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Hydrolutos gransabanensis sp.n. (Orthoptera: Anostostomatidae), a new semi-aquatic Lutosini species from Gran Sabana (Venezuela)

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Abstract

Hydrolutos gransabanensis, a new species of Lutosini (Orthoptera: Anostostomatidae) from the cave Cueva El Tigre (Santa Elena de Uairén, SE Venezuela) is described and figured for both sexes. This is the first record of *Hydrolutos* species out of tepui systems. The genus is recently known by 6 apterous species from Venezuelan Guayana region.

Key words: Orthoptera, Anostostomatidae, Hydrolutos, semi-aquatic, Venezuela

Introduction

Hydrolutos, the South American anostostomatid genus (Anostostomatidae Saussure 1859: Lutosinae Gorochov 1988: *Hydrolutos* Issa & Jaffe 1999) has been recently known by 5 apterous medium-sized brown-coloured Lutosini species: *H. auyan* Issa and Jaffe 1999, *H. chimantea* Issa and Jaffe 1999, *H. roraimae* Issa and Jaffe 1999, *H. aracamuni* Issa and Jaffe 1999 and *H. breweri* Derka and Fedor 2010 with highly conserved morphology (Issa and Jaffe 1999, Derka and Fedor 2010, 2012). Although their general diagnosis includes many distinct characters, e.g. head with horizontal, slightly flattened fastigium, convex vertex, well-developed, 5 segmented maxillary palps and pigmented, weakly elevated eyes, pronotum slightly elevated over mesonotum, thoracic sterna with 2 spines, front tibiae with tympanal organs present on both sides, middle tibiae dorsally with a row of 4 spines on internal side and a row of 3 spines on external side, hind tibiae with 2 lateral combs and medium-sized, upwards curved ovipositor in females, *Hydrolutos* species are clearly determined within their relative Lutosini anostostomatids by extremely built sternal and pleural area covered by typical fine microtrichia forming a plastron (Derka and Fedor 2010).

As a typical almost fully southern hemispheric group of orthopterans Anostostomatidae generally are believed to owe their distribution to the split of Gondwana (Fleming 1979, Gibbs 2006). Moreover, their unique phylogenetic status (Pratt *et al.* 2008, Johns 1997, Gorochov 2001, Jost and Shaw 2006) supports a challenge for specific conservation (Gibbs 1998, Johns 2001).

As semi-aquatic insects, *Hydrolutos* species have been described from various SE Venezuelan flat-topped table mountains—tepuis (Issa & Jaffe 1999, Derka and Fedor 2010, 2012). They are composed of quartzites and sandstones of the Precambrian Roraima Group, overlaying the igneous metamorphic Guyana Shield. Since tepuis are separated from surrounding wide lowlands and uplands by hundreds meters high sheer cliffs, they are acknowledged mountain islands supporting high endemism (Huber 2005, Rull 2005, Aubrecht *et al.* 2012, Čiampor and Kodada 1999). Their summits are considered distinct and discontinuous biogeographical province called Pantepui (Mayr and Phelps 1967), which ranges from 1,500 to 3,000 m a.s.l. and covers an area of about