

Oribatid Mites of the Superfamilies Gymnodamaeidea and Plateremaeidea (Acari: Oribatida) from Steppe of Russia

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Abstract

Oribatid mites belonging to the superfamilies Gymnodamaeidea and Plateremaeidea collected from steppe soils of Russia are studied. Two new species, *Pedrocortesella minuta* sp. nov. and *Pleodamaeus tuberculatus* sp. nov. are described. In addition, three known species, *Licnodamaeus pulcherrimus* (Paoli, 1908) and *Plesiodamaeus glaber* Mihelèiè, 1957 are redescribed, with notes on their distributions.

Key words: Acari: Oribatida, Gymnodamaeidea, Plateremaeidea, new species, Russia

Introduction

The oribatid mite superfamilies Gymnodamaeidea and Plateremaeidea are known to be rather diverse mostly in the Northern Hemisphere and most species are inhabitants of litter of forests, mosses, decaying woods and organic and mineral soil layers. However, many species of Plateremaeidea are xerophilous, and they distributed in the soils of arid habitats such as steppe and semideserts.

The present work is part of the series of studies on systematics and ecology of oribatid mites of grassland habitats of Russia, Kazakhstan and Mongolia. The description of two new species belonging to the genera *Pedrocortesella* and *Pleodamaeus* and the supplementary description of two known species of the genera *Licnodamaeus* and *Plesiodamaeus* are presented here.

Ruiz *et al.* (1990) included the species *Plesiodamaeus glaber* Mihelèiè, 1957 in the genus *Jacotella* Banks, while Woas (1992) listed this species under the genus *Gymnodamaeus* Kulczynski. However, the articulation of leg segments in species of *Jacotella* is in sockets, while that in *Plesiodamaeis*-species is not in sockets. Members of another genus, *Gymnodamaeus* have contiguous anal and genital apertures as opposed to the well separated openings in species of *Plesiodamaeus*. Moreover, all species of *Plesiodamaeus* have distinctly developed prominent folds on the posterior end of the notogaster, but not developed in the species of *Gymnodamaeus*. Therefore, we consider *Plesio-*

damaeus as a valid genus, although the current supraspecific classification of Gymnodamaeidea and Plateremaeidea is artificial and too restrictive.

Material and Methods

The species were collected between 1991 and 1999 from soils in grassland habitats of the southwestern part of Russia. Descriptions or redescriptions of the species are based on adults. The type locality and habitat characteristics for each species are given in the respective "Material examined" sections.

The taxonomic terminology used in this paper is based on that (with a few modifications) developed by Grandjean (1931, 1933, 1964), as summarized and applied by Covarrubias (1968), Fernandez (1987) and Paschoal (1982). Body length is measured in lateral view, from the tip of the rostrum to the posterior edge of the notogaster. Notogastral length is measured in lateral aspect, from the anterior to the posterior edge. Notogastral width refers to the maximum width in dorsal aspect. Measurements are given in micrometers and the average values are given in parentheses after the ranges.

The line drawings were made with the aid of a camera lucida attached to a compound microscope "PZO SK14".