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Dolerus (*Achaetoprion*) *uliginosus* (Klug, 1818), new record for the fauna of Hungary (Hymenoptera: Symphyta)

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Haris, A.: *Dolerus (Achaetoprion) uliginosus (Klug, 1818), new record for the fauna of Hungary (Hymenoptera: Symphyta).*
Abstract: *Dolerus (Achaetoprion) uliginosus* (Klug, 1818) captured in Zselic Hills (Zselicség, SW. Hungary) and reported first time from the present territory of Hungary. Separation of this species from the closely related *Dolerus* (*Achaetoprion*) *madidus* (Klug, 1818) is provided.

Keywords: *Dolerus uliginosus* (Klug, 1818), new record, Hungary, Hymenoptera, Tenthredinidae

Introduction

In Zombori (1982), this species is listed as potential member of the fauna of Hungary. The first report from the Carpathian Basin is from Transylvania in 1922 (Müller 1922). From our region, we have further data from Bethlen (Transylvania), from Remetevasgyár (Remeťské Hámre) (Slovakia) and from Kelc (Czech Carpath Mts.) (Roller & Haris 2008). Occurence of this species is very local, we have additional data from Austria, Belgium, France, Germany, Great Britain, Lithuania, The Netherlands, Poland, Spain, Sweden, Switzerland and Ukraine (Zajanckauskas & Jonaitis 1979, Schedl 2009, Taeger et al. 2006, Lacourt 2001, Liston 1995, 2015, Borowski 2017, Noblecourt 2004, Llorente Vigil 1988).

Material and methods

The applied method was net sweeping from April till the last decade of May. For identification, the Palaearctic key of genus *Dolerus*, Zhelochovtsev's work on the sawflies of the European part of the former USSR, the handbook of Lacourt on the identification of the European sawflies and the latest Czech and Slovak monograph (Haris 2000, Macek et al. 2020, Zhelochovtsev 1988 and Lacourt 2020) were used. For the discussion of the distribution, we consulted the book of Roller and Haris titled Sawflies of the Carpathian Basin, History and Current Research (Roller & Haris 2008), the most recent European checklist of species (Taeger et al. 2006) and the monograph of Sundukov on the sawflies of Russia (Sundukov 2017) completed with local faunistic papers as listed above.

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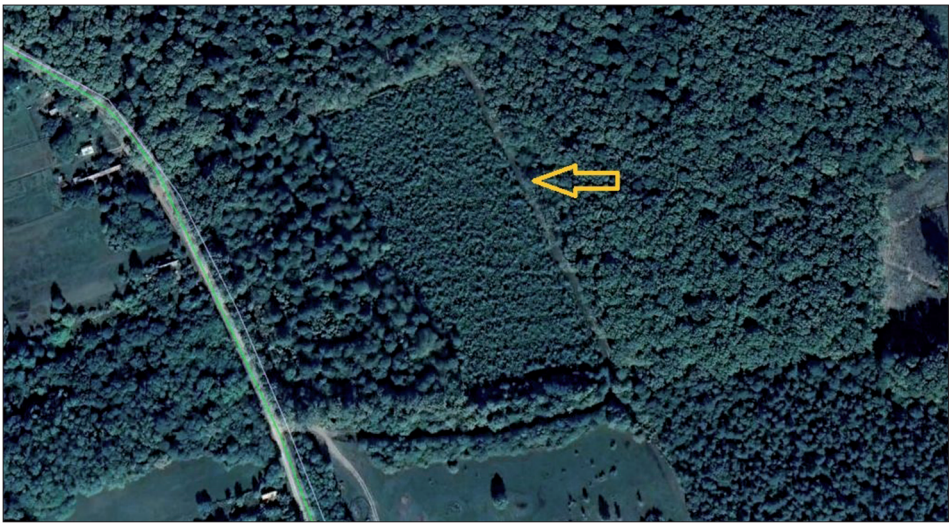

Fig. 1: Habitat at collecting site of *D. uliginosus*

Results

One female, Visnyeszéplak: Vitorág, 30. 04. 2022 around 46°13'10.79"N, 17°43'30.42"E (Fig. 1). Habitat: Roadside depression, cira 20 sqm wet spot covered by *Juncus* spp. vegetation in Turkey oak – silver lime mixed forest (*Tilio argenteae - Quercetum petraeae-cerris*).

