



Checklist of Chinese Isotomidae (Collembola) and a description of a new *Subisotoma*

YAN GAO¹, YAN XIONG^{1,2} & MIKHAIL POTAPOV^{3,4}

¹ Institute of Plant Physiology & Ecology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai 200032, China. E-mail: yangao@sibs.ac.cn

² Shanghai Information Center for Life Sciences, Chinese Academy of Sciences, Shanghai 200031, China. E-mail: yxiong@sibs.ac.cn

³ Moscow State Pedagogical University, Kibalchich str., 6, korp. 5, Moscow, 129278 Russia. E-mail: mpnk@orc.ru

⁴ Corresponding author

Abstract

A review of the historical research of Chinese Isotomidae and a checklist of the 70 species of Isotomidae recorded so far from China are given. *Subisotoma quadrisensillata* **sp. nov.** from Hainan province (South China) and Dong Nai Province (Southern Vietnam) is described and illustrated. The species is characterized by a disproportional set of sensilla on Abd.I–IV which has never been observed in the family Isotomidae so far.

Key words: taxonomy, new species, abdominal sensilla, China, Vietnam

Introduction

Isotomidae is one of the largest families of Collembola normally predominating in natural and disturbed communities of temperate and subtropical areas of Asia. Nevertheless, the fauna of this family is poorly known in China, the largest and the most diverse Asiatic country with the large variety of habitats.

The present paper is the first of our contributions to the knowledge of this family in China. Below all Chinese isotomids are listed and a new species of genus *Subisotoma* is described. Descriptions of some other new species and redescription of less known ones will be given in subsequent publications.

Material and methods

During several past decades a vast material of Collembola has been collected by the staff of the laboratory of Institute of Plant Physiology and Ecology (Shanghai, SIPPE) from all 34 Provinces, Centrally-administered Municipalities, and Autonomous Regions of China (except Tibet, Hong Kong, Macao and Taiwan).

Collembola were extracted from soil samples using Modified Tullgren's funnel or individuals were caught by aspirator and kept in 75% ethanol before sorting. Then specimens were mounted in Hoyer's mounting liquid on slides for microscopic studies.

Abbreviations. Abd. I–VI—abdominal segments, Ant. I–IV—antennal segments, bms—basal microsensillum on antennal segments, ms—microsensillum, MSPU—Moscow State Pedagogical University, PAO—postantennal organ, s—sensillum, SIPPE—Institute of Plant Physiology and Ecology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Th. I–III—thoracic segments I–III.