



Description of two new Aulacidae (Hymenoptera: Evanioidea) from Japan

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Abstract

Two Aulacidae, *Aulacus uchidai* Turrisi & Konishi, **sp. n.** and *Pristaulacus superbus* Turrisi & Konishi, **sp. n.**, are described and illustrated from females recently collected in Japan. *Aulacus uchidai* is recognizable among the other Palaearctic *Aulacus* by the colour pattern, with the metasoma entirely blackish, the weak and not extensive sculpture on upper frons, weakly rugulose-foveolate, the shape of mesosoma with propodeum declivous, the moderately long and slender apical lobe of hind coxa and the ovipositor length, 0.6–0.9× fore wing length. *Pristaulacus superbus* is a large species (length: 15.3–17.3 mm) with a long ovipositor (1.5× fore wing length), readily distinguishable from other Palaearctic *Pristaulacus* by the blue to dull green metallic hue on head and mesosoma, the entirely black metasoma and one tooth-like process on each side of hind surface of propodeum. Including the two new species, the number of Japanese Aulacidae is now nine, two species of *Aulacus* and seven species of *Pristaulacus*. Images of both species are freely available at the web site: <http://morphbank.net>. A revised key for the identification of the Japanese Aulacidae is provided.

Key words: Hymenoptera, *Aulacus*, *Pristaulacus*, new species, Japan

Introduction

Aulacidae comprises 223 extant species belonging to two genera (Turrisi *et al.* 2009): *Aulacus* Jurine 1807, with 75 species and *Pristaulacus* Kieffer 1900 (including the former *Panaulix* Benoit 1984), with 148 species. The number of described species has significantly increased since the publication of the World Aulacidae catalogue (Smith 2001, who listed around 150 species), which stimulated investigation especially of poorly known regions (Smith 2005a, 2005b, 2008; He *et al.* 2002; Jennings *et al.* 2004a, 2004b, 2004c; Turrisi 2004, 2005, 2006, 2007, 2011; Jennings & Austin 2006; Sun & Sheng 2007a, 2007b; Turrisi *et al.* 2009; Smith & Vilela de Carvalho 2010). Both genera are represented in all zoogeographic regions, except Antarctica, and *Aulacus* not known from Afrotropics (Kieffer 1912; Hedicke 1939; Smith 2001; Turrisi 2004; Turrisi *et al.* 2009).

Aulacidae are koinobiont endoparasitoids of wood-boring larvae of Hymenoptera and Coleoptera (Skinner & Thompson 1960; Deyrup 1984; Jennings & Austin 2004). Hosts are larval Xiphydriidae (Hymenoptera), Buprestidae (Coleoptera) and, more frequently, Cerambycidae (Coleoptera) (Barriga 1990; Visitpanich 1994; Turrisi 1999, 2004, 2007; Smith 2001; Jennings & Austin 2004).

The Japanese Aulacidae currently includes seven species, one *Aulacus* and six *Pristaulacus* as revised by Konishi (1989, 1990, 1991) and was partly reevaluated in the recent revision of the Palaearctic *Pristaulacus* by Turrisi (2007). A revised key to Palaearctic *Pristaulacus* has recently been provided by Turrisi (2011).

The purpose of this paper is to describe two new recently discovered aulacid species from Japan, provide a taxonomic discussion and an updated key for identification of Japanese Aulacidae. This study is part of an ongoing project on the revision of the Asian Aulacidae, especially of the Oriental Region (Turrisi 2005, 2007; Turrisi & Smith 2011; Turrisi & Watanabe 2011).