

New chorological data and critical notes on the Bulgarian vascular flora

Dimitar Dimitrov & Vassil Vutov

Department of Botany, National Natural History Museum, Bulgarian Academy of Sciences, 1, Tsar Osvoboditel Blvd., 1000 Sofia, Bulgaria, e-mail: dimitroff@mail.bg

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Abstract. The paper presents chorological data on 14 vascular plant species. Ten of them have been collected by the authors and the remaining four are materials deposited at the Sofia University Herbarium (SO).

Key words: chorological data, flora, vascular plants

Results and discussion

Information on the Bulgaria flora needs permanent updating and investigation. Chorological data on most species are still incomplete. The article provides information on some new localities established in the following floristic regions: Danubian Plain – 4 species, the Forebalkan – 2, Sofia region – 2, Mt Sredna Gora (*Western*) – 2, Rhodopi Mts (*Central*) – 2, and one species each for the Black Sea Coast, Mt Vitoshka and the Valley of Mesta River. *Avenula compressa* is a new species for the Danubian Plain and the Valley of Mesta River. Four taxa are cited according to the herbarium materials, collected by D. Jordanov, V. Štríbrný and K. Popov, and the rest have been collected by the authors. *Erodium hoefftianum* is entered in the *Red Data Book of the PR of Bulgaria* as rare and *Viola aetolica* is a Balkan endemic.

The materials have been cross-referred with the Chorological Card Index of the Institute of Botany – BAS and the herbaria of the St. Kliment Ohridski University of Sofia (SO), Institute of Botany (SOM), and Higher Institute of Agriculture in Plovdiv (SOA).

List of species

Alyssum corymbosoides Formánek

Valley of Mesta River: in dry grassy places between Gotse Delchev town and Ilinden village, Blagoevgrad district, 17.07.1938, GM-30, SV (D. Jordanov), SO 29407.

This Pontic-Balkan element has been known so far from the floristic regions of the Forebalkan, Znepole region, Valley of Strouma River, the Rhodopes (*Central & Eastern*), and Thracian Lowland (Anchev 1992).

Avenula compressa (Heuff.) Sauer & Chmelit.

Danubian Plain: in meadows northwards of Dulgodeltsi village, Montana district, 18.05.2000, FP-83, SC (DD & VV), SO 100460.

Mt Sturgach: on sandy places eastwards of Nova Lovcha village, 21.06.1984, GL-28, SC (DD), SO 92446.

This Balkan-Dacian geoelement has been known so far from the following floristic regions: the Black Sea Coast, Northeast Bulgaria, Forebalkan, Sofia region, West Frontier Mts, Pirin Mts, Rila Mts, Mt Sredna Gora, Thracian Lowland, Toundzha Hilly

Country, Mt Strandzha (Kozhuharov 1992), and the Rhodopes (*Eastern*), (Gussev & al. 1998; Petrova & al. 1998). According to Stojanov & al. (1966), it occurs throughout the country.

***Bunias orientalis* L.**

Mt Vitoshka: Dragalevtsi Residential District, in grassy places beneath the lift station, 17.07.1997, FN-93, SC (DD), SO 98899.

This Euro-Siberian element has been known so far from the floristic region of Northeast Bulgaria (Anchev 1992).

***Campanula grossekii* Heuff.**

Black Sea Coast: in the wet gullies of the forests northwest of Balchik town, on calcareous terrain, 06.08.1948, NJ-90, SV (D. Jordanov & A. Janev).

Danubian Plain: close to Polsko Kossovo village, Rouse district, 07.1931, LJ-90, SV (K. Popov), SO 72566.

So far this Balkan-Dacian element has been known (Anchev 1992) from Northeast Bulgaria, Forebalkan, Balkan Range (*Central & Eastern*), Sofia region, Znepole region, Pirin Mts and the Rhodopes (*Western*).

***Cardaminopsis arenosa* (L.) Hayek**

The Rhodopes (*Central*): on the slopes around Dobrostan (Chaushovo) village, Assenovgrad district, 07.1895, GL-24, SV (V. Střibrný, sub. *Arabis arenosa*), SO 28838.

This species has been known so far from the Rhodopes. According to Anchev (1992), it is distributed in the Forebalkan, the Balkan Range (*Western*), Sofia region, Mt Vitoshka, West Frontier Mts and Mt Sredna Gora.

***Coeloglossum viride* (L.) Hartm.**

The Rhodopes (*Eastern*): in high-mountain pastures under Chengene peak, 20.08.1939, LF-30, SV (D. Jordanov), SO 14247.

