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First record of the genus *Aplomerus* Provancher, 1886 (Hymenoptera: Ichneumonidae: Xoridinae) from the Oriental region, with descriptions of two new species

OLEKSANDR VARGA¹, ALEKSEY RESHCHIKOV² & GAVIN R. BROAD³

¹Schmalhausen Institute of Zoology of National Academy of Sciences, Ukraine. E-mail: Sancho.Varga@gmail.com

²Department of Zoology, Swedish Museum of Natural History, Box 50007, 104 05 Stockholm, Sweden.

E-mail: alexey.reshchikov@nrm.se

³Department of Life Sciences, the Natural History Museum, Cromwell Road, London SW7 5BD, UK. E-mail: g.broad@nhm.ac.uk

Abstract

The genus *Aplomerus* Provancher, 1886 (Hymenoptera, Ichneumonidae) is a small genus of the subfamily Xoridinae. Two new species from Asia, *A. orientalis* Varga & Reshchikov **sp. n.** from Thailand and *A. phamae* Broad **sp. n.** from Vietnam, are described and illustrated. An identification key for Asian species is provided. These are the first records of the genus from the Oriental region and increases the known number of *Aplomerus* species to eight, with a disjunct distribution of North America, Japan and south-east Asia.

Key words: taxonomy, new record, Amphi-North Pacific disjunct distribution, South East Asia, Thailand, Vietnam

Introduction

The genus *Aplomerus* Provancher, 1886 (Hymenoptera, Ichneumonidae) is a small genus of the subfamily Xoridinae, containing only six described species (Yu *et al.* 2012). While the other xoridine genera are widely distributed in the Holarctic region (*Ischnoceros*, *Odontocolon*) or across all biogeographic regions (*Xorides*), *Aplomerus* has a disjunct distribution with five described species in North America (Townes *et al.* 1960) and a single species, *A. japonicus* Watanabe & Matsumoto, 2010, described from Japan (Watanabe & Matsumoto 2010). Here we describe a further two *Aplomerus* species from the Oriental region, from Thailand and Vietnam, significantly extending the known range of the genus.

A cladistic analysis of Xoridinae strongly supported the monophyly of Xoridinae and indicated that *Aplomerus* is the most basal lineage of the subfamily (Wahl 1997). *Aplomerus* is characterized by the bidentate mandibles, subapically unmodified antennae, simple frons (without horn-like projection), and the flat mesosoma (Townes 1969). However, the latter character was the only autapomorphy of the genus identified by Wahl's (1997) cladistic analysis. The other two putative apomorphies identified by Wahl (1997), namely the long first metasomal sternite and the lack of the median longitudinal carinae of the first metasomal tergite, were convergently derived within the Xoridinae and, at least partly, incorrectly coded for *Aplomerus*. The first sternite is relatively long in *Aplomerus* males but much shorter in females; similarly, whilst the median longitudinal carinae are very weakly developed in females of North American *Aplomerus* species, they are well developed in males. Therefore, given the paucity of synapomorphies defining *Aplomerus* and the widely disjunct distribution of the genus, we have identified further synapomorphies in an attempt to show that this is indeed a monophyletic genus.

As are other xoridines, *Aplomerus* species are possibly idiobiont ectoparasitoids of wood-boring Coleoptera and are usually found around coniferous forests, associated with hosts boring in dead trees (Townes *et al.* 1960; Watanabe & Matsumoto 2010).

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