



A new species of *Pseudoparaclius* Grichanov (Diptera: Dolichopodidae) from Udzungwa Mountains National Park, Tanzania, and a key to Afrotropical species

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Abstract

Pseudoparaclius udzungwa sp. nov. is described from Udzungwa Mountains National Park, Tanzania, and a key to all known Afrotropical species of *Pseudoparaclius* Grichanov is provided. *Pseudoparaclius udzungwa* is morphologically very similar to *P. sanjensis* (Grichanov) but has a modified male fore tarsus with laterally compressed tarsomeres 4–5, an epandrium with slightly shorter marginal teeth distiventrally, a blunt-tipped sclerotized part of the hypandrium, and an almost straight phallus. Males of *P. udzungwa* and *P. sanjensis* share a characteristic, oval, cup-shaped cercus not seen in any other known species of *Pseudoparaclius*.

Key words: Diptera, Dolichopodidae, Dolichopodinae, *Pseudoparaclius*, new species, sister taxon, taxonomic key, Afrotropical, Eastern Arc, Tanzania, Udzungwa

Introduction

The Afrotropical fauna of long-legged flies (Dolichopodidae) is still very superficially studied and is expected to reach at least the double of its currently known 770 species (Pape *et al.* 2009; Grichanov unpubl.). Recently published broader reviews (Grichanov 2004, 2006, 2011) have greatly facilitated the study of Afrotropical long-legged flies and will be leading to a forthcoming chapter on the family in the planned Manual of Afrotropical Diptera (Grichanov & Brooks, accepted). The superficial faunistic knowledge of Afrotropical dolichopodids is perhaps particularly evident when looking at the Eastern Arc Mountains (EAM). This range of rather low mountains (< 3000 m) stretches from southern Kenya (Taita Hills) to southeastern Tanzania (Udzungwa Mountains). Rising above the much drier savannah, the EAM have sufficient precipitation to be covered in tropical woodlands, and a notable endemism has evolved (Skarbek 2008). This may relate to a remarkably stable climate, which has allowed for at least partial forest cover even in more arid periods during the Pleistocene, and an apparent high rate of *in situ* speciation as well as lower extinction rates (Newmark 2002; Burgess *et al.* 2007). The EAM have been included among the 25 most highly prioritized biodiversity hot-spots on our planet (Mittermeier *et al.* 1999; Myers *et al.* 2000), and although most of the remaining forests are within reserves and national parks, they remain severely threatened by human exploitation (Burgess *et al.* 2007). The flora and vertebrate fauna of the EAM has been extensively documented, but as in most other tropical areas the invertebrate fauna is still very poorly known. There has, however, been a few studies treating parts of the invertebrate fauna of the EAM, and some data are available for ground beetles, butterflies, dragonflies, katydid grasshoppers, linyphiid spiders and millipedes (e.g., Hoffman 1993; Jong & Congdon 1993; Scharff 1993; Nyundo & Yarro 2007; Clausnitzer *et al.* 2011; Frederiksen & Enghoff 2012; Hemp 2013; Enghoff 2014). The results of these studies support the pattern of a high degree of endemism with many invertebrates being confined to a single forest block. Today, the number of dolichopodids known from Udzungwa Mountains, which form the largest forest block within the EAM, stands at a humble total of five species: *Setihercostomus scharffi* (Grichanov), *Hercostomus selikhovkini* Grichanov,