



Discovery of the subgenus *Lithobius* (*Sigibius*) Chamberlin, 1913 (Chilopoda: Lithobiomorpha: Lithobiidae) in East Asia: A review the Chinese species

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Abstract

The present paper reviews the centipede species of the subgenus *Lithobius* (*Sigibius*) Chamberlin, 1913 (Lithobiomorpha: Lithobiidae) of the Chinese fauna, including a new species *Lithobius* (*Sigibius*) *trichinocaput* sp. n. recently discovered from Hebei Province, the only East Asian record of this otherwise Central and North America subgenus of Lithobiomorpha. Diagnoses of the subgenus and the species, detailed account on species distribution and a key to the Chinese *Lithobius* (*Sigibius*) species are presented.

Key words: Lithobiidae, *Lithobius* (*Sigibius*) *trichinocaput*, China, identification key

Introduction

The centipede subgenus *Sigibius* Chamberlin, 1913 of the genus *Lithobius* Leach, 1814 (Lithobiomorpha: Lithobiidae) comprises fourty species or subspecies, mostly known from West Palearctics, but with apparently native species in Central and North America; with a wide range of habitats, including caves, from near sea level to 2000 m (Zapparoli and Edgecombe 2011). The taxon is characterized by the presence of 2+2 coxosternal teeth, porodonts setiform, all tergites without posterior triangular projections, tarsal articulation of legs 1–13 indistinct, female gonopods generally with tridentate claw, 2+2 spurs, 3–7 ocelli on each side and antennal articles fixed at 25 or more articles.

Lithobiomorpha centipedes of China are poorly known as only sixty-seven species and subspecies are hitherto known from the country (Attems 1938, 1953; Takakuwa 1939, 1940, 1941, 1942; Takakuwa and Takashima 1949; Chamberlin and Wang 1952a; Wang 1959, 1963; Zaleskaja 1978; Wang and Mauriès 1996; Zhang 1996; Eason 1992, 1997; Chao 2005; Zapparoli 2006; Ma et al. 2007a, b, 2008a, b, 2009; Pei et al. 2010, 2011). Presently, only one species of this subgenus is known from China (Eason 1993). On examining our collections, we came across one new species of this subgenus. The description of the new species is given below, together with an identification key, and a map of the the Chinese localities known for *Lithobius* (*Sigibius*) species is presented.

Methods

All specimens were hand-collected under leaf litter or stones. The material was examined with the aid of a Motic-C microscope, made in China. Colour description is based on specimens in 75% ethanol, and body length was measured from anterior margin of the cephalic plate to posterior end of postpedal tergite. Type specimens are deposited in the College of Life Sciences, Hebei University, Baoding, China. Terminology for external anatomy follows Bonato *et al.* (2010).

The following abbreviations are used in the text and tables: T, TT = tergite, tergites; S, SS = sternite, sternites; C = coxa, Tr = trochanter, P = prefemur, F = femur, Ti = tibia, a = anterior, m = median, p = posterior.