



A new species and a new record of the genus *Homidia* Börner, 1906 from East China (Collembola: Entomobryidae)

SHI-DI SHI¹, ZHI-XIANG PAN¹ & FENG ZHANG^{2,3}

¹ School of Life Sciences, Taizhou University, Linhai 317000, Zhejiang Province, China. E-mail: pzx1118@hotmail.com

² School of Life Sciences, Nanjing University, Nanjing 210093, Jiangsu Province, China

³ Corresponding author. E-mail: xtmd.zf@gmail.com

Abstract

A new species, *Homidia apigmenta* **n. sp.** from East China is described. It is easily separated from the other *Homidia* species by absence of pigment on the dorsal tergites, presence of leaf-like modified setae on labium and ventral part of head, particular chaetotaxy of macrochaetae on posterior side of Abd. IV, and 5–8 (mostly 5) smooth setae on posterior face and 6–7 smooth setae on lateral flap of ventral tube. A table on characters of five closely related *Homidia* species is provided. A new record for China, the subspecies *H. sauteri formosana* Uchida, is redescribed and raised to the species level. A table showing the differences between *H. sauteri* Börner, and *H. formosana* Uchida, **n. comb.** is also provided.

Key words: *Homidia apigmenta* **n. sp.**, *H. sauteri formosana*, chaetotaxy, taxonomy

Introduction

The genus *Homidia* was established by Börner (1906) as a subgenus of *Entomobrya* Rondani for the species *H. cingula* Börner, 1906. Denis (1929) raised the subgenus to generic level. The genus is characterized by presence of spines on inner margin of dentes in adults, 8+8 eyes, bilobed Ant. IV apical bulb, bidentate mucro with subapical tooth larger than the apical one, mucronal basal spine short with tip reaching subapical tooth, and absence of body scales. *Homidia* species, widely distributed in Southeast Asia, usually live in leaf litter and never in soil. So far, more than 40 species in the genus have been described worldwide, 24 recorded from China; only four (*H. polyseta* Chen, 1998; *H. latifolia* Chen & Li, 1999; *H. qimenensis* Yi & Chen, 1999; *H. ziguiensis* Chen & Christiansen, 2003) have expanded modified setae on ventral side of the head. A new species also with modified setae from East China, *H. apigmenta* **n. sp.**, is described in the present paper.

The subspecies, *H. sauteri formosana*, was first described by Uchida in 1943 from Taiwan (Meixi), China, as a variety of *H. sauteri*. Salmon (1964) revised the variety and raised it to the subspecies level. Lee and Park (1989) and Zhao *et al.* (1997) accepted Salmon's opinion. Because of the poor original description, additional morphological details and figures are provided in the present paper resulting in it being raised to species level.

Materials and methods

Specimens were cleared in lactic acid, mounted under a coverslip in Marc André II solution, studied using a Leica DM2500 and a Nikon 80i microscope. The photographs were taken with a Leica AL2 microscope using a mounted Nikon DS-Fi1 camera and enhanced with Photoshop 7.0 (Adobe Inc.). Szeptycki's system (1979) is followed for the nomenclature of the dorsal body macrochaetae.

Abbreviations. Th.—thoracic segment; Abd.—abdominal segment; Ant.—antennal segment.