



Review of *Austrotrititia* (Acari: Oribatida: Oribotritiidae), with descriptions of two new species from China

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Abstract

The oribatid mite genus *Austrotrititia* Sellnick, 1959 (Oribotritiidae) is reviewed. Two new species, *Austrotrititia didyma* **sp. nov.** and *Austrotrititia fissurata* **sp. nov.**, and one newly recorded species from China, *Austrotrititia saraburiensis* Aoki, 1965, are identified. A checklist of all known species and key to the Chinese species of *Austrotrititia* are provided.

Key words: Oribatida, Oribotritiidae, *Austrotrititia*, soil mites, new species, new record, China

Introduction

Sellnick (1959) proposed the genus *Austrotrititia* with *Austrotrititia quadricarinata* Sellnick, 1959 from Polynesia as its type species, and he also assigned *Euphthiracarus (Indotrititia) bryani* Jacot, 1928 and *Indotrititia lebronneci* Jacot, 1934 to this genus. Märkel (1964) pointed out that a reappraisal of the species in this genus was required because of the inadequate original description of the type species. Ramsay and Sheals (1969) redefined the generic characters. After that, Aoki (1980) examined the generic characters and found that some features were variable among species. Mahunka (1988) mentioned that the subgenus *Macarotrititia*, erected by Pérez-Íñigo (1986) for *Indotrititia (Macarotrititia) herenessica* Pérez-Íñigo, 1986 from the Canary Islands, does not belong to *Indotrititia*, since all of its characters are identical with those of *Austrotrititia*. Mahunka (1990) treated *Indotrititia (Macarotrititia)* as a junior synonym of *Austrotrititia* and considered that *Austrotrititia* is the most variable genus of the family Oribotritiidae, though he recognized it as a valid genus and provided a generic diagnosis. Niedbała (1998b) elevated *A. lebronneci saraburiensis* Aoki, 1965 to specific status *A. saraburiensis*. In the same paper, *A. shealsi* Mahunka, 1987 and *A. optabilis* Niedbała, 1991 were synonymized with *A. saraburiensis*. Subsequently, Niedbała (2000) provided a key to the species of this genus and regarded *A. ishigakiensis* Aoki, 1980 as a junior synonym of *A. saraburiensis*, and transferred *A. lanceolata* Aoki, 1988 to *Indotrititia*. Subías (2004) cataloged 14 species in *Austrotrititia* including *A. lanceolata*, but excluding *A. bryani*.

So far 17 valid species and 3 subspecies of *Austrotrititia* have been described, none of which is recorded from China (Wang *et al.* 2002). While checking specimens of ptyctimous mites, we identified three species of *Austrotrititia* including two new species. This paper also provides a key to the three Chinese species, and checklist which contains all valid species and subspecies in the world, as well as distribution records.