



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

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Abstract: *Auplopus rectus* (Haupt, 1927) is newly recorded from Poland. It was found on sandy site near Smoldzino, 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 Smoldzino 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.

Material examined: Poland, Smoldzino env., sandy site, 54.664276 N, 17.206832 E, 15 Jul 2014, 1♀, leg. P. Bogusch, det. & coll. J. Straka revid.

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 Smoldzino 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 Únětice 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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STRESZCZENIE

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

Jedna samica nastecznika *Auplopus rectus* (Haupt, 1927) została zebrana w lipcu 2014 r. na piaszczystym terenie, w pobliżu Smołdzina w północnej Polsce (przy granicy Słowińskiego Parku Narodowego). Stanowisko jest osobliwe, ponieważ gatunek ten występował dotychczas w południowej Europie, z północną granicą zasięgu w Czechach (piaskownia w pobliżu Bratčice). Opiswane stanowisko podobne jest do czeskich, gdzie dotychczas obserwowano nastecznika. Na badanym stanowisku znaleziono także inny rzadki gatunek *Arachnospila abnormis*. W Czechach *A. rectus* wykazuje ekspansję. Prezentowane stanowisko jest prawdopodobnie najdalej wysuniętym na północ.

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