

Article



Two new species of Ameroidea (Acari: Oribatida) from Madagascar

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Abstract

Two new oribatid mite species, *Hymenobelba exclamationis* and *Pteramerus clypeatus* spp. nov. (Ameridae), are described and illustrated based on specimens collected from mossy montane rainforest in the Malagasy Republic, Toamasina Province, Maromizaha forest. Both of them show a great variation of peculiar morphological features as having or not the costuliform prodorsal structure, the number and position of the notogastral setae and the abundance or position of aggenital and adanal neotrichy in genus *Hymenobelba*. A well observable variation can be observed in the form of pedotecta and in legs segments of the other species (*Pteramerus clypeatus*), which is only the second species belonging to this genus.

Key words: taxonomy, Oribatida, new species, new determination keys, Republic of Malagasy

Introduction

Although following the initial steps in the 1960-ies (Balogh 1960a, 1960b, 1962) the study of the Oribatids of Madagascar considerably accelerated in the previous century from the 1990ies (e.g. Mahunka 1990, 1993, 1994), several significant discoveries could surely be expected in the coming years. Similarly to the peculiar representatives of other groups living on this island, several special and interesting groups are expected to occur among the oribatids even at higher taxonomic levels. The expected further rise in species numbers is supported by the fact that new species are regularly discovered in such taxa whose closest relatives only occur on Madagascar or in certain habitats. And furthermore quite often monotypic taxa become species-rich genera.

Both of the new species belong to the superfamily Ameroidea Bulanova-Zachvatkina, 1957 sensu Norton & Behan-Pelletier (2009). One of the species (*Hymenobelba exclamationis* sp.n.) belongs to the genus *Hymenobelba* Balogh, 1962 and is considered to be the closest relative of the type species of this genus (*H. ypsilon* Balogh, 1962), which was also described from Madagascar. It helps to clarify the taxonomic position of *Hymenobelba* and other closely related genera. The other species, *Pteramerus clypeatus* sp. n. is also the second species of a genus only known from Madagascar.

A further interesting fact is that the characteristic morphological features of both genera are quite peculiar, and hence their study is very important. Furthermore these characters show a high variability, and this variability offers an aid in the taxonomic investigation of the closely related taxa. Hence at present there are such species in the Hymenobelba genus that possess a costula-like structure on the prodorsum, and there are species with smooth prodorsum, or possessing only small tubercles on it, from which the setae of the prodorsum originate. The humeral apophysis is either present or missing on the anterior edge of the notogaster, and both the size and the possibility of identification of pit like cavities behind c_2 is different in the various species. The length and thickness of apodemes on the ventral side is very different, just like the aggenital and adanal neotrichy. There are differences both in the shape and position of setae. There are only two known species in the genus Pteramerus, and hence it is difficult to judge the variability of features. But we can state without doubt that the shape of the horn-shaped appendix, the shape of certain leg segments and