This Boreal element has been known so far from the regions of the Balkan Range, Sofia region, Mt Vitoshka, West Frontier Mts, Mt Slavyanka, Pirin and Rila Mts (Andreev 1992).

***Doronicum orientale* Hoffm.**

Mt Sredna Gora (*Western* – Mt Lozenska): above German Monastery in a mixed deciduous forest, 800 m, 11.05.2000, FN-92, SC (DD & VV), SO 100381.

This Balkan-Dacian element has been known so far from the floristic regions of the Black Sea Coast, Northeast Bulgaria, Balkan Range (*Central & Eastern*), Valley of Strouma River, the Rhodopes (*Central & Eastern*), Toundzha Hilly Country, and Mt Strandzha (Peev 1992).

***Erodium hoefftianum* C. A. Meyer**

Danubian Plain: in grassy places along Tsibritsa River, at Dulgodeltsi village, 16.05.2000, FP-83, SC (DD & VV), SO 10025.

This Pontic-Central Asian element with status of a rare plant has been known so far from the floristic regions of the Black Sea Coast, Northeast Bulgaria, Valley of Strouma River, the Rhodopes (*Central*), Thracian Lowland, Toundzha Hilly Country (Petrova 1992), and the Rhodopes (*Eastern*) (Gussev & al. 1998).

***Euphorbia maculata* L.**

Forebalkan: in the yard of Gorna Oryahovitsa Sugar Works, 16.11.1999, LH-97, SC (DD & VV), SO 100070.

This adventive species has been known so far from the regions of the Black Sea Coast, Danubian Plain, Sofia region, and Valley of Strouma River (Andreev 1992).

***Najas marina* L.**

Danubian Plain: next to the dam on Yantra River, northwards of Gorna Oryahovitsa town, 17.11.1999, LH-97, SC (DD & VV), SO 100043.

This hydrophyte has been so far known from the regions of the Black Sea Coast and Danubian Plain (Andreev 1992), as well as along Danube River (Stojanov & al. 1966).

***Ornithogalum montanum* Cirillo**

Sofia region: in the Rekmanitsa locality next to Mladost-2 Residential District, 04.06.2000, FN-93, SC (DD & VV).

Mt Sredna Gora (*Western* – Lozenska Mt): in a mixed deciduous forest above German Monastery, 900 m, 11.05.2000, FN-92, SC (DD), SO 100380.

This Apennines-Balkan geoelement has been known so far from the floristic regions of the Forebalkan, Balkan Range, Znepole region, Mt Vitoshka, West Frontier Mts, Mt Slavyanka, Pirin and Rila Mts, and the Rhodopes (*Western*) (Petrova 1992), as well as from the western parts of the country (Radenkova 1964).

Thesium simplex Velen. subsp. *simplex*

Sofia region: in grassy places next to Vurtopa Bridge at Mladost-1 Residential District, 29.04.2000, FN-93, SC (DD & VV), SO 100318.

This Balkan-Dacian element has been known so far from Northeast Bulgaria, the Forebalkan, Valley of Mesta River, and Thracian Lowland (Petrova 1992).

Trifolium montanum L.

Danubian Plain: in a mixed deciduous forest in the Yakovi Drunki locality, beneath the steep right-hand bank of Tsbritsa River, close to Dulgodeltsi village, 16.05.2000, FP-83, SC (DD & VV), SO 100377; In meadows northeast of Yakimovo village, along Tsbritsa River, 09.06.1949, V (D. Jordanov & S. Valev), SO 41533.

This Sub-Pontic element has been known so far from the regions of Northeast Bulgaria, the Forebalkan, Balkan Range, Sofia region, Znepole region, Mt Vitosh, West Frontier Mts, Valley of Strouma River, Pirin, Rila and the Rhodopi Mts, Thracian Lowland (Kozhuharov 1992). Urumov (1926) reported it for the district of Pleven and Stojanov & al. (1967) for the whole country.

Viola aetolica Boiss. & Heldr.

Forebalkan: in grassy places close to the gate of Belogradchik Fortress beneath the Zaeka rock, 01.04.2000, FP-33, SC (DD & VV), SO 101146.

This Balkan endemic has been known so far from the floristic regions of the Balkan Range (*Central*), the Rhodopes (*Western & Central*) (Anchev 1992), and the Rhodopes (*Eastern*) (Pavlova & al. 1997; Gussev & al. 1998).

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