

A checklist of millipede genus *Hyleoglomeris* Verhoeff, 1910 in mainland China, with descriptions of seven new species (Diplopoda, Glomerida, Glomeridae)

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Abstract

Seven new cavernicolous species of the millipede genus *Hyleoglomeris* Verhoeff, 1910 are described and illustrated from karsts in southern China: *H. grandis* sp. n., *H. baxian* sp. n. from Guangxi Zhuang Autonomous Region; *H. rhinoceros* sp. n., *H. getuhensis* sp. n., *H. generalis* sp. n., *H. variabilis* sp. n. and *H. multistriata* sp. n., from Guizhou Province. All of them are presumed troglobites except for *H. multistriata* sp. n. which is likely to be a troglophilic because of its well pigmented body. A distribution map of *Hyleoglomeris* in Guizhou and Guangxi is also provided.

Key words: *Hyleoglomeris*, new species, cave-dwelling, southern China

Introduction

The millipede genus *Hyleoglomeris* Verhoeff, 1910 belongs to the family Glomeridae, order Glomerida (Mauriès 2006). It has been reviewed by Golovatch *et al.* (2006, 2012). The main features to distinguish *Hyleoglomeris* from the similar European genus *Glomeris* Latreille, 1803 lie in the caudomesal process of the telopod femur forming a distinct angle to femur proper (Golovatch *et al.* 2006, 2010).

Hyleoglomeris is the largest and most widespread genus in the entire order Glomerida, being warm temperate to tropical Eurasian. At present, it encompasses 85 species which range from Serbia and Greece in the west, through Anatolia, the Caucasus, Central Asia and the Himalayas, to China, Korea and Japan in the east and, through Indochina and Malay Peninsula, to the Philippines and Sunda Archipelago (Sulawesi) in the southeast (Golovatch *et al.* 2012). *Hyleoglomeris* Verhoeff, 1910 is the only genus of Glomerida yet known in mainland China. Among a total of 23 species which have already been reported from China, 18 are cavernicole coming from karsts in southern China.

The present paper provides a checklist of *Hyleoglomeris* species in China, coupled with descriptions of seven new species, all but one being presumed troglobionts. A distribution map of *Hyleoglomeris* in Guizhou and Guangxi is also given.

Material and methods

All specimens used in this study were collected by hand from caves in Guangxi Zhuang Autonomous Region and Guizhou Province, southern China. The holotypes and a number of paratypes are deposited in the zoological collection of the South China Agricultural University, Guangzhou, China (SCAU), while some paratypes are also to be housed in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZAS), and Zoological Museum, State University of Moscow, Russia (ZMUM).

Observations and dissections were performed using a Leica DFC295 stereoscope. The line illustrations were executed with help of a Leica MZ125 stereoscope or Olympus BH-2 microscopes and a camera lucida attached to the scope. The photographs were taken with a Canon EOS 40D camera, further processed using Adobe Photoshop CS5 computer software. The distribution map was created using MapInfo Professional 12.0 software.