

Eleven new species of Sericostomatoidea from Madagascar (Trichoptera: Helicopsychoidea, Petrothrincoidea, Sericostomatidae)

KJELL ARNE JOHANSON¹ & JÁNOS OLÁH²

¹Swedish Museum of Natural History, Entomology Department, Box 50007, S-104 05 Stockholm, Sweden.

²Department of Environmental Management, Tessedik College, Szarvas. Residence address: I. kk. 10, H-5540 Szarvas. Hungary.

Table of contents

Abstract	2
Introduction	2
Material and methods	3
Systematics	4
Helicopsychoidea Ulmer, 1906	4
<i>Helicopsyche</i> von Siebold, 1856	4
<i>Helicopsyche</i> (<i>Petrotrichia</i>) Ulmer, 1910	4
<i>Helicopsyche</i> (<i>Petrotrichia</i>) <i>ambodiva</i> , new species	4
<i>Helicopsyche</i> (<i>Petrotrichia</i>) <i>sahadika</i> , new species	6
<i>Helicopsyche</i> (<i>Petrotrichia</i>) <i>ninakosha</i> , new species	8
Petrothrincoidea Scott, 1985	10
<i>Petrothrinco</i> Barnard, 1934: 323, 325.	10
<i>Petrothrinco circularis</i> Barnard, 1934	10
<i>Petrothrinco triangularis</i> (Hagen, 1864)	10
<i>Petrothrinco demoori</i> Scott, 1993	11
<i>Petrothrinco steineri</i> (Weaver, 1997), new combination	11
<i>Petrothrinco concava</i> (Weaver, 1997), new combination	11
<i>Petrothrinco acuta</i> (Weaver, 1997), new combination	11
<i>Petrothrinco scottae</i> (Malm & Johanson, 2005), new combination	11
<i>Petrothrinco weaveri</i> (Malm & Johanson, 2005), new combination	11
<i>Petrothrinco tsaratananensis</i> , new species	12
<i>Petrothrinco newidop</i> , new species	13
<i>Petrothrinco dhritaparam</i> , new species	15
<i>Petrothrinco pauliani</i> , new species	16
<i>Petrothrinco andohel</i> , new species	18

<i>Petrothrincus andring</i> , new species	19
Sericostomatidae Stephens, 1836	20
<i>Cheimacheramus</i> Barnard, 1934	20
<i>Cheimacheramus rossi</i> , new species	20
<i>Rhoizema</i> Barnard, 1934	22
<i>Rhoizema mahalevonum</i> , new species	22
Key to male Sericostomatoidea of Madagascar	27
Acknowledgements	29
References	29

Abstract

Eleven new Trichoptera species of the superfamily Sericostomatoidea are described from Madagascar. Three species within Helicopsychidae are described as *Helicopsyche (Petrotrichia) ambodiva*, new species, *Helicopsyche (Petrotrichia) sahadika*, new species, and *Helicopsyche (Petrotrichia) ninakosha*, new species; six species within the Petrothrincidae are described as *Petrothrincus tsaratananensis*, new species, *Petrothrincus newidop*, new species, *Petrothrincus dhritaparam*, new species, *Petrothrincus pauliani*, new species, *Petrothrincus andohel*, new species, and *Petrothrincus andring*, new species; and two new species within the Sericostomatidae are described as *Cheimacheramus rossi*, new species, and *Rhoizema mahalevonum*, new species. The genus *Gyrocarisa* Weaver 1997 is synonymized with *Petrothrincus* Barnard 1934, resulting in the new combinations *Petrothrincus steineri* (Weaver 1997), new combination, *Petrothrincus concava* (Weaver 1997), new combination, *Petrothrincus acuta* (Weaver 1997), new combination, *Petrothrincus scottae* (Malm & Johanson 2005), new combination, and *Petrothrincus weaveri* (Malm & Johanson 2005), new combination. A key is presented to males of all Sericostomatoidea species from Madagascar. Distribution maps are given for all new and previously described Madagascar species within the superfamily.

Key words: Trichoptera, Sericostomatoidea, Helicopsychidae, Petrothrincidae, Sericostomatidae, Africa, Madagascar, new species, key, distribution maps

Introduction

The superfamily Sericostomatoidea includes a high proportion of very interesting families and genera that exhibit typically Gondwanan affinities. It is therefore not surprising to find a number of the older branches of this superfamily on Madagascar and also in South Africa, both of which were part of the ancient break-up fragment of Gondwana, together with India, the Seychelles and northern South America, about 140 million years ago. About 120 million years ago, Madagascar, together with the Seychelles and India, separated from mainland Africa and northern South America. Thus the fauna of these areas have experienced a long period of isolation and provide interesting insight into the phylogenetic relationships between these older trichopteran taxa, and the biogeography of