

## The genus *Arrhopalites* (Collembola, Arrhopalitidae) in Asia, with the description of two new Japanese species of Yosii collection

DOUGLAS ZEPPELINI

*Departamento de Sistemática e Ecologia, Universidade Federal da Paraíba. 58059-900, João Pessoa, Paraíba, Brazil. E. mail: zeppelin@dse.ufpb.br*

### ABSTRACT

The seventeen Asian species and two species from the East Europe (Moravia and Ukraine) of the genus *Arrhopalites* (Collembola: Arrhopalitidae) are diagnosed, discussed and compared. The Japanese species are re-described and two new Japanese epigeic species, *A. yosii* sp. n. and *A. ezoensis* sp. n., are described and illustrated. A key for identification is given.

**Key words:** Collembola; Arrhopalitidae; *Arrhopalites*; Asian *Arrhopalites*; Collembola diversity; R. Yosii

### INTRODUCTION

The genus *Arrhopalites* Börner is widespread in the Holarctic and Neotropical regions, with about 100 described species. This distribution pattern is most unusual, no species are known from India or sub-Saharan Africa, furthermore the Australian species must be revised as they are likely to be not *Arrhopalites* (Christiansen, pers. com.; Zeppelini, 2001), to be conclusive about the distribution pattern of the genus it is necessary perform collections in Africa, India, Australia and Oceanic regions.

Seventeen species occur in Asia (the two new species described herein included). These belong in the biogeographic areas 2b, 3a, 3b and 18, the two European species included belong in the biogeographic region 2a (according to Good, 1947; Christiansen and Bellinger, 1995) (Tab. I).

Nine species are found in Japan, two of the “caecus group” (Stach, 1945), *A. antrobius* Yosii and *A. minutus* Yosii and seven of the “pygmaeus group s. lat. (Stach, 1945; Bretfeld, 1999) *A. alticola* Yosii, *A. habeii* Yosii, *A. japonicus* Yosii, *A. octacanthus* Yosii, *A. uenoi* Yosii, and two new species.