





## A review of the American species of *Xenelmis* Hinton (Coleoptera: Elmidae), with a new species from Argentina

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## **Abstract**

The genus *Xenelmis* Hinton is taxonomically reviewed. A new species of riffle beetle from Argentina, *Xenelmis uruzuensis* **sp. nov.** is described and illustrated from adults of both sexes and the larva. Ten additional species of *Xenelmis* are treated: *X. sandersoni* Brown, *X. bufo* (Sharp), *X. rufipes* Delève, *X. leechi* Perkins & Steiner, *X. marcapata* Perkins & Steiner, *X. tarsalis* Hinton, *X. teres* Hinton, *X. audax* Hinton, *X. comis* Hinton and *X. laura* Brown. Male genitalia of each species are illustrated, some of them for the first time. Distributional records, diagnoses and a key to distinguish the species of *Xenelmis* are included.

Key words: riffle beetles, Elmidae, Elminae, Xenelmis, South America

## Introduction

The elmid fauna of South America is poorly studied and only a few of the South American genera are clearly defined. In addition to this, no cladistic analyses at a generic level have ever been performed. There is only a preliminary phylogenetic analysis presented by Costa et al. (1999) on Byrrhoidea *sensu* Lawrence and Newton (1995) where the family Elmidae, as currently defined, appears as paraphyletic. The family comprises two subfamilies, Larainae and Elminae; the genus *Xenelmis* Hinton, belongs to the subfamily Elminae.

Xenelmis includes minute riffle beetles ranging from southern North America to northern Argentina. With the species described here there are currently 13 species recognized in the genus. Hinton (1936) erected Xenelmis for Elmis bufo described by Sharp (1882) from Panama. Hinton (1940) redescribed Xenelmis, diagnosed X. tarsalis and included two species originally described by Grouvelle (1889) in Elmis, X. granata and X. micros, both from Brazil. A few years later Hinton (1946) described 3 new species, X. teres from Brazil, X. audax from Brazil and Argentina and X. comis from Paraguay,