



Taxonomy of European Damaeidae (Acari: Oribatida) I. *Kunstidamaeus* Miko, 2006, with comments on *Damaeus* sensu lato

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Abstract

The diagnosis of the genus *Kunstidamaeus* Miko, 2006 is given and a new generic concept within *Damaeus* sensu lato is proposed. *Epidamaeus*, *Kunstidamaeus* and *Spatiodamaeus* are given generic status, whereas *Adamaeus*, *Paradamaeus* and the nominal subgenus *Damaeus* s. stricto are considered to be subgenera of the genus *Damaeus*. The type species *K. lengersdorfi* (Willmann, 1932) including the immature stases is redescribed and its geographic distribution and ecology is discussed. The neotype of *K. lengersdorfi* is designated. Together with the type species, the genus *Kunstidamaeus* includes seven known European species: *K. tenuipes* (Michael, 1885), *K. tecticola* (Michael, 1888), *K. nivalis* (Kulczynski, 1902), *K. nidicola* (Willmann, 1936), *K. diversipilis* (Willmann, 1951), *K. granulatus* (Willmann, 1951), and *K. longisetosus* (Willmann, 1953).

Key words: type species, redescription, neotype, taxonomy, ontogeny, chaetotaxy, troglophilous species

Introduction

Oribatid mites of the family Damaeidae Berlese, 1896 occur mostly in the northern hemisphere, with the majority of known species living in forest soils of temperate, boreal and subarctic zones of palearctic and nearctic regions (Norton 1979a, 1979b).

The present paper represents the first part of a series which aims to revise the European Damaeidae based on the study of extensive material from Northern, Western and Central Europe, the types or topotypes of European authors when available, and recent discoveries on the family. This first part deals with the generic concept of *Damaeus* sensu lato, together with the detailed morphology of *Kunstidamaeus* Miko, 2006 including a redescription of its type species. Species of Central and Northern Europe belonging to other genera within *Damaeus* C. L. Koch, 1836 sensu lato (i.e. including *Damaeus* s. stricto, *Adamaeus* Norton, 1977b, *Epidamaeus* Bulanova-Zachvatkina, 1957, *Paradamaeus* Bulanova-Zachvatkina, 1957, *Spatiodamaeus* Bulanova-Zachvatkina, 1957 and *Kunstidamaeus* Miko, 2006) were revised (see Miko, 2006) and will be redescribed in detail in following articles of this series.

The family Damaeidae is reasonably diverse, being represented by more than 250 described species (Subías 2004). Grandjean (1954a) included the family in Euphérédermes, one of the five sections recognized within Brachypylina, which is characterised namely by the nymphs (less often also by the adults) carrying gastronomic exuviae of previous stages (“scalps”) and by the reduction of the notogastral setae *fl*, *da*, *dm*, *dp* (the setae *da*, *dm*, *dp* are present only in the larvae). Monophyly of the Euphérédermes was questioned recently