

Five new species of the genus *Milnesium* (Tardigrada, Eutardigrada, Milnesiidae)

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Abstract

An illustrated description of five new tardigrade species belonging to genus *Milnesium* is given. The new species differ from all known species of this genus mainly by the proportions of the claws and bucco-pharyngeal apparatus. A new key to the determination of recent species of the genus *Milnesium* is presented.

Key words: Tardigrada, *Milnesium antarcticum* sp. nov., *Milnesium almatyense* sp. nov., *Milnesium asiaticum* sp. nov., *Milnesium reductum* sp. nov., *Milnesium longiungue* sp. nov., Antarctica, Himalaya, Tien-Shan

Introduction

For a long time the genus *Milnesium* was considered as monotypic with a single valid cosmopolitan species *Milnesium tardigradum* Doyère, 1840. Later some new characters (proportions of claws and buccal tube, claw structure, cuticular sculpture) were taken into consideration (Maucci 1988(1991), Binda & Pilato 1990, Pilato & Binda 1991, Pilato *et al.* 2002) and it led to the description of several new species. Today the genus *Milnesium* consists of 7 recent species, 2 recent subspecies and one extinct species. Among them, only *Milnesium tardigradum* is widely distributed (traditionally considered to be cosmopolitan, but now reports of this species should be revised) while other species are known from restricted areas (*Milnesium brachyungue* Binda & Pilato, 1990—Chile, *M. eurystomum* Maucci, 1988(1991)—Greenland, *M. dujiangensis* Yang, 2003—China, *M. katarzynae* Kaczmarek, Michalczyk & Beasley, 2004—China, *M. reticulatum* Pilato, Binda & Lisi, 2002—Seychelles, *M. tetralamellatum* Pilato & Binda, 1991—Tanzania and Seychelles). The single extinct species *Milnesium swolenskyi* Bertolani & Grimaldi, 2000 is known from Cretaceous amber. During my work with tardigrada material from different