

<http://dx.doi.org/10.11646/zootaxa.4020.3.10>
<http://zoobank.org/urn:lsid:zoobank.org:pub:6A10D461-0F05-44F1-9CA7-AC9B78C6ACA3>

Review of the genus *Taiwanomyrme* Tsuneki, 1993 (Hymenoptera, Mutillidae, Mutillinae), with description of two new species from China

BIN-BIN TU¹, ARKADY S. LELEJ^{2,3} & XUE-XIN CHEN^{1,3}

¹State Key Laboratory of Rice Biology and Ministry of Agriculture, Key Laboratory of Agricultural Entomology, Institute of Insect Science, Zhejiang University, 866 Yuhangtang Road, Hangzhou, Zhejiang 310058, China.

E-mails: binbintu2012@163.com, xxchen@zju.edu.cn

²Institute of Biology and Soil Science, Russian Academy of Sciences, Vladivostok-22 690022, Russia. E-mail: lelej@biosoil.ru

³Corresponding authors. E-mails: lelej@biosoil.ru; xxchen@zju.edu.cn

Abstract

Five species of *Taiwanomyrme* Tsuneki, 1993 are reviewed; two of them, *T. latisquamula* Tu, Lelej et Chen, **sp. nov.** (China: Guizhou) and *T. impressoides* Tu, Lelej et Chen, **sp. nov.** (China: Zhejiang, Fujian, Hunan), are described and illustrated. *Smicromyrme taiwanus* Tsuneki, 1993 is proposed as a **new synonym** for *Taiwanomyrme friekae* (Zavattari, 1913). A key to males and females of *Taiwanomyrme* and additions to the key of females of Oriental genera of the tribes Petersenidiini and Trogaspidiini are given. New ranges are given for *T. basirufus* (Chen, 1957) and *T. impressus* (Chen, 1957), specifically within China.

Key words: mutillid wasps, Petersenidiini, fauna, key to species, Oriental Region, Palaearctic

Introduction

Mutillidae currently include 212 genera and about 4300 described species (Lelej 2007; Lelej & Brothers 2008; Aguiar *et al.* 2013, updated). In the Palaearctic region 525 species in 59 genera and in the Oriental region 640 species in 64 genera are reported (Lelej 2002, updated; Lelej 2005). The mutillid fauna of China includes 157 species in 32 genera (Lelej 2002, 2005; Tu *et al.* 2014a, b), comprising both Palaearctic (northwards of 30°N) and Oriental (southwards 30°N) taxa. Because of extreme sexual dimorphism, sex associations cannot be made on morphology alone; most species and even many genera are known from one sex only. This has resulted in many taxonomic challenges in trying to make associations, and resulted in many synonyms recognized through matching of males and females.

The genus *Taiwanomyrme* Tsuneki, 1993 was described as a subgenus of *Smicromyrme* Thomson, 1870 (Tsuneki 1993), but later was raised to generic status (Lelej 1995). *Taiwanomyrme* is a small genus in the tribe Petersenidiini (subfamily Mutillinae). Currently *Taiwanomyrme* includes four species known from the Palearctic and Oriental regions (Zavattari 1913; Mickel 1933; Chen 1957; Lelej 1996, 2002, 2005): *T. basirufus* (Chen, 1957), ♂, ♀; *T. friekae* (Zavattari, 1913), ♂; *T. impressus* (Chen, 1957), ♂; and *T. taiwanus* (Tsuneki, 1993), ♂. The female of *Taiwanomyrme* was unknown to A. Lelej and not included in his generic key for the Oriental region (Lelej 2005). In the present paper we describe two new species: *T. impressoides* Tu, Lelej et Chen, **sp. nov.**, ♂, and *T. latisquamula* Tu, Lelej et Chen, **sp. nov.**, ♀ and synonymize *T. taiwanus* (Tsuneki, 1993) under *T. friekae* (Zavattari, 1913). A key to males and females of this genus is also given.

Material and methods

The following acronyms are used for the collections where type specimens and other materials are deposited (responsible person in parentheses):