almost in whole Europe (Walters 1993). It has many occurrences in Greece, even in the North Central floristic region near the Albanian border (Tan 2002), and the same subspecies occurs in Macedonia (Micevski 1995: 437) among others also near the border with Albania (e.g. Mavrovo). New for the flora of Albania.

Myosotis speluncicola (Boiss.) Rouy – loc. 17: 11847

It is a very rare species with scattered distribution in Europe (Greuter & al. 1984: 100), and supposedly an ancient relict element (Strid & Tan 1999). In the Balkan Peninsula it was only known from Macedonia until its first record from Greece by Strid & Tan (1999). New for the flora of Albania.

Orobanche pubescens d'Urv. – loc. 33: obs., loc. 34: obs., loc. 35: obs., loc. 39: obs., loc. 40: 11126, loc. 43: 7785, loc. 44: 11217

The species is not included in Albanian floras, even though Zerny (in Hayek 1924: 166) reported it from near Kula Lums (NE Albania). Its presence is confirmed by our records and Barina & Pifkó (in press) found it also in the southwestern part of the country.

Orobanche rechingeri Gilli – loc. 19: 11546.

According to Foley (2000) *Orobanche nowackiana* and *O. rechingeri* are conspecific due to their similar morphology. However, the comparison of the two taxa emphasizes that the stigma lobes of *O. nowackiana* are purple and those of *O. rechingeri* are yellow. Another important difference may be that the host plant of the type of *O. rechingeri* was an *Alyssum* species (Foley 2000) and some other serpentine species of *Brassicaceae* (Hartvig 1991a), while Markgraf in the description of *O. nowackiana* named *Thymus jankae* and *Poa badensis* (though the latter species is not probable) as hosts. *O. nowackiana* was described from Albania and today it is known from 3 localities in the country (Foley 2000). However, the taxon is not mentioned in the Albanian floras (Demiri 1983; Qosja & al. 1996; Vangjeli 2003). Our plant has yellow stigmas and parasites on *Alyssum* sp., so if *Orobanche nowackiana* and *O. rechingeri* differed on a certain taxonomic level, it belongs to the latter taxon.

Phlomis tuberosa L. – loc. 26: 11464 (leaves on some square metres, some specimens in bud).

In Europe the species is distributed in the eastern regions, westwards to the Czech Republic and

southwards to Greece (DeFilipps 1972). Our record is the first for Albania. The only known occurrence in Albania of the related *Phlomis herba-venti* L. is almost in the same location according to Baltisberger & Lenherr (1984: 428): “Bezirk Korca: NW-Abhang des Mali i Thate, c. 15 km ESE von Pogradeci, 1050-1200 m” (Paparisto & Qosja 1976: 94; Vangjeli & al. 1995: 110). After revision of the sheets of *P. herba-venti* collected there by Matthias Baltisberger, we can confirm the identification.

Prunella xintermedia Link – loc. 30: 12598

Janchen (1920) recorded this hybrid from the vicinity of Shkodra (N Albania) and Markgraf (1931) from Barizani (CW Albania) and Matja (C Albania). Our collection confirms the presence of this hybrid, which is not included in any of the Albanian floras. In Greece it is known from N Pindhos (Baden 1991).

Ranunculus penicillatus (Dumort.) Bab. – loc. 42: 11222 (det. A. Mesterházy)

An imperfectly known species, only with a few occurrences in the Balkans. It is not known from Macedonia (Micevski 1985), very rare in Greece but has some occurrences also on Corfu (Strid 2002). New for the flora of Albania.

Rorippa palustris (L.) Besser – loc. 29: 12589

This species is widely distributed in Europe except for the southern part of the Balkan Peninsula (Valentine & Jonsell 1993). The related *Rorippa islandica* (Oeder ex Murray) Borbás is exclusively known in Greece from Mt Timfi, N Pindhos, near the Albanian border (Franzén 1986: 254; Jonsell 2002: 175) and in Macedonia from Strumica and Prespansko Ezero (Micevski & Matevski in Micevski 1995: 615). Our specimen has c. 2 mm long petals and sepals of about the same length, its fruits are straight, cylindrical, 5-8 × c. 1 mm and its stem is 5-10 cm long. New for the flora of Albania.

Scirpus cernuus Vahl – loc. 41: 11064

See comments under the following species.

