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***Atrichadenotecnum multispinosus* sp. n. (Psocoptera: Psocidae)
from southwestern China, with new synonyms and new combinations
from *Psocomesites* and *Clematostigma***

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Abstract

Atrichadenotecnum multispinosus sp. n. is described from southwestern China. *Psocomesites* and *Clematostigma* from China are discussed, with five species transferred to *Atrichadenotecnum* and four species placed as new synonyms. Keys to adult males and females of *Atrichadenotecnum* species are presented.

Key words: Psocoptera, Psocidae, *Atrichadenotecnum*, *Psocomesites*, *Clematostigma*, new synonyms, new combinations, new species, keys

Introduction

The genus *Atrichadenotecnum* was erected by Yoshizawa (1998), with *A. quadripunctatum* from Japan as the type species. Species of this genus are very similar to those of *Trichadenotecnum* Enderlein in having marginal markings and triangular areola postica on the fore wing. However, male and female genitalic characters show that the two genera are assignable to different tribes (Yoshizawa, 1998). This relationship was also supported molecularly, and *Atrichadenotecnum* is now assigned to its own independent tribe, Atrichadenotecnini, and *Trichadenotecnum* to the tribe Ptyctini (Yoshizawa & Johnson, 2008). *Atrichadenotecnum* is characterized by maculate fore wings with continuous or distinct marginal markings, triangular areola postica, and small to medium sized body. In the male genitalia, the hypandrium is asymmetrical to form a pair of sinuate processes or is almost symmetrical with two tiers of projections, and the phallosome is closed and always asymmetrical. Female genitalia usually have a short stout egg-guide, with pigmented arms forming V-shaped regions, sometimes with a median band.

Morphological examination of the new species described below indicated that this is closely related to *Psocomesites laricolum* Li from northeastern China, due to similar fore wing and male genitalic characters. In addition, we found species of *Clematostigma* that match the generic definition of *Atrichadenotecnum* rather than *Clematostigma*, and we here transfer all species of *Clematostigma* and *Psocomesites* described from China to *Atrichadenotecnum*. With one new species described below, this genus now includes 13 species, all from Asia. These comprise two species from Japan, two from Indonesia, one each from Sri Lanka and Malaysia, and seven from China, including Taiwan and Hong Kong (Table 1).

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 fore wing; B =