Auplopus rectus (Haupt, 1927) (Hymenoptera: Pompilidae) – a new spider wasp species to the fauna of Poland

Petr BOGUSCH

Department of Biology, Faculty of Science, University of Hradec Králové, Rokitanského 62, CZ-500 03 Hradec Králové, Czech Republic; e-mail: bogusch.petr@gmail.com

Abstract: Auplopus rectus (Haupt, 1927) is newly recorded from Poland. It was found on sandy site near Smołdzino, on the border of Słowiński National Park — the most northerly known locality of this species. The distribution of A. rectus in Central Europe and potential spreading are discussed.

Key words: spider wasp, new record, distribution, Słowiński National Park

INTRODUCTION

Spider wasps (Pompilidae) are not very numerous family of aculeate Hymenoptera with 89 species known from Poland (Wiśniowski 2009). The members of this family are gracile insects with long legs. Females have sting with strong venom. They hunt various groups of spiders, some species are specialized, e.g. Eoferreola rhombica (Christ, 1791) on Eresus Walckener, 1805; Aporus unicolor Spinola, 1808 on Atypus Latreille, 1804 or Homonotus sanguinolentus (Fabricius, 1793) on Cheiracanthium C. L. Koch, 1839. Many species are ecologically specialized and hunt spiders on leaves of shrubs or on bare sands. Some genera are cleptoparasitic, using different strategies to get prey and lay the eggs on it (O’Neill 2001, Wiśniowski 2009, Macek et al. 2010). In Europe, are known 284 species and most of them occur in warmer regions, so the distribution of most species is restricted to southern Europe (Wiśniowski 2009).

In central Europe are known three species of the genus Auplopus Spinola, 1841. They are medium in size, with short petiole on first abdominal segment and elongated clypeal margin in females. The males have white or pale yellow marks on the face. The females build their brood cells of mud on stones, walls or in different kinds of cavities. They are unspecialized and hunt for various spiders of many families (Wiśniowski 2009, Macek et al. 2010).

Auplopus carbonarius carbonarius (Scopoli, 1763) is a common species in many kinds of biotopes and it is abundant in most regions of Central Europe. Auplopus albifrons (Dalman, 1823) with first abdominal terga red prefers warmer regions where it is in the Czech Republic and Slovakia locally common (Macek et al. 2010). Both species occur in Poland, although A. albifrons has been recorded only from one locality in the Lublin Upland and it is classified as critically endangered (Wiśniowski 2009). Auplopus rectus (Haupt, 1927) is known from adjacent countries (the Czech Republic and Slovakia), but it is rare and occurs only on the sandy biotopes. Recently, it was found at the post-industrial sites, especially in sandpits or military exercising areas (Wolf 1971, P. Bogusch, unpubl. data).
METHODS

The specimen was collected during the excursion of CEEPUS Summer School on sandy site near the village Smołdzino in north Poland. It was identified by the author and revised by Jakub Straka (Charles University, Praha, the Czech Republic) using the keys of Wolf (1972) and Oehlke & Wolf (1987) and also material from Czech localities. Nomenclature is used from Wolf (1971) and Wiśniowski (2009).

RESULTS

*Auplopus rectus* (Haupt, 1927)

*Pseudagenia recta* Haupt, 1927: 141 (key), 146 (description), ♂♀, syntypes from Serbia.


Distribution: South and southeastern France, Switzerland, Austria, the Czech Republic, Slovakia, South East Europe, Spain, Portugal, Italy, Cyprus, Turkey, Iran (Wolf 1971). Wahis (2004) reported this species also from Albania, Bosnia, Corsica, Greece, Malta, Romania, Sardinia, and Sicily, eastern in central Russia, Near East and North Africa. It also occurs in southern Europe, reaching central Europe in Switzerland, the Czech Republic and Slovakia. It has not been recorded in Germany and Ukraine.

Remarks: One female was collected on the bare sand between the river and the stadium in Smołdzino in northern Poland. The female was running on the sand surface, probably trying to find a prey. *Anoplius infuscatus* (Vander Linden, 1827) and *Arachnospila abnormis* (Dahlbom, 1842) were found at the same locality, the former was quite numerous.

The nearest known localities of *A. rectus* are ca. 700 km far: in south Moravia (sandpits near Bratčice or military area Bzenec) and in south Slovakia (sandpit at Nemčiňany) (Fig. 1).

Fig. 1. Map of Poland and surrounding countries with marked new locality of *Auplopus rectus* in Pomerania in Poland and with the nearest locality in South Moravia in the Czech Republic.
The habitat where the species was found in Poland is similar to those in Moravia and Slovakia. The dune is located in the unpolluted region with sandy soil, so this species is probably related to such habitat types. *A. rectus* was historically known from two sites in Bohemia (Praha and Unětice in central Bohemia) and from south Moravia and Slovakia (Wolf 1971). After that it disappeared from most of the localities and it was restricted only to the warmest sites. According to the red list of species, it is critically endangered in the Czech Republic (Straka 2005). In recent years, *A. rectus* was recorded many times in various parts of southern Moravia and it was quite numerous in some localities. Thus, it seems that this species spread to the north (P. Bogusch & J. Straka, pers. obs.).

The current discovery supplements the Polish faunistic lists of the next spider wasp and it moves the northernmost range of the species.

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**REFERENCES**


**STRESZCZENIE**

*Auplopus rectus* (Haupt, 1927) (Hymenoptera: Pompilidae) – nowy dla Polski gatunek nastecznika


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