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Faunistic records from the Czech Republic and Slovakia (Hymenoptera: Ibaliidae, Ichneumonidae)

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HOLÝ K., PSOTA V., ŠŤASTNÁ P. & MACEK J. 2012: Faunistic records from the Czech Republic and Slovakia (Hymenoptera: Ibaliidae, Ichneumonidae). *Acta Musei Moraviae. Scientiae biologicae* (Brno) **97(2):** 65–68. – New species of Ibaliidae, *Ibalia jakowlewi* Jacobson, 1899 for Slovakia and *Plectochorus iwatensis* (Uchida, 1928) from the family Ichneumonidae for the Czech Republic are reported. A short history of research into these families in the Czech Republic and Slovakia is given.

Key words. *Ibalia jakowlewi, Plectochorus iwatensis*, Czech Republic, Slovakia, new records

Introduction

Although the national unit that was Czechoslovakia was split into two countries in 1993 (the Czech Republic in the west, Slovakia in the east), faunistic research usually covers both territories and is often published in one paper. The occurrence of the family Ibaliidae in the Czech Republic was summarised by HOLÝ *et al.* (2011),with all three European species included. Only a few faunistic papers on *Ibalia leucospoides* (Hochenwarth, 1785) and *I. rufipes* Cresson, 1879 (e.g. MIKULA 1989, LUKÁŠ 2001) have emerged from Slovakia.

The Ibaliidae are parasitoids on siricid wood wasp larvae. *I. leucospoides* and *I. rufipes* are parasitoids of *Sirex, Urocerus* and *Xeris* species, while *I. jakowlewi* has only been reared from *Tremex fuscicornis* (Fabricius, 1787) (LIU & NORDLANDER 1994). All the species are included in the Red List of threatened species in the Czech Republic (HOLÝ *et al.* 2011) and *I. leucospoides* and *I. rufipes* in the "Vulnerable" category in Slovakia (LUKÁŠ 2001).

Faunistic research into the family Ichneumonidae in this region began at the end of 19th century with Jan Slavíček and continued with František Gregor senior in the first half of the 20th century. Radoslav Obrtel was very active in the 1940s and 1950s and Josef Šedivý in the late 20th and early 21st centuries. The first checklist of the family Ichneumonidae for the Czech Republic and Slovakia was published by ŠEDIVÝ (1989), where he listed 1957 species, but he assumed that the actual number of species exceeded the number published at the time by at least a quarter. One addition is *Plectochorus iwatensis* (Uchida, 1928). The small genus *Plectochorus* Uchida, 1933 contains 12

described species, from the eastern Palaearctic and Oriental regions (YU *et al.* 2005). *P. iwatensis* is a solitary parasite of the immature larvae of *Grapholita molesta* (Busck, 1916) in twigs. There is no evidence of the secondary parasitism that is usual in most of the related species in the subfamily Mesochorinae (HAEUSSLER 1940). The infestation rate of caterpillar hosts in Japan was 0.6–3.9% (HAEUSSLER l.c.). Other known hosts are *Grapholita inopinata* Heinrich, 1928 (syn. *Grapholita prunifoliae* Kozhanchikov, 1953) (LEE 1992) and *Gypsonoma* sp. (SCHWENKE 1999). Adults are attracted to light (JUSSILA 1968).

Material and method

The nomenclature follows RONQUIST & FORSHAGE (2011) and YU *et al.* (2005). Studies by KIERYCH (1973), LEE (1992) and TOWNES (1971) were used for the determination of species.

Faunistic data are listed in the following order: country, locality, code number in parentheses referring to the central European grid for mapping flora and fauna (NOVÁK 1989, PRUNER & MÍKA 1996), date of collection, altitude, number and sex of specimen, and collector.

The specimen of *I. jakowlewi* is deposited in the National Museum, Prague and the female of *P. iwatensis* is deposited in the first author's private collection.

The specimens of *P. iwatensis* were collected with a fogger instrument (Puls Fog) which generates an aerosol containing the active ingredient deltamethrin at a concentration of 0.0025 g/l. The aerosol was applied to the tops of selected apple-trees (*Malus domestica*). Arthropods killed by the aerosol fell onto a plastic sheet placed under the tree. The acquired material was kept in 70% alcohol and subsequently determined in an entomological laboratory.

List of species

Family IBALIIDAE

Ibalia jakowlewi Jacobson, 1899

Material examined. Slovakia, Banská Štiavnica (7579), vi.1955, 1♂, M. Čapek lgt., J. Macek det., coll. National Museum, Prague

Note. Distributed in Austria (MADL 2004), Czech Republic (HOLÝ *et al.* 2011, PFEFFER 1983), Germany, Poland, Russia, Japan, Korea (LIU & NORDLANDER 1994) and Finland (MARTIKAINEN & VIITASAARI 1996). **New species for Slovakia.**

Family ICHNEUMONIDAE

Plectochorus iwatensis (Uchida, 1928)

Material examined. Moravia mer., Velké Bílovice – old apple tree avenue (7167), GPS: 48°50′4.798″ N, 16°52′18.454″ E, 23.vi.2011, 176 m.a.s.l., 1 ♀, V. Psota et P. Šťastná lgt., K. Holý det. et coll.

Note. Distributed in Finland, Russia (Jussila 1968), Italy (Schwenke 1999) and Japan (Uchida 1928). The common host *G. molesta* (Haeussler 1940, Townes 1956, Uchida 1933), originally from Asia, was recently anthropogenically introduced to Europe and other parts of the world. The first find of *G. molesta* in Europe was recorded from Italy in 1920 (Rothschild & Vickers 1991), implying *P. iwatensis* was introduced to Europe by its host. **New species for the Czech Republic.**

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