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THE WESTERNMOST LOCALITIES OF THE BUSH-CRICKET *LEPTOPHYES DISCOIDALIS* (TETTIGONIIDAE: PHANEROPTERINAE)

Josip Skejo[1] & Mihajlo Stanković[2]

[1]IRES – Institute for Research and Development of Sustainable Ecosystems, Ivana Lučića 5, HR-10000 Zagreb, Croatia (skejo.josip@gmail.com)

[2]Zasavica Special Nature Reserve, Pokret Gorana, Svetog Save 19, RS-22000 Sremska Mitrovica, Serbia (trogloxen@gmail.com)

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This paper presents two westernmost records in the Pannonian lowland for the eastern and central European bush-cricket *Leptophyes discoidalis* (Frivaldszky, 1868) (Tettigoniidae: Phaneropterinae): near the road from Privlaka village to Vinkovci in the Slavonia region (Croatia) and Zasavica Special Nature Reserve in Srijem, Vojvodina region (Serbia). The Privlaka record is the first record of this species in Croatia.

Key words: *Leptophyes discoidalis*, new records, Orthoptera, bush-crickets

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U radu se navode dva najzapadnija nalaza istočno- i srednjoeuropske vrste konjica *Leptophyes discoidalis* (Frivaldszky, 1868) (Tettigoniidae: Phaneropterinae) u Panonskoj nizini: blizu ceste od Privlake prema Vinkovcima u Slavoniji (Hrvatska) i u Specijalnom rezervatu prirode Zasavica u Srijemu, Vojvodina (Srbija). Nalaz kraj Privlake je prvi lokalitet za ovu vrstu u Hrvatskoj.

Ključne riječi: *Leptophyes discoidalis*, novi nalazi, Orthoptera, zrikavci

The bush-cricket genus *Leptophyes* Fieber, 1853 contains 19 species globally of which nine occur in Europe, excluding Turkey (Eades *et al.*, 2013). According to Kleukers *et al.* (2010), four species occur in Croatia and four in Serbia: *Leptophyes albovittata* (Kollar, 1833), *L. boscii* Fieber, 1853 and *L. punctatissima* (Bosc, 1792) in both countries, *L. laticauda* (Frivaldszky, 1868) only in Croatia and *L. discoidalis* (Frivaldszky, 1868) only in Serbia (Us, 1967). The last species is known from the westernmost part of the area of Belgrade to the SE part of the country (Adamović, 1975).

The known range for *Leptophyes discoidalis* (Fig. 1) includes Serbia, Romania (C and N Muntenia, C and N Oltenia, C and W Transylvania, Banat and Crişana) (Iorgu *et al.*, 2008); Hungary (E and NE part of the country) (Nagy & Rácz, 2007; Szövényi *et al.*, 2013), Slovakia and Ukraine in riparian habitats near the Tisa River (Krištín & Kaňuch, 2013); Bulgaria (Vraca: Harz, 1969; Western Stara Planina and Struma Valley: Popov, 2007) and Montenegro (Durmitor Mt.) (Ingrisch & Pavičević, 2012).

During fieldwork in the Zasavica Special Reserve in Vojvodina (N 44°56'27.08'', E 19°30'2.37''), on August 7th 2013, we found two males and three females of *L. discoidalis* on bushes of *Sambucus nigra* L. on wet grassland near water. At the time this was con-

Fig. 1. General distribution of *Leptophyes discoidalis* according to published data (orange) reviewed in text and rough position of the new localities in Serbia and Croatia (MN=Montenegro).

sidered the westernmost locality for the species. In October, the first author identified samples of Orthoptera collected by Nikola Tvrtković, on July 7th in a lowland forest edge on a *Sambucus ebulus* L. thicket near a channel of the Bosut River, on the road from Privlaka village to Vinkovci (N 45°13'10.64'', E 18°47'9.24''; 50 km W of Zasavica), Croatia. After identification, it became evident that among the material there were two females of *L. discoidalis.* This finding is now the westernmost locality for the species and also a new-bush cricket species for the known Orthoptera fauna of Croatia (cf. Us, 1967). Authors who investigated the Orthoptera fauna in North-East Croatia (Eastern Slavonia, Srijem and Baranja) earlier (Graber, 1870; Pongracz, 1944) did not find this species.

Males of *L. discoidalis* differ from males of other European species primarily in the shape of the cerci: very broad in the base and then suddenly narrowing at 3/4 of their length (Kleukers *et al.*, 2010). Females of *L. discoidalis* are very similar to those of *L. boscii*, and both differ from other European members of this genus primary in having a

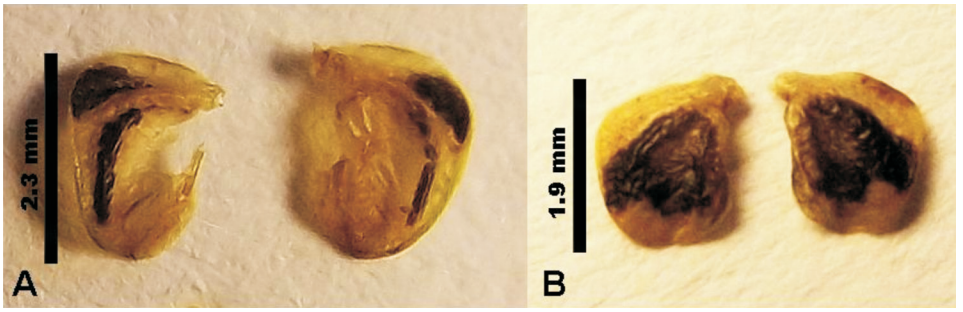

Fig. 2. Female tegmina: A – *Leptophyes boscii* (19.08.2013. Ćićarija Mt.: Dol, 790 m a.s.l., leg. J. Skejo & N. Tvrtković), B – *Leptophyes discoidalis* (07.08.2013. Zasavica, leg. J. Skejo & M. Stanković)

notch at the base of the ovipositor. According some keys, it is not possible to distinguish females of these two species (Kleukers *et al*., 2010; Massa *et al*., 2012), but there is one useful character (Heller, in litt.): the tegmina coloration. Females of *L. boscii* have two black stripes on the tegmina (Fig 2. A) and females of *L. discoidalis* have one black blotch (Fig 2. B). Heller (in litt.) has proven that this character is significant after checking large sample. We were able to confirm this, comparing specimens of *L. boscii* from many localities in Croatia with our first *L. discoidalis* specimens. This character is applicable also in males.

We will focus our future investigations on the clarification of the distribution and ecology of *L. discoidalis* in other parts of Eastern Slavonia and the Croatian part of Baranja, all in the border area of the Eastern Pannonian and Balkan moesian forest communities (Vukelić, 2012) and remnants of forest-steppe-like habitats – also habitats of some other eastern species like the European souslik (*Spermophilus citellus*) and the lesser mole rat (*Nannospalax leucodon*) (Petrov, 1996).

TAXONOMIC NOTE

Since Frivaldszky's paper *Magyarországi Egyenesröpüek magánrajza* (*Monographia Orthopterorum Hungariae*) was written in 1867, but published in 1868 in XII. Szám of Magyar Tudományos Akadémia in Pest (Budapest), according to article 21.6. of the International Code of Zoological Nomenclature (1999) the date of publication is valid, *id est* 1868. The author's correct name is Frivaldszky, as published in his paper (1868), not Frivaldsky as written in the majority of papers and in the Orthoptera Species File database (consulted on October 9th 2013).

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