Short communication

FIRST RECORD OF BATHYTHRIX FORMOSA (DESVIGNES)
(ICHNEUMONIDAE: CRYPTINAЕ) IN SERBIA

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The genus Bathythrix Förster, 1869 belongs to Ichneumonidae, one of the largest family among parasitoid insects. It is placed in the subfamily Cryptinae and the tribe Phygadeuontini, which comprises more than 70 genera worldwide (Yu et al., 2012; Fauna Europaea, 2017). The great majority of Cryptinae are idiobiont ectoparasitoids that attack the pupal or prepupal stages of holometabolous insects, but there are also koinobiont endoparasitoid species. Some species parasitize the egg sacs of spiders (Fitton et al., 1987). The genus Bathythrix comprises about 60 species worldwide. In the European fauna, 23 species of Bathythrix have been recorded. Only three species have been registered for the territory of Serbia, B. aerea (Gravenhorst, 1829), B. lamina (Thomson, 1884) and B. maculata (Hellen, 1957) (Fauna Europaea, 2017). So far, B. formosa (Desvignes, 1860) has not been registered in Serbia; therefore, we report this species as new to the investigated territory.

Bathythrix formosa is a relatively common species, often found in central and northern Europe: Belgium, Great Britain, Finland, France, Germany, Hungary, Latvia, Poland and Sweden (Fauna Europaea, 2017). This ichneumon wasp is often reared from the egg cocoons of some spiders (Sawoniewicz, 1980; Horstmann, 1998). B. formosa is recorded from the egg sacs of the following spiders: Agroeca brunnea (Blackwall, 1833), A. proxima (O. P.-Cambridge, 1871) from the family Liocranidae (Hedwig, 1950; Horstmann, 1998; Schwarz & Shaw, 2010), and Allagelena gracilens (C. L. Koch, 1841) from the family Agelenidae (Smith & Desvignes, 1860; Parfitt, 1881; Bignell, 1898).

At first, after the revision of European species of the genus Bathythrix by Sawoniewicz (1980), B. formosa was considered to be a variety or a form of Bathythrix fragilis (Gravenhorst, 1829). However, Horstmann (1998) showed that these two taxa are actually separate species according to morphological criteria and because they have different host spectrums; B. formosa parasitizes spider sacs, while B. fragilis is a parasitoid of some hymenopterans.
A female specimen of *Bathythrix formosa* (Fig. 2) was reared from a single egg sac of the spider *Agroeca* sp. (Aranea: Liocranidae). Collecting data are as follows: 1♀ Suva Planina (Mt.), Bojanine Vode (43°13'13.6"N 22°06'48.9"E) 11.07.2010, Leg. S. Stanković. The exact locality is shown in the Fig. 1.

![Sampling site - Serbia: Suva Planina (Mt.), Bojanine Vode, marked with the black dot.](image)

Adults occur from May to September. Their size can vary between 5-8 mm, with males being somewhat smaller. Body coloration is a combination of black, yellow and brown. Antennae are made up of 24-30 segments, lightly brown in color. Thorax and abdomen brown, rather red-yellow, with black patches. Legs are lighter than the rest of the body, which is mostly yellowish. Ovipositor straight, with black sheets about 2 mm long. *Agroeca* egg sac is spun of white silk, shaped like a wine glass hanging upside down (Fig. 3).

*Bathythrix formosa* represents an important pest of Liocranidae and Agelenidae spiders. In some cases, it can significantly affect the population dynamics of spider hosts (Rollard, 1990; Finch, 2005). However, there is little information about the influence of *B. formosa* on other species.
Figure 2. Female specimen of *Bathythrix formosa* (Desvignes, 1860) (Photo by S. Stanković)

Figure 3. Spider sac of *Agroeca* sp. (Aranea: Liocranidae) (Photo by V. Žikić)
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