

## A note on distribution of *Myosotis orbelica*

### Poznámky k rozšíření druhu *Myosotis orbelica*

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Five new localities of *Myosotis orbelica* (Vel.) D. Peev et N. And. are reported from Bulgaria.

In 1891, Czech botanist J. Velenovský, an outstanding student of Balkan flora, distinguished and described on his material from Rila Mts. *Myosotis palustris* var. *orbelica* (Velenovský 1891:401). Since that time, after a substantiated reevaluation of its taxonomic position, *Myosotis orbelica* (Vel.) D. Peev et N. And. has been treated as a distinct species of the *Myosotis palustris* group. However, our knowledge of its distribution range has not been significantly modified since the Velenovský publication.

Judging from sporadic literature data and herbarium vouchers (herb. PR, PRC, SOA, SOM examined), *Myosotis orbelica* has been regarded as an endemic of the high Bulgarian mountains of Rila and Pirin (Schuster 1967, Peev et Andreev 1989), where its occurrence has so far been confirmed with certainty only from wet meadows above 1800 m (Peev et Andreev l.c.). Urumov (1917)<sup>1</sup> and Davidov (1904, sec. Peev et Andreev 1989) indicated *M. orbelica* also from the Rhodopes Mts. and the Predbalkan region, respectively.

In studying the Bulgarian populations of the *Myosotis palustris* group in the field, we have found *M. orbelica* in the following localities interesting from a phytogeographical point of view (see also Fig. 1).

1. Western Stara planina Mts. - a fen in the valley of the Srebarna reka, 2 km NW of the village of Komštica, limestone, ca 900 m a. s. l., 20. VI. 1990, Markova et Štěpánková, PR et SOA.

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<sup>1</sup> In studying the literature dealing with the distribution of *M. orbelica*, we have revealed the fact that some literature records are interpreted erroneously in the Flora of the PR of Bulgaria. Peev and Andreev (1989:210) in the paragraph summarizing localities recorded in the literature, also give the following stands of *M. orbelica*: "Sredna Stara planina et Osogovska planina (Urum.:1917)". However, in the Urumov work (1917:145), the above localities refer to *M. palustris* L. var. *scabra* Link, and by no means to *M. orbelica*. Urumov (l. c.) merely listed "Yundola and Filibelijskata poljana" as the localities of *M. orbelica* (under the name of *M. palustris* var. *orbelica* Vel.). The latter two localities are situated in the W. Rhodopes, in a region phytogeographically very different from the Stara planina and the Osogovska planina Mts.

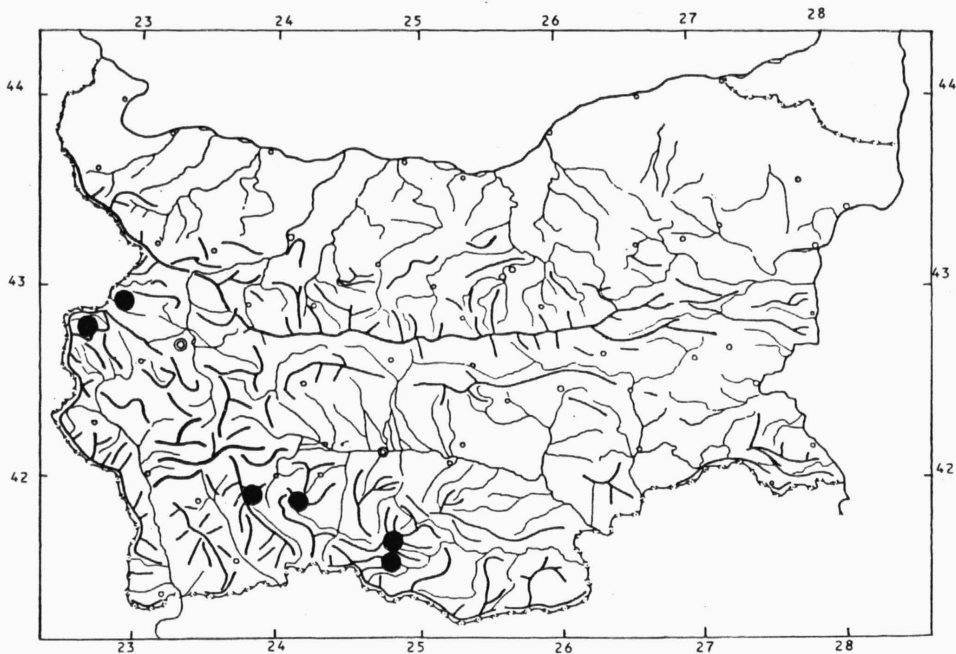


Fig. 1 - New localities of *Myosotis orbelica* (Vel.) D. Peev et N. Andr. in Bulgaria.

2. Znepole region - wet meadows in the locality Gerena, near the village of Ezdimirci, ca 900 m a. s. l., 5. VII. 1990, Valjovska, SOA.
3. Western Rhodopes Mts. - a wet meadow above the locality Yundola, Kurtovo tourist complex, ca 1500 m a. s. l., 5. VII. 1985, Štěpánková, PR et SOA.
4. Western Rhodopes Mts. - wet meadows in the locality Beglica, Rakovo dere, ca 1600 m a. s. l., 5. VII. 1985, Štěpánková, PR et SOA.
5. Central Rhodopes Mts. - wet meadows around Smoljanski lakes, 1520 m a. s. l., Štěpánková, PR et SOA.
6. Central Rhodopes Mts. - Roženski livadi wet meadows, along the Progled - Sokolovci road, 1600 m a. s. l., 3. VII. Štěpánková PR et SOA.

From the list it is evident that the western and central Rhodopes very likely also belong to the region in which *M. orbelica* is not a rare species. The geographical position of the localities 1 and especially 2 gives us an opportunity to presume that *M. orbelica* is to be found also in the Yugoslavian mountains. These two localities also complete the data concerning the altitudinal distribution of *M. orbelica*. Their vertical position (ca 900 m a. s. l.) considerably extends the lower limit (ca 1800 m given for this species in the literature - Schuster 1967, Peev et Andreev 1989).

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## Souhrn

V Bulharsku bylo zjištěno několik nových, z fyto geografického hlediska zajímavých lokalit druhu *Myosotis orbelica*.

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## Einheimische Grosspilze. Bestimmungstabellen für Pilzfreunde

G. Fischer, Jena 1990, 247 str., cena neuvedena. (Kniha je v knihovně ČSBS.)

Určování hub začátečníky, kteří nejsou obeznámeni se základní sestavou běžněji se vyskytujících druhů, patří k nejobtížnějším při určování přírodnin. Je to dáno hlavně tím, že určujeme houby podle klíčů, které jsou založeny převážně na v mikrostrukturu plodnic: to vyžaduje značné zkušenosti s mikroskopováním a přirozené i příslušné vybavení, jež nemá každý k dispozici. Uvedení začátečníka do určování hub je proto jistě nelehký úkol, který se autoři recenzované knihy pokusili - a to s úspěchem - splnit, a to jen za použití makroznaků.

Kniha je řešena zcela netradičně, a to ve formě graficky provedených tabulí, na nichž je kombinován vlastně normální slovní dichotomický klíč se schematickými kresbami plodnic hub nebo jejich částí a charakteristickými znaky. Dichotomický klíč je navíc graficky doplněn výraznými šipkami, jimiž je uživatel klíče