



A new species of anole related to *Anolis altae* from Volcán Tenorio, Costa Rica (Reptilia, Squamata, Polychrotidae)

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Abstract

I describe a new species of *Anolis* related to *Anolis* (or *Norops*) *altae* from Volcán Tenorio, Costa Rica. The new species differs from all other species in the *A. altae* complex by having the ventral surfaces of body and limbs distinctly reticulated with dark brown pigment and a male dewlap that is dark red with brown blotches, as well as in several morphometric and pholidotic characteristics. It further differs from its geographically nearest congener of this complex, *A. monteverde*, by having a bilobate hemipenis (unilobate in *A. monteverde*).

Key words: *Anolis*, Costa Rica, new species, Polychrotidae, Reptilia, Squamata, Volcán Tenorio

Resumen

Se describe una nueva especie de *Anolis* relacionada con *Anolis* (o *Norops*) *altae*, proveniente de Volcán Tenorio, Costa Rica. La nueva especie difiere de todas las demás especies del complejo *A. altae* en tener la superficie ventral del cuerpo y extremidades reticuladas con pigmento marrón, y los machos con papera rojo oscuro manchada de marrón, así como otras características morfométricas y de escamación. Además, se diferencia de su congénere geográficamente más cercano de este complejo, *A. monteverde*, por tener un hemipene bilobado (unilobado en *A. monteverde*).

Introduction

The highlands of Lower Central America are home to a distinct assemblage of beta anoles (fide Etheridge 1959) that mainly belongs to two radiations, species related to *Anolis altae* (i.e., *A. altae*, *A. fortunensis*, *A. gruuo*, *A. kemptoni*, *A. monteverde*, *A. pseudokemptoni*) and those related to *A. pachypus* (i.e., *A. magnaphallus*, *A. pachypus*, *A. pseudopachypus*, *A. tropidolepis* and another species in the process of being described by Lotzkat et al. in press). The species in each of these species clusters show an allopatric distribution pattern and, therefore, at any given locality only one representative of each cluster is found. In the Serranía de Tabasará, *A. pseudopachypus* occurs syntopically either with *A. pseudokemptoni*, *A. gruuo*, or *A. fortunensis*; in the eastern portion of the Cordillera de Talamanca in western Panama and eastern Costa Rica *A. kemptoni* is found in sympatry either with *A. magnaphallus* or with *A. pachypus*, depending on the locality; in the western portion of the Cordillera de Talamanca, as well as in the Cordillera Central of Costa Rica, *A. altae* occurs together with *A. tropidolepis*; and in the Cordillera de Tilarán, *A. monteverde* can be found with *A. tropidolepis* (Köhler et al. 2007, Köhler 2008). Aside from these two clusters, only a few other species of beta anoles are commonly found above 1500 m elevation including *A. datzorum*, *A. laevis*, *A. salvini*, and *A. woodi*.

A single female specimen from Cerro Cacao referred to the *A. altae* complex by Köhler (2009) is the only representative of this species complex known from the Cordillera de Guanacaste. This record in the far northwestern corner of the country makes it appear as likely that *A. altae*-like populations occur on the other peaks of this mountain range. In March 2011, together with several local naturalists, I undertook an expedition to Volcán Tenorio, which is the southeasternmost peak in the Cordillera de Guanacaste reaching an altitude of 1916 m above sea