



***Machilontus* (s. str.) *medogensis* Song & Huang, sp. nov. from Tibet,  
the northernmost record of the genus *Machilontus* Silvestri, 1912  
and the first record of the family Meinertellidae  
(Insecta: Microcoryphia: Machiloidea) in China**

ZHI-SHUN SONG<sup>1</sup>, FU-SHENG HUANG<sup>2</sup> & AI-PING LIANG<sup>3</sup>

Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China.

E-mail: <sup>1</sup>songzs@ioz.ac.cn; <sup>2</sup>huangfs\_ioz@sina.com

<sup>3</sup>Corresponding author. E-mail: liangap@ioz.ac.cn

**Abstract**

A new bristletail species, *Machilontus* (s. str.) *medogensis* Song & Huang, **sp. nov.**, is described and illustrated from Medog, Tibet, southwestern China. The new species not only represents the northernmost record of the genus *Machilontus* Silvestri, 1912, but also represents the first record of the family Meinertellidae Verhoeff, 1910 in China. Checklists of Chinese Microcoryphia and world *Machilontus* spp. are provided. A distribution map and a key to the species of *Machilontus* are given.

**Key words:** jumping bristletails, new species, identification key

**Introduction**

The bristletail family Meinertellidae Verhoeff, one of two families in the order Microcoryphia, is known mostly from the southern hemisphere. Species of Meinertellidae can be distinguished from the other family, Machilidae, by the following combination of characters: head, antennae, palps, legs and styli without scales; head, body and appendages generally with patches of reddish to violet-brown hypodermal pigment; article II of maxillary palps in males usually with a dorsal distal angular apophysis; all abdominal sternites small to very small, triangular to spindle-shaped; parameres absent (Sturm & Machida 2001).

Currently Meinertellidae contains more than 170 species in 19 genera, which are clustered into five groups: *Machiloides* group, *Machilinus* group, *Hypomachiloides* group, *Machilontus* group and *Meinertellus* group (Sturm & Machida 2001). Most extant members of the family have been recorded from southern hemisphere and are the only representatives of the order Microcoryphia in Madagascar and in the Neotropical and Australian regions (Sturm & Machida 2001; Mendes 2002). A few genera, e.g., *Machilinus* Silvestri and *Machiloides* Silvestri, occur in some disjunct areas of the northern hemisphere, extending to latitude 45°N (Sturm & Machida 2001). However, there have been no authentic records of meinertellids in China.

The microcoryphian fauna of China remains inadequately studied. A total of 20 species in 7 genera of Machilidae have been described from China. Of these, 11 species were erected by Silvestri (1906, 1934, 1936, 1943) and the rest were mostly described by Chinese workers after 1990 (Xue & Yin 1991; Zhang *et al.* 2005; Huang *et al.* 2006; Zhang & Li 2009; Yu *et al.* 2010). The total number of described species probably represents only a fraction of the actual diversity of Chinese Microcoryphia, when one considers the vast territory and variety of habitats of China. Revisionary work on this group in China is highly needed.

While sorting and identifying Microcoryphia from material in the Insect Collection of the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS), we found an undescribed species of genus *Machilontus* Silvestri from Medog, Tibet, southwestern China. The new species represents the northernmost record of *Machil-*