



Species of *Euphthiracarus* (Acari: Oribatida: Euphthiracaridae) from China

DONG LIU¹, DONGHUI WU¹ & JUN CHEN^{2,3}

¹Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun 130012, P. R. China

²Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, P. R. China

³Corresponding author: E-mail: chenj@ioz.ac.cn

Abstract

The oribatid mite genus *Euphthiracarus* Ewing, 1917 in China is reviewed. Eight species of *Euphthiracarus* including six new species, *E. aequalis* **sp. nov.**, *E. carinatus* **sp. nov.**, *E. dilatatus* **sp. nov.**, *E. flagellatus* **sp. nov.**, *E. longisetus* **sp. nov.**, *E. longulus* **sp. nov.** are described, and two newly recorded species from China are redescribed. A key to Chinese species of *Euphthiracarus* is provided.

Key words: Oribatida, Euphthiracaridae, *Euphthiracarus*, soil mites, new species, new record, China

Introduction

Ewing (1917) proposed the genus *Euphthiracarus* with *Phthiracarus flavus* Ewing, 1908 as type species. Märkel & Meyer (1959) considered *Pseudotritia monodactyla* Willmann, 1919, the type species of the genus *Pseudotritia*, should be placed in the genus *Euphthiracarus*. Märkel (1964) confirmed that it was unnecessary to maintain the subgenus level of *Pseudotritia*, and divided *Euphthiracarus* into two subgenera: *E. (Euphthiracarus)* and *E. (Brasiliotritia)*. After that, Niedbała (1998, 2001a) treated *Pocsia* Mahunka, 1983 as a subgenus and *Niedbalaia* Mahunka, 1999 as a junior synonym of *Euphthiracarus*, respectively.

Euphthiracarus is the largest genus of the family Euphthiracaridae, with eighty-three species of nearly cosmopolitan distribution (Subías 2010). As one of the earth's 12 “mega-diverse” countries, China is taking the third place for biodiversity in the world and the first in the Northern Hemisphere (McNeeley *et al.* 1990). However, this group of mites remained poorly known in China, represented only by two species (Chen *et al.* 2010). During taxonomic study on Chinese ptyctimous mites, we identified eight species of *Euphthiracarus*, including six new species and two newly recorded species from China. Descriptions of those species and a key to identification of them are given in this paper.

Material and methods

Measurements and descriptions are based on specimens mounted in temporary cavity slides that were studied using a light microscope equipped with a drawing camera.

Terminology generally follows Niedbała (2000). The unit of measurement is micrometre (µm).

All specimens studied are deposited in the National Zoological Museum of China, Institute of Zoology, Chinese Academy of Sciences, Beijing.