



A new species of *Rhinatrema* Duméril & Bibron (Amphibia: Gymnophiona: Rhinatrematidae) from Guyana

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Abstract

The first new species of rhinatrematid caecilian in more than 50 years, *Rhinatrema shiv* sp. nov., is described from Guyana. The type series of 10 specimens differs from the only other species in the genus, *R. bivittatum*, in having a longer tail, different colour pattern, more acuminate and relatively shorter head, and in several features of the skull and mandible including dentition. Sequence data for 1572 aligned base pairs of mitochondrial DNA are > 15% different between the two species. *Rhinatrema shiv* is known only from Guyana, and *R. bivittatum* from French Guiana and far northeastern Brazil. The only reported specimen of the genus from Suriname is not clearly referable to either of the named species.

Key words: Brazil, caecilians, French Guiana, Guiana Shield, herpetology, HRXCT, Kaieteur, South America, Suriname, systematics, taxonomy

Introduction

The family Rhinatrematidae Nussbaum, 1977 comprises the two Neotropical genera *Rhinatrema* Duméril & Bibron, 1841 and *Epicrionops* Boulenger, 1883 and is the sister group of all other living caecilian amphibians (e.g., Wilkinson & Nussbaum 2006). *Rhinatrema*, hitherto known only from the type species *R. bivittatum* (Guérin-Méneville, 1838) itself described from a single specimen from “L’Amérique Méridionale” (Cayenne, French Guiana according to Taylor, 1968), has been considered particularly poorly known because very few additional specimens have been reported in the more than 150 years since its discovery and description. Taylor (1968) listed only two specimens, and, in the most recent revision, Nussbaum & Hoogmoed (1979) summarized variation among the four specimens of *R. bivittatum* known to them, including new locality records for Suriname and Guyana (although they overlooked a few additional specimens in Brazilian collections). Since then, substantial additional but largely unreported collections of *R. bivittatum* have been made from French Guiana. Recently, Kok & Kalamandeen (2008) reported *Rhinatrema* from Kaieteur National Park, Guyana and noted that there were differences between this population and *R. bivittatum* that likely warranted the description of a new species, which is the purpose of this paper.

Material and methods

Recently collected specimens were killed by lethal anaesthesia (Xylocaine or MS222), fixed in formalin for several days, washed in water and stored in 70% ethanol or industrial methylated spirits, and deposited in the collections of the Royal Belgian Institute of Natural Sciences, Brussels, Belgium (IRSNB) and the Natural