

Notes on new records and rare species of digger wasps in Poland

(Hymenoptera, Crabronidae)

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We provide information on the occurrence of crabronid wasps (Hymenoptera, Crabronidae) in Poland, based on the material collected in various regions in 2004–2013. Two species are new to the Polish fauna: *Lindenius parkanensis* (Zavadil, 1948) and *Psenulus chevrieri* (Tournier, 1889). *Psenulus chevrieri* is probably widespread in the country. The study confirms the occurrence of another two species, rarely recorded from Poland, i.e. *Harpactus morawitzi* Radoszkowski, 1884 and *Oxybelus dissectus* Dahlbom, 1845.

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Introduction

The extent of research on digger wasps varies in particular regions of Poland (Szczepko 2013). The crabronid fauna of Poland was summarized in the annotated checklist by Wiśniowski (2004) who presented a comprehensive compilation of 237 species – eight of them were reported erroneously and another four are documented insufficient.

The present paper provides information on the occurrence of two rare species and two other species of Crabronidae new to Poland. The specimens were collected using sweep nets and yellow traps in the period of 2004–2013. The material is deposited in the personal collections of the authors. Images were taken with a camera attached to a Leica M205C microscope.

Review of species

Harpactus morawitzi Radoszkowski, 1884

Wielkopolska-Kujawy Lowland: Toruń-Glinki (52°58'16"N, 18°33'32"E), 03 VIII 2011 – 2♂ and 1♀, 10 VI 2012 – 2♂ and 1♀, 31 VII 2012 – 1♂ and 1♀, 12 VI 2013 – 1♀, 06 VIII 2013 – 1♂ and 1♀, 14 VII 2013 – 1♂ and 1♀, 12 VI 2012 – 2♂, 29 VI 2012 – 3♂, leg. P. Olszewski.

Reported from Mazovian Lowland-Kampinos National Park (Plewka 1981) and from Masurian Lake-land (Kowalczyk 1988, 1991).

The species occurs in Austria, Bulgaria, Czech Republic, France, Greece, Hungary, Italy, Russia (European part, Mordovian Rep.), Slovakia, Spain, Turkey, Turkmenistan and Ukraine (Pulawski 2016). In Germany not reported (Jacobs 2007).



Fig. 1. *Harpactus morawitzi* ♀, habitus, dorsal view.

Lindenius parkanensis Zavadil, 1948

Wielkopolska-Kujawy Lowland: Inowrocław-Matwy (52°45'34"N, 18°15'44"E) 07 VII 2010 – 1 ♂ and Rysiówka (52°35'13"N, 18°19'39"E) 21–22 VII 2008 – 1 ♀, leg. L. Twarda.

First records from Poland. The species occurs in Austria, Belarus, Bulgaria, Hungary, Kazakhstan, Romania, Russia (European part), Slovakia and Ukraine (Pulawski 2016).



Fig. 2. *Lindenius parkanensis* ♂, habitus, lateral view.

Oxybelus dissectus Dahlbom, 1845

Wielkopolska-Kujawy Lowland: Toruń, artillery training ground (52°57'46"N, 18°34'12"E), 20 VIII 2013 – 1 ♀, leg. P. Olszewski.

Reported for the last time by Skibińska (1982, 1986). In neighbouring countries unrecorded for many years. It is known from Austria, Bulgaria, Croatia, France, Germany, Greece, Spain, former Yugoslavia, Malta, Portugal, Romania, Russia, Slovakia, Switzerland, Hungary and Italy (Pulawski 2016). Listed as 'extinct' in the red list of Aculeata of Germany, collected for the last time in 1954 (Schmid-Egger 2010); very rarely recorded in Slovakia (Zavadil 1951).

Psenulus chevrieri (Tournier, 1889)

Baltic Coast: Gdynia (54°29'57"N, 18°33'14"E), 07 VIII 2009 – 1 ♀, leg. J. K. Kowalczyk. Małopolska Upland: Nida Landscape Park (50°25'N, 20°35'E), 09 VIII 2004 – 1 ♀, leg. J. Bąk.

First records from Poland. The species range includes mainly North and Central Europe. It is known from Austria, Belgium, Croatia, Czech Republic, Estonia, Finland, France, Italy, Germany, The Netherlands, Slovakia and Switzerland (Pulawski 2016).



Fig. 3. *Oxybelus dissectus* ♀, habitus, dorsal view.

Schmid-Egger (2016) provided new identification characters and a key to identification of *pallipes* species group including *P. chevrieri*.

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Fig. 4. *Psenulus chevrieri* ♀, head, frontal view.

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