



A new species of dink frog (Anura: Eleutherodactylidae: *Diasporus*) from Cordillera de Talamanca, Costa Rica

GERARDO CHAVES^{1,3}, ADRIÁN GARCÍA-RODRÍGUEZ¹, ALEJANDRA MORA² & ALEJANDRO LEAL²

¹Zoology Museum, Department of Biology, Universidad de Costa Rica. E-mail: cachi@biologia.ucr.ac.cr; garciar.adrian@gmail.com

²Genetics and Biotechnology Section, Department of Biology, Universidad de Costa Rica. E-mail: alejandro.leal@ucr.ac.cr

³Corresponding authors. E-mail: cachi@biologia.ucr.ac.cr

Abstract

A new dink frog species of the genus *Diasporus* (Eleutherodactylidae) is described from the Cordillera de Talamanca in Costa Rica. The new species shows an amazing polymorphism in the dorsal and ventral coloration that varies from red to black and white that is unique in the genus. Here we include the description of its mating call, sexual dimorphism relative to coloration, and comments on its distribution and conservation status. In addition, molecular data that complement the morphological taxonomy are shown.

Key words: *Diasporus ventrimaculatus* sp nov, intraspecific variation, polymorphism, polychromatism, Costa Rica

Resumen

Una nueva especie de rana campana del género *Diasporus* (Eleutherodactylidae) es descrita de la Cordillera de Talamanca en Costa Rica. La nueva especie muestra un sorprendente polimorfismo en la coloración dorsal y ventral que varía entre rojo hasta blanco y negro, lo cual es único en el grupo. Aquí incluimos la descripción de su canto de cortejo, dimorfismo sexual relacionado con la coloración así como comentarios sobre su distribución y estatus de conservación. Se muestran, además, datos moleculares que complementan la taxonomía morfológica.

Palabras claves: *Diasporus ventrimaculatus* sp nov, variación intraespecífica, polimorfismo, policromatismo, Costa Rica

Introduction

Costa Rica hosts one of the best known herpetofaunas of any tropical country (Savage 2002). However there are still some areas within Costa Rica that have received little attention from herpetologists, such as the mountains of the Peninsula de Nicoya, the north Caribbean region and the highlands of the Cordillera de Talamanca. New species of salamanders (García-París *et al.* 2008; Wake *et al.* 2007), anurans (Lips 1996; Lips & Savage 1996) and reptiles (Lips & Savage 1994; Savage & Guyer 1998; Savage & Lahanas 1989) were recently described for the Talamancas, based on material collected from the few surveys carried out in the last decades. These new discoveries highlight the incomplete nature of our herpetological knowledge, especially in highland areas.

In a recent survey of a high elevation valley known as Valle del Silencio, on the Caribbean versant of the Cordillera de Talamanca (Fig. 1), we found a remarkably abundant dink frog from the genus *Diasporus* (*sensu* Hedges *et al.* 2008). Frogs in the genus *Diasporus* were formerly placed in the family Leptodactylidae under the genus *Eleutherodactylus* (Frost 1985), but recently Heinicke *et al.* (2007) divided the eleutherodactylines