

Data on the flora of Albania

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Abstract. The authors made a report on their field trips to three Albanian mountains (Griba Mts, Ostrovica Mts and Prokletije Mts) in 2004 and 2005. They listed 8 new species for the Albanian flora and gave a short description on their European distribution. Also the significance of the occurrence of these species in Albania is discussed.

Key words: Albania, flora, Griba, Ostrovica, Prokletije

Introduction

Albania is one of the countries, which possess the richest flora in Europe, at the same time it is perhaps the less known area from the botanical point of view. In the recent past, the complete flora work of the country was issued (Paparisto & al. 1988; Qosja & al. 1992, 1996; Vangjeli & al. 2000; and Vangjeli 2003), which discusses 3235 species altogether (including more cultivated species). However, some facts are conspicuous – comparing of the taxon-list with that of the previous Albanian identification book (Demiri 1983) indicates very significant deviations in certain cases; the *Red Data Book* of the country (Vangjeli & al. 1995) reflects the not satisfactory knowledge on the areas of certain species; additional 12 species new to the flora of Albania were published in the recent past (Desfayes 2004). All these facts incite further study on the flora.

Material and methods

The authors organised field trips to Albania in 5 occasions in the years of 2004 and 2005. The collections targeted the following areas (see Fig. 1):

1. Tomor Mts (23.05.2004 – 26.05.2004, participants: Z. Barina, Cs. Németh).
2. Kulmakes and Tomor Mts, Maliçikes (08.08.2004 – 12.08.2004, participants: Z. Barina, Cs. Németh, D. Pifkó).
3. Griba Mts (Mali i Gribes) (01.05.2005 – 05.05.2005, participants: Z. Barina, G. Király, D. Pifkó).

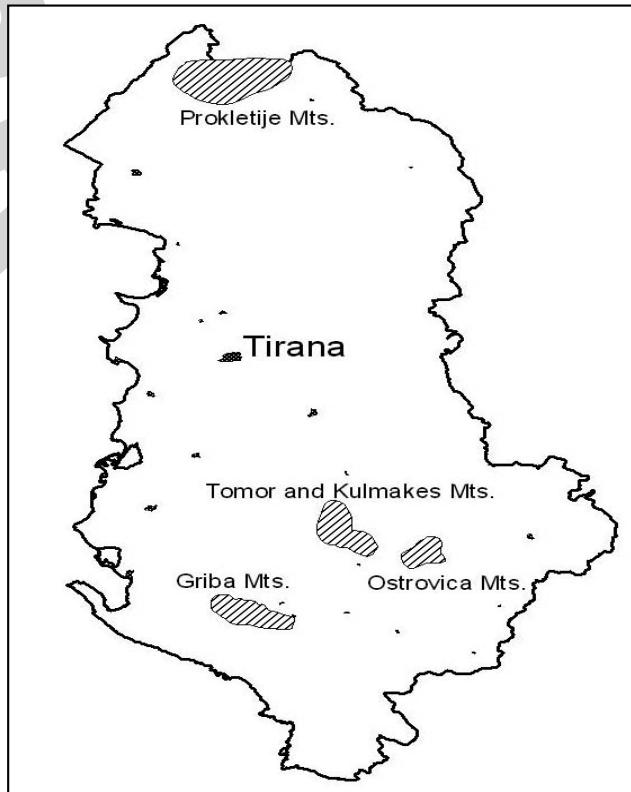


Fig. 1. The location of the mountains in Albania, mentioned in the paper.

4. Prokletije Mts (29.05.2005 – 04.06.2005, participants: Z. Barina, D. Pifkó).
5. Ostrovica Mts (Mali i Ostrovices) (03.07.2005 – 07.07.2005, participants: Z. Barina, D. Pifkó, D. Schmidt).

The geographical names referred in the paper are based on the denominations of the topographical map (1:50 000 scale) of Albania in Russian language and the denominations of the geological map of Albania in Albanian language.

The collected plants are deposited in the Herbarium Generale of Hungarian Natural History Museum, Botanical Department (BP).

