

A partial revision of the *Ameerega hahneli* complex (Anura: Dendrobatidae) and a new cryptic species from the East-Andean versant of Central Peru

EVAN TWOMEY^{1,2} & JASON L. BROWN¹

¹Department of Biology, East Carolina University, Greenville NC, U.S.A.

²E-mail: emt0424@mail.ecu.edu

Abstract

We describe a new species of poison frog from central Peru which has been referred to as *Ameerega picta* and *A. hahneli* for the past thirty years. To our knowledge the new species is endemic to Peru and occurs throughout the east-Andean versant between roughly 6 and 10 degrees south latitude. Recent phylogenies using molecular data show that the new species and *A. hahneli* are not closely related despite being similar in pattern, color, and morphology. Our data suggest that the new species is a sister taxon to *A. rubriventris*, which is readily distinguishable from the new species by its reddish venter. The new species can be distinguished furthermore from other *Ameerega* species by possessing white (rather than yellow or cream) dorsolateral stripes, and from the similar *A. hahneli* by differences in advertisement calls and larval morphology.

Key words: *Ameerega altamazonica* sp. nov., Dendrobatid frogs, *A. hahneli*, new species, Peru, poison frogs, taxonomy

Resumen

Se describe una especie nueva de rana venenosa del centro del Perú la cual había sido erróneamente asignada a *A. picta* y *A. hahneli* durante los últimos treinta años. Según nuestros conocimientos, la especie nueva es endémica al Perú y se distribuye a través de la vertiente oriental de los Andes entre aproximadamente 6 y 10 grados de latitud sur. Recientes filogenias utilizando datos moleculares muestran que la nueva especie y *A. hahneli* no están cercanamente emparentadas, a pesar de ser similar en patrones, color, y morfología. Nuestros datos sugiere que la nueva especie es una especie hermana a *A. rubriventris*, que puede distinguirse de la nueva especie por su vientre rojizo. Además se puede distinguir de la mayoría de otras especies de *Ameerega* por presentar rayas dorsolaterales blancas (en lugar de amarillo o crema), y se diferencia de *A. hahneli* por diferencias en los cantos y morfología larval.

Introduction

Species richness of dendrobatid frogs in the upper Peruvian Amazon is unparalleled, particularly in the genus *Ameerega* (Roberts *et al.* 2006, Lötters *et al.* 2007). Of the ca. 25 recognized species in this genus, 11 are endemic to the east-Andean versant and surrounding lowlands of Peru. Recent, intensified sampling in this region combined with molecular phylogenetic analysis is revealing that there may be many more species of dendrobats in this area than previously suspected. As a result, several new species of poison frogs are currently being described from this area, most of which dwell in the Cordillera Oriental in central Peru.

One of these species, the subject of this paper, has been known for quite some time but by an incorrect name, having first been referred to as a population of *Phyllobates pictus* (= *Ameerega picta*), and later referred to as a population of *A. hahneli* (e.g. Silverstone 1976, Lötters *et al.* 1997). The type locality of *A. hahneli*