Female: head and thorax black, red: prothorax, tegula, all mesonotal lobes, large spot on upper half of mesopleuron. Cenchri light whitish brown. Legs entirely black. Wings hyaline, costa, subcosta, stigma black. Abdomen red. Ovipositor black, except lower middle margin of valvula 3. Cerci red with black apex. Length: width of vertex as 5 : 2. OOL : POL : OCL: 16 : 11 : 15. Ratios of antennal segments: 9 : 5 : 25 : 21 : 17 : 16 : 15 : 13 : 11. Head densely and deeply punctured, gently shiny. Occipital furrows pit-like. Postoccipital carina weekly developed reaches up to lower quarter of eye. Head paralell behind eyes with white pubescence about as long as diameter of anterior ocellus. Clypeus deeply and roundly emarginated, clypeal emargination about 0.5x as deep as clypeal median length. Mesopleuron densely and deeply punctured without interspaces, moderately shiny. Pronotum densely, deeply and roughly punctured, hardly shiny. Mesonotal lobes densely, moderately deeply punctured with shiny interspaces about 1.0-1.5x as large as a puncture. Mesoscutellum densely, moderately deeply punctured without interspaces, hardly shiny. Mesoscutellar appendage unpunctured with shallow surface sculpture. Metascutellum smooth and shiny. Thorax with white pubescence about 1.0-1.1x as long as diameter of anterior ocellus. First tergite smooth and shiny other tergites with fine microstriation. Sawsheath narrowed and rounded apically. Setae straight, angle between longest setae obtuse angle. Cerci with long hairs, reaching apex of sawsheath. Claws with small inner tooth. Length: 10.0 mm (Fig. 2).

Fig. 2: *Dolerus uliginosus* female

Fig. 3: Head of *Dolerus madidus* in dorsal view

Fig. 4: Head of *Dolerus uliginosus* in dorsal view

The separation of females of the closely related two species is very uncertain. Most of the keys (Benson 1952, Berland 1947, Enslin1912-1918, Zombori 1982, Macek et al. 2020) describe the shape of head behind the eyes as separating feature of the 2 sepcies as follows:

"Head behind the eyes converging in *D. madidus* (Klug)" and "Head behind the eyes are not converging in *D. uliginosus* (Klug)" (compare Fig. 3 and 4). Lacourt, 2020 complete this diagnosis with this feature: "Mesepisternum heavily and roughly punctate in *D.*

Fig. 5: Sawsheath of *Dolerus madidus* in dorsal view

Fig.6: Sawsheath of *Dolerus uliginosus* in dorsal view

uliginosus (Klug, 1818)" and "Mesepisternum finely and densely punctate in *D. madidus* (Klug, 1818)". Unfortunately both characters are easy to overlook, and the separation is impossible in lack of reliable comparative material. Studiing the collected *Dolerus uliginosus* Kl. and *D. madidus* specimen, we found a third feature which makes the separation easy and reliable based on female genitalia. Setae of sawsheath (valvula 3) in dorsal view forming obtuse angle (circa 110°) in *Dolerus uliginosus* (Klug) and acute angle (circa 65°) in *D. madidus* (Klug) as they figured in Fig. 5 and 6.

Flying period and distribution in the Carpathian Basin.

We have (with the present data), only 3 complete data from the Carpathian Basin of this species. These data are:

Kerz (Transylvania), 07. 05. 1918. It is capctured and published by Arnold Müller, sex is unknown (MÜLLER 1922), Remetevasgyár (Remeťské Hámre): 1 female, 26 May 2007 captured by Ladislav Roller (published in ROLLER & HARIS 2008) and the present data from Visnyeszéplak: Vitorág, 30. 04. 2022, 1 female.

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