

## A new species of the genus *Spiritiops* Lugo-Ortiz & McCafferty (Ephemeroptera, Baetidae) from the Pantepui biogeographical province

CAROLINA NIETO<sup>1</sup> & TOMÁŠ DERKA<sup>2</sup>

<sup>1</sup>CONICET-Instituto de Biodiversidad Neotropical. Facultad de Ciencias Naturales e IML. Miguel Lillo 251. Tucumán.  
Argentina. UNASUR (4000). E-mail: macarolina\_nieto@yahoo.com.ar

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

### Abstract

The genus *Spiritiops* was described by Lugo-Ortiz & McCafferty in 1998. Since then, only the type species, *S. silvudus*, was reported from different countries, such as Brazil, French Guiana, Surinam and Venezuela. In the last years, various international speleological expedition explored summits of some table mountains called tepuis in Guyana region in south-eastern Venezuela. Here we describe a new species of the genus *Spiritiops*, found at three tepuis (Auyán-tepui, Churí-tepui and Mt. Roraima) during above mentioned speleological expeditions.

**Key words:** Venezuela, tepui, taxonomy, systematic, *Baetodes* complex

### Resumen

El género *Spiritiops* fue descripto por Lugo-Ortiz & McCafferty en 1998. Desde su descripción solo la especie tipo, *S. silvudus*, fue reportada para diferentes países, tales como Brasil, Guayana Francesa, Surinam y Venezuela. En los últimos años, varias expediciones espeleológicas internacionales exploraron las cimas aplanadas de las mesetas llamadas Tepuyes en la región de las Guyanas en el sur este de Venezuela. En este trabajo describimos una especie nueva del género *Spiritiops*, colectadas en 3 tepuyes (Auyán-tepui, Churí-tepui y Mt. Roraima) durante las mencionadas expediciones espeleológicas.

**Palabras claves:** Venezuela, tepui, taxonomía, sistemática, complejo *Baetodes*

### Introduction

The genus *Spiritiops* was described by Lugo-Ortiz & McCafferty in 1998 based on nymphs from Brazil and French Guiana. Later, Salles & Nieto (2008) described the adults from Brazil. Since then, only the type species, *S. silvudus* Lugo-Ortiz & McCafferty, was reported from other countries, such as Surinam (Salles & Nieto 2008) and Venezuela (Nieto *et al.* 2011). Nieto placed this genus into the *Baetodes* complex by the presence of strong subapical setae in the tarsal claws (Node B, Fig. 73: Nieto 2010). *Spiritiops* was recovered at the base of the complex which includes: *Baetodes* Needham & Murphy, *Lugolops* McCafferty & Baumgardner, *Mayobaetis* Waltz & McCafferty, *Moribaetis* Waltz & MacCafferty and *Prebaetodes* Lugo-Ortiz & McCafferty.

In last years, various international speleological expedition explored summits of some table mountains called tepuis in Guyana region in south-eastern Venezuela (Fig. 1) (Šmídá *et al.* 2003, 2010; Aubrech *et al.* 2011). The ecological community of summits of tepuis is considered a distinct and discontinuous biogeographical province called Pantepui (Mayr & Phelps 1967). The Pantepui ranges from 1,500 to 3,000 m a.s.l. covering an area of about 5,000 km<sup>2</sup> (Berry *et al.* 1995; Huber 1995). Flat summits are known for high levels of endemism (Huber 2005; Rull 2005; Rull & Nogué 2007). It is true also for the fauna of water streams (Spangler & Faitoute 1991; Čiampor & Kodada 1999; Issa & Jaffe 1999; Derka & Fedor 2010). Black water streams with bedrock bottoms, cascades and