

## Aulacid wasps (Hymenoptera: Aulacidae) of New Guinea, with descriptions of five new species

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### Abstract

The little known aulacid fauna of New Guinea comprises six geographically isolated, endemic species. Previously known from a single species, *Aulacus pterostigmatus* (Szépligeti), three new species of *Aulacus* are described: *A. enarotadi*, *A. sedlaceki* and *A. wau*. In addition, *Pristaulacus* is recorded from New Guinea for the first time with the descriptions of *P. kiunga* **sp. nov.** and *P. laloki* **sp. nov.** A key to the New Guinea species is provided.

**Key words:** Evanioidea, *Aulacus*, *Pristaulacus*, taxonomy, parasitic wasps

### Introduction

Aulacidae is a family of parasitic wasps that are endoparasitoids of wood-boring wasps (Xiphydriidae) and beetles (Cerambycidae and Buprestidae) (e.g., Carlson 1979; Gauld & Bolton 1988; Smith 2001; Jennings & Austin 2004; Jennings & Deans 2006). Although at various times the Aulacidae have been treated as either a subfamily or group of the Evaniidae *s.l.*, most recent studies regard them as a distinct family and probably the sister group to the Gasteruptiidae (e.g., Mason 1993; Jennings & Austin 2000; Smith 2001; Basibuyuk *et al.* 2002; Jennings *et al.* 2004a,b; Jennings & Deans 2006)

As with other members of the Evanioidea, aulacids are characterised by the high dorsal articulation of the metasoma on the propodeum, but these wasps are readily distinguished from the other families by the presence of fore wing vein 2m-cu (Gauld & Bolton 1988), fore wing cross-vein 3r-m (Konishi 1990), and the presence of a metapostnotum (Jennings *et al.* 2004a,b,c). The Aulacidae currently comprises 189 valid species, including 65 species of *Aulacus* Jurine, 122 species of *Pristaulacus* Kieffer and two species of *Panaulix* Benoit (see Smith 2001; Jennings 2001; Jennings *et al.* 2004a,b,c; Turrisi 2004; Smith 2005a,b; Deans *et al.* 2006). Both *Aulacus* and *Pristaulacus* are