Scirpus setaceus L. – loc. 2: 12413, loc. 3: 12055

Both *Scirpus cernuus* and *S. setaceus* are indicated with question marks in Flora Europaea for Albania (DeFilipps 1980: 279). Demiri (1983: 85) discusses only *S. setaceus*, while Vangjeli & al. (2000: 402) and Vangjeli (2003: 541) mention only *S. cernuus* for Albania. Tan & Mullaj (2000) confirmed the occurrence of *S. cernuus*. Based on our records both taxa occur in Albania.

Sorbus austriaca (Beck) Hedl. – loc. 9: 12217 (young specimens), loc. 10: 12230

Both occurrences are located in the valley of brook ‘Pr. i Gramës’, on evaporite bedrock; the specimens under 12217 are situated along a footpath and are dwarf shrubs, while the ones of 12230 are taller shrubs in the rich shrub layer of a beech forest. Jávorka (1926: 267) reported *Sorbus austriaca* (specimen: BP-157214) from Mt Hekurave (N Albania), however, this was omitted in the Albanian floras (Demiri 1983; Qosja & al. 1992; Vangjeli 2003). The species is known from Macedonia, where it is not so rare but more rare than its congeners according to Cekov & Micevski (1998).

Veronica verna L. – loc. 24: 11675

Demiri (1983: 414) discusses the species, however, without any exact location (‘në vende me bar’ = in grasslands). Qosja & al. (1996) does not list it at all. Our collection confirms its presence in Albania. Fischer (1991) mentions it from several parts of Greece, from various substrates.

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References

- Anon. 1983: Harta gjeologjike e RPS të Shqipërisë 1 : 200 000. – Tirana.
- Alston, A. H. G. & Sandwith, N. Y. 1940: Results of two botanical expeditions to South Albania. – *J. Bot. (London)* **74**: 219-246.
- Baden, C. 1991: *Prunella* L. – Pp. 120-121 in: Strid, A. & Tan, K. (ed.), Mountain flora of Greece **2**. – Edinburgh.
- Baltisberger, M. & Lenherr, A. 1984: Labiaten aus Albanien. – *Candollea* **39**: 423-439.
- Barina, Z. & Pifkó, D. (in press): Data on the flora of Albania. – In: Ivanova, D. (ed.), Proceedings, IV Balkan Botanical Congress, 20-26 June 2006, Sofia. – Sofia.
- Cekov, S. & Micevski, K. 1998: The flora of the Republic of Macedonia **1.4**. – Skopje.
- Chater, A. O. 1980: *Carex* L. – Pp. 290-333 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea **5**. – Cambridge, etc.
- DeFilipps, R. A. 1972: *Phlomis* L. – Pp. 144-145 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea **3**. – Cambridge, etc.
- 1980: *Scirpus* L. – Pp. 277-280 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea **5**. – Cambridge, etc.
- Demiri, M. 1983: Flora ekskursioniste e Shqiperise. – Tiranë.
- Desfayes, M. 2004: Additions to the vascular flora of Albania. – *Ann. Bot. (Rome)*, ser. 2, **4**: 155-157.
- Dimitrov, D. 1997: Contribution to the flora of the western Balkan Peninsula. – *Phytol. Balcan.* **3(1)**: 139-141.
- 1998: A supplement to the flora of the Balkan Peninsula. – *Phytol. Balcan.* **4(3)**: 57-60.
- 2001a: *Satureja croatica* (Pers.) Briq. – [In: Greuter, W. & Raus, T. (ed.), Med-Checklist Notulae, 20]. – Willdenowia **31**: 324.
- 2001b: *Centranthus longiflorus* subsp. *junceus* (Boiss. & Heldr.) I. Richardson. – [In: Greuter, W. & Raus, T. (ed.), Med-Checklist Notulae, 20]. – Willdenowia **31**: 325.
- ESRI 1991: Arc View 3.0. Desktop Geographic Information System. – <http://www.esri.com/software/arcview/>
- Fischer, M. A. 1991: *Veronica* L. – Pp. 209-235 in: Strid, A. & Tan, K. (ed.), Mountain flora of Greece **2**. – Edinburgh.
- Foley, M. J. 2000: The taxonomic position of *Orobanche rechingeri* Gilli (*Orobanchaceae*) in relation to *Orobanche nowackiana* Markgr. – *Candollea* **55**: 269-276.
- Franzén, R. 1986: *Rorippa* Scop. – Pp. 254-255 in: Strid, A. (ed.), Mountain flora of Greece **1**. – Cambridge, etc.
- Generalnyj Shtab (ed.) 1986: Albania 1: 50 000. – Moskva.
- Greuter, W. & Raus, T. (ed.) 2000: Med-Checklist Notulae, 19. – Willdenowia **30**: 229-243.
- , Burdet, H. M. & Long, G. 1984: Med-Checklist **1**. – Genève & Berlin.
- Hartwig, P. 1986: *Eryngium* L. – Pp. 665-666 in: Strid, A. (ed.), Mountain flora of Greece **1**. – Cambridge, etc.
- 1991a: *Orobanche* L. – Pp. 263-276 in: Strid, A. & Tan, K. (ed.), Mountain flora of Greece **2**. – Edinburgh.
- 1991b: *Carex* L. – Pp. 840-864 in: Strid, A. & Tan, K. (ed.), Mountain flora of Greece **2**. – Edinburgh.
- Hayek, A. 1924: Zweiter Beitrag zur Kenntnis der Flora von Albanien. – *Denkschr. Akad. Wiss. Wien, Math. Naturwiss. Kl.* **99**: 101-224.

