



New and little known species of ptyctimous mites (Acari, Oribatida) from Ethiopia

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Abstract

Three new species of oribatid mites of the genus *Plonaphacarus*, *Plonaphacarus sidorchukae* **sp. nov.**, *Plonaphacarus rybalovi* **sp. nov.** and *Plonaphacarus hamulus* **sp. nov.**, are described from Bale Mountains National Park (Afrotropical region, Ethiopia). Morphological and taxonomical remarks about *Steganacarus* (*Steganacarus*) *sol* and *Steganacarus* (*Steganacarus*) *vestitus* are presented.

Key words: oribatid, ptyctimous mites, new species, Ethiopia

Introduction

Ethiopia is the African country yet little explored as regards ptyctimous mites. Only three species are described to date (Niedbała 2001, 2008). In the course of faunistic studies of oribatid mites of Bale Mountains National Park (located in Ethiopia) we have found new species in the genus *Plonaphacarus* Niedbała, 1986.

The genus *Plonaphacarus* is not very speciose in Afrotropical region. Nine species are known, seven of them are endemic. In this paper three new species of this genus are described. Also furthermore some morphological remarks about two known species of *Steganacarus* (*Steganacarus*) are given.

Subías (2004) proposed the synonymisation of the genus *Plonaphacarus* with the subgenus *Rhacaplacarus* (*Rhacaplacarus*), unfortunately he did not support his decision with any arguments. According to him, the latter subgenus should include selected species from the genera *Hoplophthiracarus* and *Austrophthiracarus*, and this proposition is also given with no justifying background. This decision is contradictory to the presently accepted conception of classification of Phthiracaroida.

According to the results of a cladistic analysis of phthiracaroid mites (Niedbała 1986) the genus *Plonaphacarus* is characterised by two pairs of anal setae an_1 and an_2 at proximal border of anoadanal plates, while the subgenus *Steganacarus* (*Rhacaplacarus*) on the proximal border of anoadanal plates has three pairs of setae an_1 , an_2 and ad_1 . *Plonaphacarus* is an older taxon, closer to *Phthiracarus*, whereas *Steganacarus* (*Rhacaplacarus*) is phylogenetically younger and much distanced from *Phthiracarus*.

From the continent of Africa and nearby islands, 14 species of the subgenus *Steganacarus* (*Steganacarus*) have been reported. No *Steganacarus* species is known from South Africa. One species *S. (S.) magnus* is West-Palaearctic introduced to St. Helena Island.

Four other species known from south Europe occur in the Magrebian subregion. Three species are the endemites occurring on the Canary Islands.

The other six occur in Central Africa, four of them are endemites, while two species of *Steganacarus* (*Steganacarus*) are widely spread. Some morphological remarks concerning these two species are given.