Zootaxa 2653: 51–59 (2010)
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

Hydrolutos breweri sp. n., a new aquatic Lutosini species (Orthoptera: Anostostomatidae) from Churí-tepui (Chimantá Massif, Venezuela)

TOMÁŠ DERKA[1] & PETER FEDOR[2, 3]

[1]*Department of Ecology, Faculty of Natural Sciences, Comenius University, Mlynská dolina, 84215 Bratislava, Slovakia*
[2]*Department of Ecosozology, Faculty of Natural Sciences, Comenius University, Mlynská dolina, 84215 Bratislava, Slovakia*
[3]*Corresponding author. E-mail: fedor@fns.uniba.sk*

Abstract

Hydrolutos breweri, a new species of Lutosini (Orthoptera: Anostostomatidae) from Cueva Charles Brewer (Churí-tepui, Guyana Highlands, Venezuela) is described and figured. Inhabiting aquatic environment it represents an unusual orthopteran with sternal and pleural area covered by fine microtrichia forming a plastron.

Key words: Orthoptera, Anostostomatidae, *Hydrolutos*, aquatic, Venezuela, tepui

Introduction

As a typical almost wholly southern hemispheric group of orthopterans Anostostomatidae are believed to owe their distribution to the split of Gondwana (Fleming 1979; Gibbs 2006), however, a dispersal factor to some islands should be taken into account (Knapp *et al.* 2005; Pratt *et al.* 2008). The whole family, formerly included in Stenopelmatidae, has been connected with plenty of longstanding nomenclatural problems, but some of them have been resolved through examination of most of the types (Johns 1997; Gorochov 2001; Jost and Shaw 2006). In their analyses Pratt *et al.* (2008) found support for the monophyly of Anostostomatidae and for the close relationship with the Gryllacrididae and Stenopelmatidae. Anostostomatids occupy a variety of ecological conditions across their zoogeographical range. Their unique phylogenetic status supports a challenge for specific conservation (Gibbs 1998; Johns 2001).

The South American *Hydrolutos* species are medium-sized flightless anostostomatids. The genus *Hydrolutos* (Orthoptera: Anostostomatidae) was known by 4 species: *H. auyan* Issa and Iaffe 1999, *H. chimantea* Issa and Iaffe 1999, *H. roraimae* Issa and Iaffe 1999, *H. aracamuni* Issa and Iaffe 1999, described from four different table mountains – tepuis in SE Venezuela (Issa and Iaffe 1999). Tepuis are peculiar flat-topped table mountains, typical for the Guyana region. They are separated from surrounding wide lowlands and uplands by the sheer cliffs. Tepuis are composed of quartzites and sandstones of the Precambrian Roraima Group, overlaying the igneous metamorphic Guyana Shield (Gibbs and Barron 1993). The Guyana Shield occupies the area of north-eastern South America, extending between the Orinoco River to the north and the Amazon River to the south (Fig. 1A). The Guyana region is known for its extraordinary diversity and high level of endemism, which is, above all, remarkable at the tops of the isolated table mountains (Huber 2005; Rull 2005; Rull and Nogué 2007). The ecological community of their summits is considered a distinct and discontinuous biogeographical province called Pantepui. Pantepui ranges from 1,500 to 3,000 m a.s.l. and covers an area of about 5,000 km^2 (Berry *et al.* 1995, Huber 1995). Tepuis are acknowledged islands supporting high endemism (Huber 2005; Rull 2007; Breure 2009; Breure and Schlögl 2010). This includes many aquatic species with a limited (endemic) geographical distribution (e.g. Čiampor and Kodada 1999; Kodada and Jäch 1999; Derka 2002; Derka *et al.* 2009), such as those of *Hydrolutos* (Issa and Iaffe 1999). All

Accepted by D. Rentz: 22 Sep. 2010; published: 21 Oct. 2010