Description of two new species of *Walkerella* (Pteromalidae, Otitesellinae) from China with a key to species of the genus

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Abstract

*Walkerella* is an Old World genus of non-pollinating fig wasps in the subfamily Otitesellinae (Chalcidoidea, Pteromalidae). It is the most widely distributed genus of the subfamily, though there has been only six known world species. This paper describes two new species associated with the host *Ficus* subsection *Conosycea* of section *Urostigma*, subgenus *Urostigma* in Xishuangbanna, China. The two new species, *Walkerella nigrabdomina* Ma & Yang sp. nov. and *W. curtipedis* Ma & Yang sp. nov., are described from specimens reared from *Ficus pisocarpa* and *Ficus curtipes*, respectively. A key to all described species of *Walkerella* found is provided.

Key words: fig wasps, taxonomy, comparison, Xishuangbanna

Introduction

*Walkerella* Westwood is classified in the subfamily Otitesellinae of Pteromalidae (Hymenoptera: Chalcidoidea) (Bouček 1988, 1993; Rasplus *et al.* 1998; Westwood 1883). There are currently fifteen described genera in Otitesellinae (Noyes 2012). *Walkerella* is recorded widely throughout the Oriental and Australasian regions, and it has also been introduced to the Palearctic, Neartic and Neotropics. Only six *Walkerella* species have been described to date. Species of *Walkerella* are typically associated with the host *Ficus* (Moraceae) subsection *Conosycea* of section *Urostigma*, subgenus *Urostigma* in Xishuangbanna, China. The two new species, *Walkerella nigrabdomina* Ma & Yang sp. nov. and *W. curtipedis* Ma & Yang sp. nov., are described from specimens reared from *Ficus pisocarpa* and *Ficus curtipes*, respectively. A key to all described species of *Walkerella* found is provided.

Wasps of Otitesellinae occur only in smaller-sized figs, probably because their ovipositors are rather short. Some members of the subfamily, such as *Walkerella* species, use their ovipositors to penetrate the fig wall and lay eggs without entering the fig cavity (Beardsley 1998; Bouček 1988; Wang *et al.* 2009, 2010). These do not have a smooth head and pronotum with tooth-like tubercles, unlike species that do enter figs to oviposit.

We found two new species of *Walkerella* in Xishuangbanna, China. Here we provide detailed descriptions and photographs of the new species and, for the first time, provide a key to all species of *Walkerella* associated with figs.