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A new genus of Philorheithridae (Trichoptera) from Madagascar

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Abstract

Afrorheithrus genus novum and three species (*Afrorheithrus fallax* **sp. nova**, *A. mirus* **sp. nova**, *A. admirabilis* **sp. nova**) of the family Philorheithridae (Trichoptera) are described from Madagascar, representing the first described philorheithrids from the Afrotropical Region.

Key words: Afrorheithrus, Africa, caddisflies, taxonomy

Introduction

The examination of caddisfly material from Madagascar has revealed a new genus and some new species of Philorheithridae. Depositories of material examined are abbreviated as follows, MNHN, Muséum National d'Histoire Naturelle, Paris; NMPC, National Museum, Praha; USNM, National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Philorheithridae Mosely

The philorheithrids are a relatively small family, represented by eight described genera, six from Australasian Region (*Philorheithrus* Hare, *Aphilorheithrus* Mosely, *Tasmanthrus* Mosely, *Austrheithrus* Mosely & Kimmins, *Kosrheithrus* Mosely & Kimmins, *Ramiheithrus* Neboiss), and two from the temperate Neotropical Region (*Psilopsyche* Ulmer and *Mystacopsyche* Schmid). The new genus described herein, is the first philorheithrid recorded from the Afrotropical Region. The characteristics of the family have been described by Mosely & Kimmins (1953), Schmid (1955), and Neboiss (1977, 1991). Males and females have been described for all genera except *Ramiheithrus*, for which females are unknown.

Diagnosis. We agree with Parker and Wiggins (1987) that the Philorheithridae are closely related to the Odontoceridae. Adults of both families have unique modifications in the anterior wings, having a slender vein along the posterior margin, but we are not certain that it is a true vein. It was observed in Philorheithridae and Odontoceridae by Schmid (1964, 1980) and referred to it as the "post anale" vein. The anterior wing is also modified by having the posterior margin slightly recessed and the anal lobe small but conspicuously thick-ened. All of these characters together would appear to increase the strength of the posterior margin. This characteristic appears to be a strong synapormorphy, supporting monophyly of the Philorheithridae and Odontoceridae.

Reliable characteristics that may distinguish the Philorheithridae and the Odontoceridae from each other are not apparent to us at this time. A more through study of each group would be required to answer this ques-