



<http://dx.doi.org/10.11646/zootaxa.3608.3.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:F5D1BDBA-BB2F-4E28-BAF5-09962DBD8272>

Magadacerina, a new genus of Leptoceridae (Trichoptera) from Madagascar

TOBIAS MALM^{1,3} & KJELL ARNE JOHANSON²

¹University of Eastern Finland, Department of Biology, P.O. Box 111, FI-80101 Joensuu, Finland

²Swedish Museum of Natural History, Entomology Department, Box 50007, SE-10405 Stockholm, Sweden.

E-mail tobias.malm@uef.fi; kjell.arne.johanson@nrm.se

³Corresponding author

Abstract

Magadacerina forcipata, new genus, new species (Trichoptera: Leptoceridae), is described from Madagascar. The monotypic genus is characterised by having the tibial spur formula 2,2,2; wings with sessile bifurcation of M; genitalia with preanal appendages fused with segment IX and greatly produced posterad, and a tergum X with an anteriorly extended ventral base articulating with a sclerotised spine-like process of the phallic shield. The new genus is most closely related to *Blyzophilus* in the tribe Blyzophilini.

Key words: Leptocerinae, Blyzophilini, *Magadacerina*, *forcipata*, new genus, new species

Introduction

The long-horned caddisflies (Leptoceridae) are 1 of the 3 largest families within the Trichoptera, as well as one of the most widespread. The highest species diversity of the family is recorded from the tropics (Holzenthal *et al.* 2007). The Leptoceridae have until recently been grouped into 2 subfamilies: Triplectidinae Ulmer and Leptocerinae Leach, a classification mainly supported by wing venation characters and characteristics in leg and phallic morphology (Morse 1981; Morse & Holzenthal 1987). Based on recent evidence from analyses of molecular data, it has been suggested that Leptoceridae should hold 4 subfamilies, by the removal of *Leptorussa* Mosely from the Leptocerinae to form Leptorussinae Morse, and removal of Grumichellini Morse from Triplectidinae to form Grumichellinae Morse (Malm & Johanson 2011). Malm & Johanson (2011) recognized 45 genera within the family, after the synonymisation of *Ptochoecetis* Ulmer with *Oecetis* McLachlan, and *Condocerus* Neboiss with *Hudsonema* Mosely.

The subfamily Leptocerinae currently includes 28 genera, and contains the most species-diverse genera of the family, *Oecetis* (with about 400 species), *Triaenodes* McLachlan and *Setodes* Rambur (each with more than 200 described species), as well as 5 monotypic genera, *Achoropsyche* Holzenthal, *Blyzophilus* Andersen & Kjørandsen, *Leptoceriella* Schmid, *Neothripsodes* Holzenthal, and *Russobex* StClair (Holzenthal *et al.* 2007; Malm & Johanson 2011). Eighteen genera of Leptocerinae have been recorded from the Afrotropical Biogeographic Region, of which 6 are endemic to the region: *Axiocerina* Ross (2 species), *Leptecho* Barnard (3 species), *Hemileptocerus* Ulmer (2 species), *Sericodes* Schmid (2 species) and *Blyzophilus* (1 species). The Madagascan Leptoceridae fauna consists of the seven previously recorded genera *Athripsodes* Billberg, *Homilia* McLachlan, *Leptocerina* Mosely, *Leptocerus* Leach, *Oecetis*, *Setodes* and *Triaenodes* (Johanson 2010).

Morse (1981) presented a phylogenetic hypothesis of the Leptoceridae, and an outline of the classification used up to date for the subfamily, with 4 new tribes. Later, Holzenthal (1984) erected the genus *Achoropsyche* and tribe Achoropsychini, a sister group of the clade proposed by Morse (1981) that included Triaenodini, Oecetini, Setodini, Mystacidini. Morse's (1981) classification was also followed by Andersen *et al.* (1999) when describing the Afrotropical monotypic genus *Blyzophilus* and tribe Blyzophilini, and placing it in a trichotomy with Leptocerini and the remaining "higher" leptocerines (Triaenodini, Oecetini, Setodini, Mystacidini). According to Andersen *et al.* (1999), *Blyzophilus* is characterised by 4 unique synapomorphies: the presence of a pair of