



Two new species of the *acifer* species group of *Polypedilum* subgenus *Tripodura* Townes from China (Diptera: Chironomidae)

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Abstract

Polypedilum (*Tripodura*) *falcatum* sp. n. and *P. (T.) procerum* sp. n. of the *acifer* species group of *Polypedilum* subgenus *Tripodura* Townes are described and illustrated as male imagines from China. The male adult of *P. (T.) falcatum* sp. n. is distinguished by the presence of two faint markings on wing; short and interrupted abdominal tergite bands; the sickle-like superior volsella bearing 0–2 outer setae and a tuft of short setae on its apex. The male adult of *P. (T.) procerum* sp. n. differs in having short abdominal tergite bands; a long, slender and apically curved superior volsella; a high fore leg ratio (2.30–2.33). A key to known male imagines of *Polypedilum* subgenus *Tripodura* from China is presented.

Key words: Chironomidae, *Polypedilum*, *Tripodura*, new species, key, China

Introduction

The genus *Polypedilum* was erected by Kieffer (1912) and has a cosmopolitan distribution with about 440 described species worldwide. According to Sæther *et al.* (2010), this genus contains eight subgenera: *Polypedilum* s. str. Kieffer, 1913; *Pentapedilum* Kieffer, 1913; *Tripedilum* Kieffer, 1921; *Kribionympha* Kieffer, 1921; *Tripodura* Townes, 1945; *Uresipedilum* Oyewo & Sæther, 1998; *Cerobregma* Sæther & Sundal, 1999 and *Probolum* Andersen & Sæther, 2010.

The subgenus *Tripodura* was erected by Townes (1945) for species with broad pad-like superior volsellae and often having lateral projections or shoulders to each side of the anal point. To date, 140 species of subgenus *Tripodura* have been described worldwide including 10 species recorded from China (Wang, 2000; Zhang *et al.*, 2006; Zhang & Wang, 2007; Qi *et al.*, 2013, 2014; Tang *et al.* 2014). Vårdal *et al.* (2002) performed phylogenetic analysis of the subgenus *Tripodura* and 20 species groups were recognised within the subgenus. According to Vårdal *et al.* (2002), the *acifer* species group forms the sister group of the remaining species. Vårdal *et al.* (2002) noted that male imagines of the *acifer*-group possess the following character states: tergite IX with projections or shoulders on each side of the anal point, less than five setae on squama, anal point conspicuously broad, apical projection of superior volsella present, no wing markings, base of cell r_{4+5} without spot, front tibial scale with spur, and inferior volsella with 6–15 setae.

Six species of the *acifer*-group have been recorded worldwide: *P. (T.) acifer* Townes, 1945; *P. (T.) pulchrum* Albu, 1980; *P. (T.) sidoniensis* Moubayed, 1990; *P. (T.) pseudacifer* Zorina & Makarchenko, 2001; *P. (T.) chelum* Vårdal *et al.*, 2002; *P. (T.) leptovolsellae* Ree, 2009. In this paper, two new species of the *acifer* group of subgenus *Tripodura* from China are described and a key to known male imagines of *Polypedilum* (*Tripodura*) from China is presented.

Methods, terminology and material

The morphological nomenclature follows Sæther (1980). The material examined was mounted on slides following

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