

First record of the genus *Spatiodamaeus* Bulanova-Zachvatkina (Oribatida: Damaeidae) from China, with description of a new species

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Abstract

The genus *Spatiodamaeus* Bulanova-Zachvatkina, 1957 is reported for the first time from China, and a new species *Spatiodamaeus bomeensis* **sp. nov.** is described and illustrated from Tibet, China. A checklist and key to all species of the genus are provided.

Key words: Oribatida, Damaeidae, *Spatiodamaeus*, new species, new record

Introduction

Bulanova-Zachvatkina (1957) proposed *Spatiodamaeus* as a subgenus of *Damaeus* with *Damaeus verticillipes* Nicolet, 1855 as type species. She gave no specific rationale, but we presume this was based primarily on general appearance. For example, eight species that Bulanova-Zachvatkina placed into this subgenus share: the set of tubercles *Da*, *Ba*, *Bp*; club-shaped legs; presence of accessory seta v_2' on tarsi I–IV; and strong spinae adnatae (Norton, 1977; Miko & Mourek, 2008). Later, most scholars considered *Spatiodamaeus* at generic level but still a sister group of *Damaeus* (e.g. see Schatz, 1983; Balogh & Balogh, 1992; Subías, 2004; Miko & Mourek, 2008). In contrast to *Damaeus*, *Spatiodamaeus* lacks the rugged prodorsal surface, which presents only in large species of *Damaeus*, is generally smaller in size and has relatively shorter legs, and the genual setation is 4-4-4-4 or 5-5-4-4 compared with 4-4-3-3. Later, Miko (2006) and Miko and Mourek (2008) narrowed the concept of *Spatiodamaeus* to encompass only those species with interlamellar setae with the form and size similar to that of the sensillus, and arrangement of leg setae to form typical verticils. They considered these characters to be autapomorphies for this genus, based on its stability within the species group and the absence in other known Damaeidae (Miko, 2006; Miko & Mourek, 2008). Prior to our study, three species were reported from the Palearctic and Nearctic regions (Weigmann, 2006). Amongst Earth's 12 “mega-diverse” countries, China is third and the first in the Northern Hemisphere (McNeeley *et al.*, 1990). However, until now no *Spatiodamaeus* was recorded from China (Chen *et al.*, 2010).

Here, we give the first record of *Spatiodamaeus* species from Tibet, China, based on the new species, *Spatiodamaeus bomeensis* **sp. nov.** A key to the identification of all known species is also given in this paper.