Results

New species to the flora of Albania on the basis of Demiri (1983), Paparisto & al. (1988), Qosja & al. (1992, 1996), Vangjeli & al. (2000) and Vangjeli (2003):

***Aphanes floribunda* (Murb.) Rothm.**

Location: Albania, District of Berat (Rrethi i Beratit), Tomor Mts: near village Vodice, in the valley of Vodice Stream. Coordinates: 40.690090 N, 20.034890 E, 130 m (leg. Z. Barina, Cs. Németh; 23.05.2004).

The species occurs in the Mediterranean region from Sardinia to Turkey (Tutin & al. 1968: 64; Pignatti 1982: 601), but it is not mentioned by Micevski (1998: 1002-1004) from the neighbouring Macedonia. Its further occurrences can be expected from other Mediterranean regions of Albania.

***Carex digitata* L.**

Location: Albania, District of Shkodër (Rrethi i Shkodrës), Prokletije Mts: Mt Zorgjit (Maja e Zorgjtit, 1663m), south of Theth, on limestone rocks. Coordinates: 42.385070 N, 19.761850 E, 1490 m (leg. Z. Barina, D. Pifkó; 30.05.2005).

No former data exist from Albania, however, it is mentioned by Strid & Tan (1991: 856-857) from more locations from the northern part of Greece.

***Eranthis hyemalis* Salisb.**

Location: Albania, District of Tepelenë (Rrethi i Tepelenës), Griba Mts (Mali i Gribës): northeast of Bença (Bënçë), northern slope of Mt Dutihe (1429.1 m), in closed grassland. Coordinates: 40.262010 N, 19.980910 E, 1223 m (leg. Z. Barina, G. Király, D. Pifkó; 02.05.2005).

In our opinion the occurrence of the species is native in the above location; its turn-up is expected from other mountains of Albania as well. It is also present in the southern part of Serbia (Gajić in Sarić 1992: 280-282) near the Albanian border. However,

it is not mentioned by Micevski (1985) from Macedonia, and the populations in Croatia reported by Franjić (1992) are probably not native. Up to now, it has not been found because of its very early flowering; we came across with it at the beginning of May, above 1400 m altitude, we found only its specimens with fruit.

***Himantoglossum adriaticum* H. Baumann**

Location: Albania, District of Skrapar (Rrethi i Skraparit), Ostrovica Mts (Mali i Ostrovices): western part of village Polena, by the roadside. Coordinates: 40.494980 N, 20.281540 E, 921 m (leg. Z. Barina, D. Pifkó, D. Schmidt; 03.07.2005).

The species was known from the surroundings of the Istrian Peninsula (Baumann 1978); our data expands the area of the species significantly to the south.

***Melilotus graecus* (Boiss. & Spruner) Lassen**

Location: Albania, District of Tepelenë (Rrethi i Tepelenës), Griba Mts (Mali i Gribës): north of Bença (Bënçë), near the Bridge Bençës; in Mediterranean scrubland. Coordinates: 40.258900 N, 20.002220 E, 400 m (leg. Z. Barina, G. Király, D. Pifkó; 02.05.2005).

Its previous occurrences were known exclusively from Greece (Širajev 1928; Tutin & al. 1968: 151); especially it can be found in the southern part of the country in more locations (Peloponnesos, Crete), but it is present also near the Albanian border, in the area of Pindos (Tan & Iatrou 2001: 188).

***Orobanche pubescens* d'Urv.**

Location: Albania, District of Tepelenë (Rrethi i Tepelenës), Griba Mts (Mali i Gribës): between Tepelenë and Bença, ca. 2 km south of Tepelenë, bank of stream Bença. Coordinates: 40.280270 N, 20.014120 E, 168 m; being parasite on *Pastinaca* (leg. Z. Barina, G. Király, D. Pifkó; 04.05.2005).

It is native in Southeast Europe; it was known from Greece and the area of former Yugoslavia, too (Tutin & al. 1972: 290).

