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First records of two symphytan and a crabronid species in the Hungarian fauna (Hymenoptera: Xiphydriidae, Diprionidae, Crabronidae)

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Abstract – Xiphydria picta Konow, 1897 (Xiphydriidae), Gilpinia socia (Klug, 1812) (Diprionidae), and Harpactus formosus (Jurine, 1807) (Crabronidae) are recorded for the first time from Hungary. The diagnostic characters of Harpactus formosus are given. With 3 figures.

Key words - Xiphydria, Gilpinia, Harpactus, faunistics, Western Palaearctic region, Carpathian Basin

## INTRODUCTION

The Hungarian Hymenoptera fauna is still not fully known. Even in the relatively well-known, species-poor and economically important families such as the wood wasps (Xiphydriidae) and the forestry pest conifer sawflies (Diprionidae) there are species which have not yet been recorded (MÓCZÁR & ZOMBORI 1973). Aculeate species are in general better known than Symphyta or Parasitica; however, there are also several species in this suborder yet to be explored in the Hungarian fauna (see e.g. BAJÁRI 1957). Wasps and bees belonging to Apoidea have recently been overviewed and catalogued by JÓZAN (2011).

Amateur entomologists István Lukács and József Muskovits collected several hymenopteran specimens and recently donated them to the Hymenoptera Collection of the Hungarian Natural History Museum (HNHM). During regular identification efforts two symphytan and one crabronid species were found in their material representing their respective first records in the Hungarian fauna according to Móczár & Zombori (1973) and Józan (2011).

Determination was based on the key provided by BAJÁRI (1957), MÓCZÁR & ZOMBORI (1973) and BITSCH (1997). The specimens were identified by using

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Fig. 1. Xiphydria picta Konow, 1897, female

a Nikon SMZ645 stereoscopic microscope. The voucher specimens are deposited in the Hymenoptera Collection of the HNHM.

## **RESULTS**

Xiphydria picta Konow, 1897 (Xiphydriidae) (Fig. 1)

*Material* – Hungary, Pest County, Törökbálint, Tétényi-fennsík [= plateau], 5.VIII.2014, leg. J. Muskovits, det. Z. Vas. – A single female specimen has been collected.

Remarks – Xiphydria picta has a wide distribution in the Western Palaearctic region. In Europe, this species has been known from Sweden, Finland, Russia, Ukraine, Romania, Austria, Switzerland, Italy, and Spain (TAEGER & BLANK 2013a).

Gilpinia socia (Klug, 1812) (Diprionidae) (Fig. 2)

*Material* – Hungary, Pest County, Göd, 11.VI.2014, leg. I. Lukács, det. Z. Vas. – A single female specimen has been collected.



Fig. 2. Gilpinia socia (Klug, 1812), female



Fig. 3. Harpactus formosus (Jurine, 1807), female

Remarks – Gilpinia socia is a widely distributed species in the Western Palaearctic region. Within Europe, it has been recorded from Finland, Latvia, Estonia, Ukraine, Poland, Czech Republic, Austria, Germany, Switzerland, Italy, Croatia, and France (TAEGER & BLANK 2013b). Its larvae develop on *Pinus* trees (MÓCZÁR & ZOMBORI 1973).

Material – Hungary, Budapest, XI. [= 11th District], Jászóvár u. [= str.], 17.VI.2009, leg. J. Muskovits, det. Z. Vas. – A single female specimen has been collected.

Remarks – Harpactus formosus is a widespread species throughout Europe. It has been recorded from Ukraine, Bulgaria, Greece, Czech Republic, Germany, Austria, Switzerland, Italy, France, Spain, and Portugal (YVAN 2013). Females of Harpactus species hunt, paralyze, and collect leafhoppers (Cicadellidae) and froghoppers (Cercopidae) for their larvae which develop in nest tunnels burrowed into sandy soil (BAJÁRI 1957, BOHART & MENKE 1976).

Harpactus formosus is not included in BAJÁRI'S (1957) key; this species keys out there as Harpactus laevis (Latreille, 1792) due to the similarly dark brown pterostigma. These species can be distinguished by the following characters in combination (BITSCH 1997). Harpactus formosus: the apical part of the propodeum is striated, not polished, usually there is a pair of whitish markings on the first abdominal tergite, and the basal part of the propodeum is usually partly black. Harpactus laevis: the apical part of the propodeum is not striated, partly rather polished, the first abdominal tergite is usually entirely black and the basal part of the propodeum is usually red.

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