The genus *Semicerura* (Collembola; Isotomidae) in Asia

MIKHAIL POTAPOV1,2,a, ZHIJING XIE3,4,5,a, ALEXANDER KUPRIN6,7 & XIN SUN3,5,*

1Senckenberg Museum of Natural History Görlitz, Am Museum 1, 02826 Görlitz, Germany
2Moscow State Pedagogical University, Kibalchich str., 6, korp. 3, Moscow 129278, Russia. E-mail: nppk-abroad@yandex.ru
3Key laboratory of Wetland Ecology and Environment, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun 130102, China
4University of Chinese Academy of Sciences, Beijing 100049, China
5Georg-August-University Göttingen, Untere Karspüle 2, D-37073 Göttingen, Germany
6Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok-22, 690022, Russia
7Center for Forest Ecology and Productivity, Russian Academy of Sciences, Moscow, 117485, Russia.

*Corresponding author. E-mail: sunxin@iga.ac.cn
athese authors contributed equally to this work

Abstract

Two new species, *Semicerura bryophila* sp. nov. and *S. draconis* sp. nov., are described from the Far East of Russia and north-eastern part of China. *S. goryshini* Martynova, 1969 is redescribed based on the type material and fresh materials from China and South Korea. The holotype of *S. bishopi* Maynard, 1951 (eastern areas of the U.S.A.) was studied and commented on. Taxonomic remarks to s-chaetotaxy and the labium of the genus are given.

**Key words:** Northeast China, Far East of Russia, labial palp, spine, dens

Introduction

The genus *Semicerura* is distributed in North America and East Asia and currently consists of three species (Bellinger et al. 1996–2019), none of which has been described in modern morphological terms. For Asia it was recorded in Russia (Martynova 1969; Kutyreva 1984, 1988; Solntseva et al. 1979), China (Sun in press), Korea (Dányi et al. 2014), and Japan (Aoki 1991; Suma 1997; Furuno et al. 2000; Hasegawa & Niijima 2012). Considering Isotomidae of the Holarctic the genus *Semicerura* is a very peculiar taxon due to the presence of well-developed spines on posterior side of dens which suggest a relation to several “austral” genera. Our study describes two new species and provides modern morphological insight to the morphology of this genus.

Materials and methods

Cavity and flat slides with Gisin’s liquid and Marc André II solution, respectively, were used to mount the specimens. The material was collected by funnel extraction.

The individuals of both new species are deposited in Senckenberg Museum of Natural History Görlitz (Germany), Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences (China), and Moscow State Pedagogical University (Russia). Cavity and flat slides with Gisin’s liquid and Marc André II solution, respectively, were used to mount the specimens.

**Abbreviations:** A, B, C, D, E—papillae of labial palp following Fjellberg (1999); Abd.—abdominal segments; accp—s-chaetae situated near or within p-row of chaetae; al—anterolateral s-chaeta/e; alt.—altitude; Ant.—antennal segments; as—anterosubmedial s-chaeta/e; Is-nae—two chaetae specific to subfamily Isotominae; ms—micro s-chaeta(e) or ms-chaeta(e); MSPU—Moscow State Pedagogical University; IGA—Northeast Institute of Geogra-