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Two new species of *Coecobrya* (Collembola: Entomobryidae: Entomobryinae) from China, with a key to the Chinese species of the genus

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Abstract

Two new species of the genus *Coecobrya* are described. Both species, belonging to *tenebricosa*-group, present smooth chaetae on manubrium and base of dens, three sutural cephalic chaetae, labial formula $MREL_1L_2$, spiny microchaetae X and X_4 posterior to labium, large outer tooth on unguiculus, 3 inner ungual teeth, S-chaetotaxy formula 32/222–3, and 4+4 central macrochaetae on Abd. IV. *C. brevis* **sp. nov.** is similar to *C. tibiotarsalis*, and differs from the latter by Abd. IV chaetotaxy and ventral tube. *C. pani* **sp. nov.** is similar to *C. borerae* but can be separated by the latter in chaetotaxy of Abd. III and IV. A key to the Chinese *Coecobrya* species is provided.

Key words: *C. brevis* **sp. nov.**, *C. pani* **sp. nov.**, blind species, chaetotaxy

Introduction

The genus *Coecobrya* was re-diagnosed by Zhang *et al.* (2009) and divided into *tenebricosa*- and *boneti*-groups, blind and with a large outer tooth on unguiculus in the former and eyed and with the outer edge of unguiculus smooth or serrate in the latter (Zhang *et al*., 2011a). All *Coecobrya* species have polymacrochaetotic chaetotaxy, no labral papillae, inverted intrusion on labral margin U-shaped, chaetae MELL of labium always smooth, reduced eye number (0 to 3 ommatidia per side), pigment reduced or absent, antennal apical bulb absent, falcate mucro with a basal spine, and scales and dental spines absent. So far, 7 known species of the genus have been reported from China. Here, two new species of *tenebricosa*-group are described and a key to the Chinese *Coecobrya* species is also provided.

Material and methods

Specimens were mounted, after clearing in lactic acid, under a coverslip in Marc André II solution, and were studied using a Nikon E600 microscope. Photographs were enhanced with Photoshop CS2/PC. The dorsal and ventral chaetotaxy of head and the Ant. III organ are described after Chen and Christiansen (1993). Dorsal body chaetae are designated following Szeptycki (1979) and Zhang *et al*. (2011b). The number of macrochaetae is given by half-tergite (left side) in the descriptions. Type material is deposited in the collections of the School of Life Sciences, Nanjing University (NJU), P. R. China.

Abbreviations: Th.—thoracic segment; Abd.—abdominal segment; Ant.—antennal segment; mac—macrochaeta(e); mic—microchaeta(e); ms—S-microchaeta(e) (=microsensillum/a, auct.); s—ordinary tergal S-chaeta(e) (=macrosensillum/a, auct.).

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