



A new dendrobatid frog (Anura: Dendrobatidae: *Anomaloglossus*) from the Orinoquian rainforest, southern Venezuela

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Abstract

A new species of *Anomaloglossus* is described from the Venezuelan Guayana; it is the 21st described species of *Anomaloglossus* from the Guiana Shield, and the 15th from Venezuela. This species inhabits rainforest on granitic substrate on the northwestern edge of the Guiana Shield (Estado Amazonas, Venezuela). The new species is distinguished from congeners by sexual dimorphism, its unique male color pattern (including two bright orange parotoid marks and two orange paracloacal spots on dark brown background), call characteristics and other morphological features. Though to the new species is known only from the northwestern edge of the Guiana Shield, its distribution may be more extensive, as there are no significant biogeographic barriers isolating the type locality from the granitic lowlands of Venezuela.

Key words: Amphibia, Dendrobatidae, *Anomaloglossus*, Venezuela, Guiana Shield

Resumen

Se describe una nueva especie de *Anomaloglossus* de la Guayana venezolana, que es la vigesimoprimera descrita del Escudo Guayanés, y la decimoquinta para Venezuela. Habita selva pluvial baja sobre substrato granítico y se conoce de dos localidades en el extremo noroeste del Escudo Guayanés (Estado Amazonas, Venezuela). La nueva especie se distingue de sus congéneres por la coloración única de los machos (incluyendo dos manchas parotoideas y dos manchas para-cloacales de color naranja vivo sobre fondo marrón oscuro), coloración sexualmente dicromática en vida, características del canto y algunos rasgos morfológicos. Aunque es aparentemente endémico del extremo noroeste del Escudo de Guayana, podría estar mucho más expandido ya que no existe ninguna aparente barrera biogeográfica para extenderse a través de zonas bajas graníticas de Venezuela.

Introduction

The genus *Anomaloglossus* (Grant *et al.* 2006) is allocated in the family Dendrobatidae, in the subfamily Aromobatinae (Santos *et al.* 2009), which also includes the genera *Aromobates*, *Mannophryne*, *Rheobates*, and *Allobates*. *Anomaloglossus* are distinguished from all other dendrobatids by the presence of a median lingual process (MLP). The MLP (*sensu* Grant *et al.* 1997) of *Anomaloglossus* has a similar morphology to a structure in Old World ranoids and is probably convergent. Biogeographically, *Anomaloglossus* is mostly distributed in the Guiana Shield with few trans-Andean representatives.

The Guiana Shield is an enormous portion of northeastern South America (~1.520.000 km²), comprising the area to the south and east of the Orinoco River watershed and to the east and north of the Río Negro and lower Amazon River Basins (Hoogmoed 1979; Hallowell & Reynolds 2005). This region harbors a large number of known living taxa (15000 species of vascular plants, 1004 birds, 282 mammals, 269 amphibians,