A taxonomic study on *Hypogastrura* Bourlet, 1839 (Collembola, Hypogastruridae) from China

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**Abstract**

A new species of the *Hypogastrura trybomi* group is described from Shanxi province, China. Because of the presence of prolonged maxillary lamellae and 6 setae on the dens, *H. manghe* sp. nov. resembles *H. hexasetata* Jiang & Yin, 2010. *H. yosii* Stach, 1964, equal to *H. sheyangensis* Jiang, Tang & Chen, 2010, is redescribed based on syntypes. The latter species was recognized as a junior synonym of the former. A key to the Chinese *Hypogastrura* Bourlet, 1839 species is also given.

**Key words:** springtails, *H. manghe* sp. nov., *H. yosii*, *H. sheyangensis*, redescription, synonymy

**Introduction**

*Hypogastrura* Bourlet, 1839 is a large collembolan genus comprising 165 hemiedaphic species (Bellinger et al. 2011). Most of them live in the Holarctic, more than 60 were recorded from Asia (Babenko et al. 1994, Thibaud et al. 2004, Bellinger et al. 2011) and only 9 from China (Jiang & Yin 2010, Jiang et al. 2011). Among them only one species—*H. distincta* Axelson, 1902 is widely distributed, *H. gracilis* (Folsom, 1899) is known from Japan, Korea and China, remaining ones e.g. *H. heptasetata* Jiang & Yin, 2010, *H. hexasetata* Jiang & Yin, 2010, *H. quadriteneta* Jiang & Chen, 2008, *H. verruculata* Rusek, 1967, *H. sheyangensis* Jiang et al., 2010 and *H. yosii* Stach, 1964 are known only from China. Their taxonomic status is rather unquestionable, excluding two last mentioned species of the *manubrialis* group which are close morphologically. The examination of the *H. yosii* and *H. sheyangensis* types showed that both species are identical and consequently the later was recognized as a junior synonym of the former species. The aim of this work was to redescribe *H. yosii*, describe a new *Hypogastrura* species from the Taihang Mountains (China) and to give a key to Chinese *Hypogastrura*.

**Material and methods**

The specimens of *Hypogastrura manghe* sp. nov. and one *H. yosii* were cleared in Nesbitt’s fluid (chloral hydrate, concentrated hydrochloric acid, distilled water), subsequently mounted on slides in arabic gum solution (Swan’s fluid: distilled water, arabic gum, glycerol, chloral hydrate), and studied using a Nikon Eclipse E600 phase contrast microscope. Figures were drawn with the camera lucida. The terminology for the description follows that given in Fjellberg (1984, 1999), Babenko et al. (1994), and Thibaud et al. (2004).