



## Description of *Hydrolutos breweri* (Orthoptera: Anostostomatidae) female from Chimantá Massif (Venezuela)

TOMÁŠ DERKA<sup>1</sup> & PETER FEDOR<sup>2,3</sup>

<sup>1</sup>Department of Ecology, Faculty of Natural Sciences, Comenius University, Mlynská dolina, 84215 Bratislava, Slovakia

<sup>2</sup>Department of Ecosozology, Faculty of Natural Sciences, Comenius University, Mlynská dolina, 84215 Bratislava, Slovakia

<sup>3</sup>Corresponding author. E-mail: fedor@fns.uniba.sk

### Abstract

The female sex of the cave-dwelling cricket *Hydrolutos breweri* Derka & Fedor (Anostostomatidae; Lutosinae) is described. The cricket is of interest because it has few adaptations towards its peculiar life-style. The genus is known from 5 apterous species from South America.

**Key words:** Anostostomatidae; Lutosinae, cave crickets, adaptations, cricket morphology

Since it was described in 2010 (Derka and Fedor 2010), *Hydrolutos breweri* (Orthoptera: Anostostomatidae) has been under attention of scientific community and even established as the Biofresh Cabinet Freshwater Curiosity in its September issue (<http://cabinetoffreshwatercuriosities.com>). Despite absence of typical troglotrophic adaptations (e.g. reduction of eyes and coloration) this cave-dwelling species has been observed walking and swimming inside the stream of the cave Cueva Charles Brewer in Churí-tepui plateau, Venezuela. Thanks to high ability to cling by means of strong legs and tarsal claws it is able to move even against strong current.

*Hydrolutos*, the South American anostostomatid genus has been recently known by 5 apterous medium-sized flightless 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, distributed in SE Venezuelan table mountains (Gibbs and Barron 1993, Huber 1995). Geomorphologically separated by the sheer cliffs the tepuis have become attractive by a high level of endemism (e.g. Rull 2005; Huber, 2005, Berry et al., 2005, Issa and Jaffe, 1999, Rull and Nogué 2007).

External, highly conserved morphology of *Hydrolutos* species has been presented by Issa and Jaffe (1999) as well as Derka and Fedor (2010) in their original descriptions, including the main difference in sternal and pleural area covered by typical fine microtrichia forming a plastron, generally unique within Lutosini, such as *Apotetamenus* Brunner von Wattenwyl, *Lutosa* Walker or *Neolutosa* Gorochoy.

The original description of *Hydrolutos breweri* by Derka and Fedor (2010) was based on several 2009 male records, including the holotype, with no female analysis. However, further research in 2010 has brought valuable data on morphology and diagnosis of female specimen (allotypes), projected in this short correspondence. Material was collected inside the cave Cueva Charles Brewer at Churí-tepui at the Chimantá Massif, Venezuela by Mr. Charles Brewer-Carías, manually and stored in pure ethanol. Morphological characters were studied and photographed using stereomicroscope Leica M80. The allotype has been preserved dry and pinned. Allotype will be deposited in Museo del Instituto de Zoología Agrícola (MIZA), Facultad de Agronomía, Universidad Central de Venezuela, Maracay, Edo. Aragua, Venezuela.

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