



## *Ceratophysella taiguensis* sp. nov. (Collembola, Hypogastruridae) from China, with an annotated checklist of Chinese *Ceratophysella* Börner, 1932

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### Abstract

A new species of the *Ceratophysella denticulata* group is described from Shanxi province, China. Because of the presence of prolonged empodial appendages and reduced number of setae on dens *C. taiguensis* sp. nov. resembles: *C. kapoviensis* Babenko, 1994, *C. kutyrevae* Babenko, 1994, *C. robustiseta* Skarżyński & Smolis, 2006, *C. sedecimocellata* (Yosii, 1962) and *C. vargovychi* Skarżyński *et al.*, 2001. A checklist of the *Ceratophysella* Börner, 1932 species hitherto recorded from China is also given. The present list contains 14 species, including *C. anshanensis* (Wu & Xie, 2007) **comb. nov.**, *C. quinidentis* (Jia *et al.*, 2005) **comb. nov.**, *C. xiaoi* (Tamura, 1998) **comb. nov.**, *C. yinae* (Yue & Fu, 2000) **comb. nov.** and *C. zhangii* (Zhao, 1998) **comb. nov.**

**Key words:** taxonomy, springtails, new species, new combination

### Introduction

Genus *Ceratophysella* Börner, 1932 comprises 125 hemiedaphic species (Bellinger *et al.* 2010). Most of them live in the Holarctic, about 60 were recorded from Asia and only 8 from China (Zhao *et al.* 1997; Liu *et al.* 1998; Wu & Yin 2007). Considering the high environmental diversity of China such the number seems to be underestimated. To improve our knowledge on Chinese *Ceratophysella* not only field studies are needed, but also reevaluation of available literature data. The aim of this work was to describe a new *Ceratophysella* species from China and to give an annotated checklist of Chinese *Ceratophysella*.

### Material and methods

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

Abbreviations used: ant. I–IV—antennal segments I–IV, th. I–III—thoracic terga I–III, abd. I–VI—abdominal terga I–VI.