***Sedum amplexicaule* DC.**

Location: Albania, District of Korçë (Rrethi i Korçës), Ostrovica Mts: Mt Komorru (1605 m), ca. 2 km southwest of Çemericë, in *Fagus sylvatica* forest. Coordinates: 40.540630 N, 20.464010 E, 1493 m (leg. Z. Barina, D. Pifkó, D. Schmidt; 06.07.2005).

Of the neighbouring countries this species is present also in Macedonia (Micevski 1998: 1054) and Greece (Strid & Tan 2002), furthermore, as for Strid & Tan (2002) "Almost throughout Greece". It is new to the Albanian flora; its turn-up is expected also from other regions of South Albania.

***Viola chelmea* Boiss. & Heldr.**

Locations:

1. Albania, District of Shkodër (Rrethi i Shkodrës), Prokletije Mts: pass Pejes (qafa Pejes), 2.5km north of Okol, near "Buni i Gropazt"; in rocky grassland on limestone. Coordinates: 42.440940 N, 19.775510 E, 1734 m (leg. Z. Barina, D. Pifkó; 31.05.2005).
2. Albania, District of Shkodër (Rrethi i Shkodrës), Prokletije Mts: Uroçishe Rukijes, between pass Pejes (qafa Pejes) and the Albanian–Montenegrin frontier; in rocky grassland on limestone (leg. Z. Barina, D. Pifkó; 31.05.2005).
3. Albania, District of Shkodër (Rrethi i Shkodrës), Prokletije Mts: between Theth and Rogam, southeastern part of Mt Alis (2471 m), near pass "Valbona" (qafa Valbones); in rocky grassland on limestone. Coordinates: 42.407330 N, 19.808640 E, 1789 m (leg. Z. Barina, D. Pifkó; 31.05.2005).

The subspecies *chelmea* occurs only in the Peloponnesos Peninsula (Tan & Iatrou 2001: 210), however, subspecies *vratnikensis* Gáyer & Degen emerges in Croatia (Degen 1914), and Micevski (1995: 514) indicates the species also from Macedonia (without mentioning the subspecies) from the area of the near Šar Planina.

Red Data List species:

Further on some supplements are added to the *Red Data Book of Albania* (Vangjeli & al. 1995); the species found during our field trips, which were supposed to be extinct from Albania and some other endangered species are listed below.

***Astragalus baldaccii* Degen**

Locations:

1. Albania, District of Tepelenë (Rrethi i Tepelenës), Griba Mts (Mali i Gribes): near the peak of Mt Dutihe (1429.1 m); on limestone rocks. Coordinates: 40.264860 N, 19.961250 E, 1320 m (leg. Z. Barina, G. Király, D. Pifkó; 03.05.2005).
2. Albania, District of Tepelenë (Rrethi i Tepelenës), Griba Mts (Mali i Gribes): ca. 3 km east of Ken-

drevicës (maja e Kendrevicës, 2121.4 m) around the 1721 m high peak; on limestone rocks. Coordinates: 40.276010 N, 19.880950 E, 1680 m (leg. Z. Barina, G. Király, D. Pifkó; 03.05.2005).

The species was described by Árpád Degen (1896) from the collection of Baldacci, originated from the near Nemérckë Mountains ('Hab. in saxosis alpinis montis Nimerčka jugo Karajan supra Diovisda distr. Pogoni Albanaiae') in 1896. Apart from this, it is known also from Greece (Tutin & al. 1968: 121), and as for Micevski (2001: 1184-1185) it is present from more locations in Macedonia. In the opinion of Vangjeli & al. (1995) it may be extinct from Albania (Ex?).

Its present locality is situated 40 km northwest of the range of Nemérckë, supposedly the species is present in the *locus classicus* even today, and its turn-up can be expected from the near mountains as well.

