

A new species of *Acroperus* Baird, 1843 (Cladocera: Chydoridae) from Africa

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Abstract

A new species of *Acroperus* Baird, 1843 (Cladocera: Chydoridae) is described based on the material from Lake Tana, Ethiopia and two water bodies in Eastern Cape, Republic of South Africa. In Africa, *Acroperus africanus* sp. nov. had a chance to be confused by previous authors with Palearctic *A. harpae* (Baird, 1834) and *A. angustatus* Sars, 1863, but it could be easily distinguished from the latter by: (1) smaller seta on the proximal segment of antenna II endopod; (2) larger values of seta 3/seta 2 length ratio on the limb I, as well as some additional features. Diversity of the genus in Africa is underestimated yet, and further investigations of taxon distribution and ecology are necessary.

Key words: Cladocera, morphology, taxonomy, new species, Ethiopia, Eastern Cape, Africa

Introduction

Currently the subfamily Aloninae Dybowski & Grochowski, 1894 emend. Frey, 1967 is actively studied. Since the beginning of the 21st century, several genera from this subfamily were subjects of global revisions, for instance, *Alonopsis* Sars (Sinev & Atroshenko 2011), *Camptocercus* Baird (Smirnov 1998; Sinev 2011; Sinev 2014), *Kozhowia* Vasiljeva & Smirnov (Kotov 2000), *Kurzia* Dybowski & Grochowski (Hudec 2000; Kotov 2004), *Leberis* Smirnov (Sinev et al. 2005), *Leydigia* Kurz (Kotov 2009; Kotov & Alonso 2010; Kotov & Fuentes-Reinés 2014), *Leydigiopsis* Sars (Sinev 2004), *Nicsmirnovius* Chiambeng & Dumont (Chiambeng & Dumont 1999; Van Damme et al. 2003). A revision of the genus *Acroperus* Baird was also started: two widespread Palearctic species of this genus were carefully redescribed (Sinev 2009); two species were transferred from the genus *Acroperus* into the re-restored genus *Alonopsis* Sars (Sinev & Atroshenko 2011); a new taxon was found in South America (Sinev & Elmoor-Loureiro 2010) and a new morphotype was described from Iceland (Sinev et al. 2012).

Nowadays the genus *Acroperus* includes seven presumably valid species according to Kotov et al. (2013), taking into consideration the taxonomic combinations proposed by Sinev (2009) and Sinev & Atroshenko (2011). Among them four taxa (*A. avirostris* Henry, 1919; *A. dispar* Keilhack, 1908; *A. maduensis* Keilhack, 1905 and *A. sinuatus* Henry, 1919) are considered as *species inquirenda*, their status could be clarified only by future investigations or even will remain unresolved forever (Kotov et al. 2013). Three taxa (Palearctic *A. angustatus* Sars, 1863 and *A. harpae* (Baird, 1834) plus South American *A. tupinamba* Sinev & Elmoor-Loureiro, 2010) are well-described (Sinev 2009; Sinev & Elmoor-Loureiro 2010). In general, it is an obvious fact that the species diversity within the genus *Acroperus* is strongly underestimated, especially in the tropical regions of the Earth. In this context, Africa is the continent with the most poorly studied cladoceran diversity (Van Damme et al. 2013). Until now no single taxon of *Acroperus* was described from Africa. In previous publications, *A. harpae* was the most frequently mentioned taxon (e.g. Rey & Saint-Jean 1968; Dumont et al. 1979; 1981; Dumont 1986; Egborge et al. 1994; Chiambeng & Dumont 2005). After examination of the samples from several African localities we have concluded, that, based on morphological features, studied populations differ from all well-described species of *Acroperus* and represent a taxon new to science. Therefore the aim of our study is to describe this new species and compare its morphology with that of well-described species from other regions.