

NOTATKA / NOTE

First records of *Psarus abdominalis* (FABRICIUS, 1794) (Diptera: Syrphidae) from Belarus

Pierwsze doniesienie z Białorusi o *Psarus abdominalis* (FABRICIUS, 1794) (Diptera: Syrphidae)

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SUMMARY. Findings of *Psarus abdominalis* (FABRICIUS, 1794), a new for the fauna of Belarus species of hoverflies from the tribe Rhingiini (Diptera: Syrphidae), are analyzed. The material was collected twice in July 2020 and June 2023 in Gomel Region. Data on distribution and ecology of the species are given.

KEY WORDS: *Psarus abdominalis*, new records, fauna, Belarus.

Hoverflies (Syrphidae) are one of the largest and most diverse families of flies (Diptera) occurring worldwide except for the Antarctic. Thanks to large sizes and bright coloration of many species and their huge abundance, representatives of this family have along attracted the attention of researchers. To date, more than 6200 described syrphid species worldwide and around 900 species in Europe (YOUNG et al. 2016, SPEIGHT 2020, VUJIĆ et al. 2022). The latest published list of hoverflies in Belarus indicates 257 species (BORODIN & BORODINA 2014). One further species, newly recorded ones is presented in this paper – *Psarus abdominalis* (FABRICIUS, 1794):

- UB-1c Belarus, Gomel region, Bragin district, Nizhnie Zhary, 25 VII 2020, 1♀ (Fig.);
- UC-1c Belarus, Gomel region, Gomel district, Rudnya Zhigal'skaya, 17 VI 2023, 1♀.

Both finds are associated with the edges of mixed forests dominated by oak with rich vegetation of herbs and shrubs. The collected material is stored in the author's private collection.

Brief description: body almost hairless of 8.5–10 mm long, with abdominal tergites red and elongated antennae, with the arista inserted on the apical half of the third segment.

P. abdominalis occurs from France in the west to European parts of Russia in the east, and from Latvia in the north to Greece in the south (MENGUAL & SSYMANK 2015, KULIJER et al. 2023). However, it is very rare throughout its range, and it is considered as regionally extinct in several European countries



Fig. *Psarus abdominalis* (F.), female, 25 July 2020, Bragin district, Nizhnie Zhary, Belarus.

such as Sweden, Netherlands, and Belgium (BOT & VAN de MEUTER 2019, SPEIGHT 2020). VERLINDEN & DECLEER (1987) state that *P. abdominalis* disappeared from northwest Europe. In Austria, the occurrence is considered doubtful (MENGUAL & SSYMANK 2015). In the Czech Republic, *P. abdominalis* is listed in the local Red List as a critically endangered species (MAZÁNEK & BARTÁK 2005, HADRAVA 2022). In Eastern Europe, the species has a restricted and fragmented distribution, but in Ukraine it is still common in some places, although it is also protected (POPOV 2009, ZAIKA et al. 2011). In Russia, it is registered in the center and in the south of the European part of the country (BARKALOV

& MUTIN 2018). Overall, in The European Red List of Hoverflies (VUJIĆ et al. 2022), *Psarus abdominalis* was classified under the category VU (vulnerable) in the geographical range of Europe, and as EN (endangered) in the narrower EU27 range.

P. abdominalis is monovoltine forest species, flying from April to the beginning of July (KULIJER et al. 2023). Its preferred habitats are well-drained thermophilous oak forests with mature trees and diverse herb vegetation (SPEIGHT 2020). MENGUAL & SSYMANK (2015) argue that the larvae might be associated somehow with *Geranium sanguineum* L., but the species was found also in the habitats where this plant is not present (HADRAVA 2022, KULIJER et al. 2023). The adult flies visit flowers and inflorescences of various plants, including *Anthemis* sp., *G. sanguineum*, *Veronica* sp. and yellow crucifers (SPEIGHT 2020). Imagines mimic solitary parasitic bees of the genus *Sphecodes* LATREILLE, 1804 (MENGUAL & SSYMANK 2015).

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