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A new species of *Symbiopsocus* Li (Psocodea: “Psocoptera”: Psocidae) from Taiwan, China, with a revised checklist and key to species

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Abstract

Symbiopsocus yangminus sp. n. is described based on specimens collected from Taiwan, China. We provide an updated checklist and comprehensive geographic distribution of *Symbiopsocus*, including species from China described in *Mecampsis*. The genus *Symbiopsocus* now comprises 20 species from mainland China, two species from Taiwan and one species from Japan. Updated keys to males and females of species from China are provided.

Key words: Psocodea, Psocoptera, Psocidae, *Symbiopsocus*, *Mecampsis*, new species, biogeography, Taiwan, China

Introduction

The genus *Symbiopsocus* was erected by Li (1997), with *S. leptocladus* from Central China as the type species. Later, nine species of *Symbiopsocus* were described from mainland of China (Li, 2002; Liu *et al.*, 2011), one species from Taiwan (Okamoto, 1907; Yoshizawa, 2008), and one species from Japan (Mockford, 2003). *Symbiopsocus sturmi* (Badonnel) from Colombia was returned to its original genus, *Psocomesites* (Yoshizawa & Mockford, 2012). The remaining species restrict the geographic distribution of *Symbiopsocus* to Asia. In addition, Yoshizawa & Mockford (2012) proposed that species of *Mecampsis* described from China were treated improperly and moved them to *Symbiopsocus*, bringing the total to 22 species in this genus.

In the present study, a second species of *Symbiopsocus* from Taiwan, *Symbiopsocus yangminus* sp. n., is described. We also provide an updated checklist (Table 1) indicating the geographic distribution of the genus, and including species from China previously placed in *Mecampsis*. These records are based upon a thorough review of the literature. Distributional data show that endemism of *Symbiopsocus* is high, with 20 species in mainland China, two species in Taiwan and one species in Japan. Updated keys to males and females of the species from China are presented.

Species from China placed in *Mecampsis* are discussed briefly, and we agree with their transfer to *Symbiopsocus* as proposed by Yoshizawa & Mockford (2012). However, the lack of genitalic information for *Mecampsis* leaves the relationship between the two genera unresolved.

Material and methods

Specimen preparation and measurements were undertaken following Liu *et al.* (2011). All the specimens examined are deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.

The following abbreviations are used: Bw = distance between top of post clypeus and apex of forewing; B = body length; F = length of hind femur; f1, f2, f3 = length of first to third flagellomeres; FW = fore wing length; HW = hind wing length; IO/d = least distance between compound eyes divided by lateral diameter of a compound eye in either anterior or dorsal view; Mx4 = length of distal segment of maxillary palpus; T = length of hind tibia; t1, t2 = length of hind first and second tarsomeres.

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