- Holub, J. 1976: *Filaginella* Opiz. – Pp. 127-128 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea 5. – Cambridge, etc.
- Janchen, E. 1920: Vorarbeiten zu einer Flora der Umgebung von Škodra in Nord-Albanien. – Österr. Bot. Z. **69**: 199-207. [[CrossRef](#)]
- Jávorka, S. 1925: Magyar flóra. Flora hungarica. – Budapest.
- 1926: Adatok Albánia flórájához. Additamenta ad floram Albaniae. – Magyar Tud. Akad. Balkán-kutatás. Tud. Eredmén. **3**: 219-346.
- Jonsell, B. 2002: *Rorippa* Scop. – Pp. 173-177 in: Strid, A. & Tan, K. (ed.), Flora hellenica 2. – Ruggell.
- Jovanović-Dunjić, P. 1972: *Camelina* Crantz. – Pp. 328-333 in: Josifović, M., Flore de la République Socialiste de Serbie. – Beograd.
- Košanin, N. 1939: Über die Vegetation von Nordalbanien. – Spomenik LXXXIX, Prvi Razred **20**: 75-105.
- Lafe, E. & Kabo, M. 2002: Fjalor i emrave gjografike te Republikes se Shqiperise. – Tiranë.
- Markgraf, F. 1931: Pflanzen aus Albanien. – Denkschr. Akad. Wiss. Wien, Math. Naturwiss. Kl. **102**: 317-360.
- Meikle, R. D. 2002: *Camelina*. – Pp. 380-381 in: Tutin, T. G., Burges, N. A., Chater, A. O., Edmondson, J. R., Heywood, V. H., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea, ed. 2, **1**. – Cambridge, etc.
- Micevski, K. 1985, 1993, 1995: The flora of the Republic of Macedonia **1.1.**, **1.2.**, **1.3.** – Skopje.
- Nelmes, E. 1952: Notes on Cyperaceae XXVIII. – Kew Bull. **1952**: 67-68. [[CrossRef](#)]
- Newman, D. & Newman, L. 2005: Ozi Explorer version 3.95.4k. – <http://www.ozieexplorer.com/>
- Niketić, M. 2005: *Hieracium exotericum* Boreau. – [In: Greuter, W. & Raab-Straube, E. von (ed.), Euro-Med Notulae, 1]. – Willdenowia **35**: 231.
- Paparisto, K. & Qosja, X. 1976: Kontribut për florën e R. P. të Shqipërisë. – Bul. i Shkencave Nat. **30(2)**: 85-98.
- , Demiri, M., Mitrushi, I. & Qosja, X. 1988: Flora e Shqiperise **1**. – Tiranë.
- Pignatti, S. 1982: Flora d'Italia **1**. – Bologna.
- Polatschek, A. 1983: *Erysimum diffusum* Ehrh. – [In: Greuter, W. & Raus, T. (ed.), Med-Checklist Notulae, 7]. – Willdenowia **13**: 90.
- Priszter, S. 1965: Megjegyzések adventív növényeinkhez. Bemerkungen über einige Adventivpflanzen Ungarns. – Bot. Közlem. **52(3)**: 141-152.
- Qosja, X. 1973: Udheheqes i flores se Korçës **2**. – Tiranë.
- , Paparisto, K., Demiri, M., Vangjeli, J. & Balza, E. 1992: Flore de l'Albanie (Flora e Shqiperise) **2**. – Tiranë.
- , —, — & Ruci, B. 1996: Flore de l'Albanie (Flora e Shqiperise) **3**. – Tiranë.
- Rakaj, M. 2006: Njoftim I parëgjetjen e tre llojeve bimore në Shqipëri: *Parietaria lusitanica* L. subsp. *lusitanica*, *Oenothera parodiana* Munz subsp. *parodiana* dhe *Lathrea squamaria* L. – Bul. Shkencave Nat. **56**: 88-95.
- Raus, T. 1987: *Soldanella hungarica* Simonkai. – [In: Greuter, W. & Raus, T. (ed.), Med-Checklist Notulae, 14]. – Willdenowia **16**: 452.
- Săvulescu, T. 1955: Flora Republicii Populare Romanice **3**. – Bukarest.
- Shuka, L. & Jahollari, N. 2007: Lloje bimore të rralla dhe të kërcënua nga lugina e gjergjevicës (Korçë). – Bul. Mat. Shkencave Nat. **4**: 116-125.
- Smejkal, M. 2003: *Camelina* Crantz. – Pp. 159-166 in: Hejný, S. & Slavík, B. (ed.), Květena České Republiky **3**. – Praha.
- Snogerup, S. 1980: *Juncus* L. – Pp. 102-111 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea 5. – Cambridge, etc.
- 1991: *Juncus* L. – Pp. 731-738 in: Strid, A. & Tan, K. (ed.), Mountain flora of Greece **2**. – Edinburgh.

