

## A taxonomic revision of *Piezura* Rondani (Diptera: Fanniidae)

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### Abstract

The world fauna of the genus *Piezura* Rondani is revised in order to resolve a series of long standing taxonomic errors. All species are redescribed, and species concepts and distribution ranges of most species have been modified. The genitalia of all species are illustrated and keys to each sex are provided. The female of *P. nearctica* Chillcott is described for the first time. *Piezura pardalina shanxiensis* Wang *et al.*, 1992 is treated as an unavailable name, and *P. pardalina shanxiensis* Xue *et al.*, 1999 is accepted as the valid name for this taxon.

**Key words:** Diptera, Fanniidae, *Piezura*, systematics

### Introduction

The Fanniidae are a small family of calyptrate Diptera, with adults ranging in length from 3.5–7.5 mm. The family has a worldwide distribution but most species are found in the Nearctic and Palaearctic regions (Carvalho *et al.* 2003). There are 285 described species in the group (Carvalho *et al.* 2003) and these are currently divided between four genera (Pont 1986): *Fannia* Robineau-Desvoidy (syn. *Homalomyia* Bouché, *Coelomyia* Haliday), is by far the largest genus and is found on all continents; *Euryomma* Stein is mainly restricted to the New World except for the cosmopolitan *Euryomma peregrinum* (Meigen); *Piezura* Rondani (syn. *Platycoenosia* Strobl, *Choristomma* Stein) is found only in the Holarctic Region; and *Australofannia* Pont is restricted to southeastern Australia.

Fanniid larvae have a distinctive shape similar to those of the Platypezidae and Phoridae (Rozkošný *et al.* 1997). The body consists of eleven exposed segments, most of which are equipped with long delicate median and/ or marginal projections. Preferred breeding substrates include fungi, birds nests, rotting vegetables and wood, latrines, dung