



A new species of harlequin frog (*Bufonidae: Atelopus*) with an unusual behavior from Andes of Colombia

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Abstract

A new species of harlequin frog, genus *Atelopus*, is described from the highlands in the northern part of the Cordillera Central, Colombia. The new species, is distinguished from all other species in the genus by the presence of a postorbital crest widely raised, well defined *coni* in postocular region and arms, small warts and spiculae scattered on the dorsal surfaces of the body and thighs and, vertebral neural processes conspicuous. Females are uniform dark reddish brown on dorsum, and bright orange ventrally; males are dark brown dorsally, and ventrally white or yellowish with dark brown irregular stripes and blotches. The conservation population status of the new species is discussed, additionally the natural history and aspects about an unusual behavior in the genus is provided.

Key words: *Atelopus nocturnus* sp. nov., Cordillera Central, Colombia, natural history, taxonomy

Resumen

Describimos una nueva especie de rana arlequín del género *Atelopus* de tierras altas en el norte de la Cordillera Central de los Andes de Colombia. La nueva especie se distingue de las otras especies del género por la presencia de una cresta postorbital ampliamente levantada, *coni* en la región posterior al ojo y en los brazos, pequeñas verrugas y tubérculos en la superficie dorsal del cuerpo y muslos, y proceso vertebral neural visible. Las hembras son café rojizo uniforme en el dorso y naranja brillante en el vientre; en machos el dorso es café oscuro y vientre blanco o crema amarillento con manchas irregulares café oscuro. Discutimos el estatus de conservación de la nueva especie, además, proveemos aspectos de la historia natural y de un comportamiento inusual en el género.

Palabras clave: *Atelopus nocturnus* sp. nov., Cordillera Central, Colombia, historia natural, taxonomía

Introduction

Although some species are found only in biological collections, the genus *Atelopus* still is one of the most diverse and conspicuous components of the neotropical anurofauna. This is the richest among the toads to family Bufonidae currently containing 94 described species (Frost 2011), has diurnal activity (Rueda *et al.* 2005, Lötters 2007, Coloma *et al.* 2002) and due to its bright color commonly referred to as harlequin frogs. *Atelopus* live at or in the margins of streams and running water is utilized for reproduction (Lötters 2007), and most species occur in mountain habitats above 1500 m (see Lötters 1996; IUCN 2010). Apparently due to association with the streams and the physiognomy of the Andes has resulted in restricted area of distribution of species (Lötters 1996; La Marca *et al.* 2005), and has promoted diversification in this genus. Throughout Central and South America, 97% of the species of the genus are regarded as Endangered, Critically Endangered or Extinct, according to IUCN Red List criteria (Stuart *et al.* 2008), because populations are known to have declined dramatically (e.g. Ron *et al.* 2003, La Marca