- Stevanović, V. & Vukojičić, S. 2006: *Eryngium sericum* (Reports 80-81). – [In: Vladimirov, V., Tan, K. & Stevanović, V. (ed.), New floristic records in the Balkans 1]. – Phytol. Balcan. **12:** 123-124.
- Strid, A. 1991: *Melica* L. – Pp. 783-786 in: Strid, A. & Tan, K. (ed.), Mountain flora of Greece 2. – Edinburgh.
- 2002: *Ranunculus* L. – Pp. 38-69 in: Strid, A. & Tan, K. (ed.), Flora hellenica 2. – Ruggell.
- & Tan, K. 1999: *Myosotis speluncicola* (Boiss.) Rouy. – [In: Greuter, W. & Raus, T. (ed.), Med-Checklist Notulae, 18]. – Willdenowia **29:** 51-67.
- Tan, K. 2001: *Camelina* Crantz. – Pp. 247-248 in: Strid, A. & Tan, K. (ed.), Flora hellenica 2. – Ruggell.
- 2002: *Montia* L. – Pp. 155-156 in: Strid, A. & Tan, K. (ed.), Flora hellenica 2. – Ruggell.
- & Mullaj, A. 2000: *Isolepis cernua* (Vahl) Roem. & Schult. – [In: Greuter, W. & Raus, T. (ed.), Med-Checklist Notulae, 19]. – Willdenowia **30:** 242.
- Tutin, T. G. 1972: *Lathraea*. – P. 281 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea 3. – Cambridge, etc.
- Valentine, D. H. & Jonsell, B. 1993: *Rorippa* Scop. – Pp. 344-345 in: Tutin, T. G., Burges, N. A., Chater, A. O., Edmondson, J. R., Heywood, V. H., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea, ed. 2, 1. – Cambridge, etc.
- Vangjeli, J. 2003: Udhëheqës fushor i florës së Shqipërisë. – Tiranë.
- , Ruci, B. & Mullaj, A. 1995: Libri i kuq. Bimët e kërcënura e të rralla të Shqipërisë. Red Book. Threatened and rare plants species of Albania. – Tiranë.
- , —, —, Paparisto, K. & Qosja, X. 2000: Flore de l’Albanie (Florae Shqiperise) 4. – Tiranë.
- Walters, S. M. 1993: *Montia* L. – P. 138 in: Tutin, T. G., Burges, N. A., Chater, A. O., Edmondson, J. R., Heywood, V. H., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea, ed. 2, 1. – Cambridge, etc.

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