



## A new species and a new species record of *Hypogastrura* (Collembola: Hypogastruridae) from China

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### Abstract

*Hypogastrura distincta* (Axelson, 1902) is recorded from China for the first time and a new species, *Hypogastrura quadritenenta* **sp. nov.**, is described from Nanjing. Both species belong to the *H. viatica* group. The new species differs from all known members of the group by possessing 2, 4, 4 tenent hairs on tibiotarsi I–III, six setae on dens and a broad basal lamella on the unguiculus. A checklist and a key to Chinese species of the genus *Hypogastrura* are provided.

**Key words:** *Hypogastrura distincta*, *Hypogastrura quadritenenta*, **sp. nov.**, *H. viatica* group, Tibet, Nanjing

### Introduction

The genus *Hypogastrura* was erected by Bourlet in 1839. In 1949, Stach proposed a new name “*Neogastrura*” for it, because he thought it is inadmissible that *Hypogastrura* was used by European authors, but *Achorutes* was used by non-European writers. Over fifty species have been described or listed in the genus by Stach (1949). The genus *Ceratophysella* Börner, also in Hypogastruridae, was distinguished as distinct from *Hypogastrura* by Stach also (1949). Thibaud *et al.* (2004) have listed nearly 40 genera within Hypogastruridae of the world and 95 species have been described in genus *Hypogastrura* alone.

Species of *Hypogastrura* are mainly found in the Holarctic region but some are cosmopolitan. They live in plant detritus, moss, forest litter, and on fungal fruit bodies (Thibaud *et al.* 2004). Hyphae and spores of mycorrhizal fungi have been observed in gut of some species. These items are probably digested, because no intact hyphae or spores have been observed in the hindgut. Fungal hyphae are probably the food of preference for these species. Members of genus *Hypogastrura* have 8+8 ocelli, fully developed mandibles with molar plate, small anal spines, usually short and uniform body hairs and no eversible sac between Ant. III and IV (Fjellberg 1998). Following Thibaud *et al.* (2004), the genus has been divided into eight species groups, but not all species of the genus can be placed into these groups. Members of the *H. viatica* group possess an antennal segment IV with weakly differentiated sensilla, body and posterior side of dens with fine granules, tenaculum with 3+3 teeth, ventral tube with 4+4 setae, unguiculus with broad basal lamella, tibiotarsus with more than one knobbed tenent hair. Seventeen species were placed in the *H. viatica* group by Thibaud *et al.* (2004). They are *H. aequipilosa* (Stach), *H. alta* Christiansen and Bellinger, *H. antra* Christiansen and Bellinger, *H. barguzini* Babenko, *H. bulba* Christiansen and Bellinger, *H. concolor* (Carpenter), *H. distincta* (Axelson), *H. gami* (Wray), *H. helena* Christiansen and Bellinger, *H. humi* (Folsom), *H. litoralis* (Axelson), *H. perplexa* Christiansen and Bellinger, *H. purpurescens* (Lubbock), *H. sensilis* (Folsom), *H. subboldorii* Delamare and Jacquemart, *H. tullbergi* (Schäffer) and *H. viatica* (Tullberg). Another eight species also belong