***Berberis vulgaris* L.**

Locations:

1. Albania, District of Shkodër (Rrethi i Shkodrës), Prokletije Mts: Mt Xharaput (2216.6 m), ca. 3 km north of Okol, near "Buni i Gropazt"; in rocky grassland on limestone. Coordinates: 42.443790 N, 19.767360 E, 1750 m (leg. Z. Barina, D. Pifkó; 31.05.2005).
2. Albania, District of Shkodër (Rrethi i Shkodrës), Prokletije Mts: Uroçishe Rukijes, near the Albanian–Montenegrin border, in rocky grassland on limestone (leg. Z. Barina, D. Pifkó; 31.05.2005).
3. Albania, District of Skrapar (Rrethi i Skraparit), Ostrovica Mts: northeast of village Backë, on the southeastern side of Frengu. Coordinates: 40.524050 N, 20.414500 E, 1796 m (leg. Z. Barina, D. Pifkó, D. Schmidt; 04.07.2005).
4. Albania, District of Skrapar (Rrethi i Skraparit), Ostrovica Mts: ca. 4 km northwest of Çemericë, at the base of the peak of 2383 m. Coordinates: 40.555650 N, 20.449230 E, 1889 m (leg. Z. Barina, D. Pifkó, D. Schmidt; 05.07.2005).

As for Vangjeli & al. (1995: 29) it is supposed to be extinct (Ex?), however, on the basis of our data it is probable that it is present also today in several mountains of Albania.

***Gymnospermium altaicum* (Pall.) Spach subsp. *scipetarum* (E. Mayer & Pulević) Kit Tan & Mullaj**

Location: Albania, District of Tepelenë (Rrethi i Tepelenës), Griba Mts (Mali i Gribes): on the west side of the ridge between the peaks maja e Trushnices

(1815.2 m) and Komtiri (1224 m), above village Zlezë. Coordinates: 40.297280 N, 19.906210 E, 1190 m (leg. Z. Barina, G. Király, D. Pifkó; 04.05.2005). On limestone, presumably in the place of a former oak forest, on few square metres.

A species of wide distribution, with rather scattered occurrences in Europe, and with more subspecies separated on the base of the morphology of leaves. Subsp. *scipetarum* occurs in Montenegro (Rumija Mts, May-er in Greuter & Raus 1983: 278), as well as in Albania. Formerly it was known in Albania only from the surroundings of Kruja (Krujës) and Elbasan (Shëmil) (Paparisto & al. 1988: 291; Vangjeli & al. 1995; Tan & Mullaj in Greuter & Raus 2001: 319-320).

Petteria ramentacea (Sieber) C. Presl

Location: Albania, District of Tepelenë (Rrethi i Tepelenës), Griba Mts (Mali i Gribes): between Tepelenë and Bënçë, in the valley of stream Bënçë. Coordinates: 40.280270 N, 20.014120 E, 168 m (leg. Z. Barina, D. Pifkó, G. Király; 04.05.2005).

Its closest occurrence is known from the nearness of Logara Pass. Former data on the species in Albania are known from there and the northern part of the country (Vangjeli & al. 1995).

Plantago reniformis Beck

Location: Albania, District of Shkodër (Rrethi i Shkodrës), Prokletije Mts: by the well of Valbona River, above village Rogam; in grassy clearing. Coordinates: 42.409920 N, 19.822490 E, 1422 m (leg. Z. Barina, D. Pifkó; 02.06.2005).

An endemic species known from the south part of Serbia as well as North Albania, which is indicated in a single point of Greece as well (Gustavsson 1978: 17). It is known from Prokletije Mts (Josifović 1974; Vangjeli & al. 1995); our datum is a specification of the former indications.

Discussion

The authors publish 8 new species to the flora of Albania. Of these, on the basis of the formerly known data the occurrences of *Carex digitata* and *Sedum amplexicaule* were expected also in the area of Albania. More species were known also from one of the neighbouring countries and our data are the specification of the area of these taxa (*Aphanes floribunda*, *Eranthis hyemalis*, *Melilotus graecus*, *Orobanche pubescens*, *Viola chelmea*).

Himantoglossum adriaticum was found a long distance from the previously known localities, significantly expanding this area, thus making probable the novel occurrences within the enlarged area getting known.

We managed to find *Astragalus baldacci* and *Berberis vulgaris*, which were supposed to be extinct from Albania, in more localities; besides this, we publish new occurrences of three further Red Data Book species as well as the specification of their localities (*Gymnospermium altaicum*, *Petteria ramentacea*, *Plantago reniformis*).

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