



## *Notomicrus josiahi*, a new species of Noteridae (Coleoptera) from Venezuela

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### Abstract

*Notomicrus josiahi* sp. n. is described from a stream in southern Venezuela. The species differs from others in the genus in 1) large size for the genus (1.48–1.53mm), 2) smooth, shiny dorsal surface with indistinct punctation and microreticulation, 3) distinct coloration with head and pronotum yellow and elytron bicolored with basal portion black and apical portion brown, and 4) distinctive male genitalia. A checklist of the valid, known species of *Notomicrus* is given.

**Key words:** Noteridae, *Notomicrus*, taxonomy, classification, Neotropical

### Introduction

The genus *Notomicrus* Sharp, 1882 includes some of the smallest of all water beetles with the length of some as little as 1.0 mm. Its members can be found in tropical and subtropical aquatic habitats, generally in lentic water, but also occasionally in lotic situations, most commonly in debris such as leaf packs. Most specimens in collections were collected at lights, but specimens can also be collected using typical aquatic sweeping techniques, though they can be easily overlooked.

*Notomicrus* is currently placed in the family Noteridae, but this was debated and not well established until Beutel and Roughley (1987) presented convincing evidence that it is sister to the remaining noterids except *Phreatodytes* Uéno, 1957. The genus exhibits a number of plesiomorphies within Noteridae (Beutel and Roughley 1987; Miller 2009), and the genus, along with the closely related *Speonoterus* Spangler from Sulawesi, Indonesia (Spangler 1996; Miller 2009) are placed in their own subfamily Notomicrinae Zimmermann, 1919 (Beutel and Roughley 1987; Nilsson 2005; Miller 2009).

Ten species are currently recognized in *Notomicrus* with all but two of these occurring in the New World from the southeastern coast of the United States and Mexico south to Argentina (Young 1978; Nilsson 2005). The species complex centered around *N. tenellus* (Clark) is widespread in southeast Asia to Australia (Young 1978; Toledo 2010) and *N. punctulatus* Fauvel, recently resurrected from synonymy with *N. tenellus*, is found in New Caledonia (Toledo 2010). The eight New World *Notomicrus* were revised by Young (1978), and each has distinctly characteristic male genitalia and, to a lesser degree, other distinctive features allowing unambiguous identification of species. A new, strikingly-colored species was recently discovered inhabiting a forest stream in Venezuela. This new species is described here.

### Materials and methods

**Measurements.** Measurements were taken with an ocular scale on a Zeiss Discovery V8 dissecting microscope using an ocular micrometer. An effort was made to measure the largest and smallest individuals. Measurements include: 1) total length (TL), 2) greatest width across elytra (GW), 3) greatest width of head (HW), and 5) distance between eyes (EW). The ratios TL/GW and HW/EW were also calculated.