



## Molecular phylogenetic relationships of the *Liolaemus rothi* complex and a new species of lizard from Auca Mahuida Volcano (Squamata: Liolaemini)

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### Abstract

A new species of lizard of the genus *Liolaemus* from Neuquén Province, western Argentina, is described. The new species is a member of the *Liolaemus rothi* species complex, and mitochondrial and nuclear molecular data show it as sister taxon of the clade composed of (*L. hermannunezi* (*L. tromen* + *L. loboii*)), differing in size, squamation, coloration, and sexual dimorphism from the other species of this group. *Liolaemus sitesi* sp. nov. has a dark body coloration with series of notched blotches on the dorsum, with bright spots, and a very iridescent yellow-green coloration in natural light. *Liolaemus sitesi* sp. nov. is found only in the Auca Mahuida volcano and is terrestrial, dwelling on the stony slopes with sandy soil between 1300 m and the volcano summit.

**Key words:** Patagonia, *Liolaemus sitesi* sp. nov., *rothi* complex phylogeny, Argentina

### Resumen

Se describe una nueva especie de lagartija del género *Liolaemus* del norte de la Provincia de Neuquén, oeste de Argentina. La nueva especie es un miembro del complejo de especies *Liolaemus rothi*, y datos moleculares mitocondriales y nucleares la muestran como el taxón hermano del clado (*L. hermannunezi* (*L. tromen* + *L. loboii*)), diferenciándose en tamaño, escamación, coloración y en dimorfismo sexual de las otras especies del grupo. *Liolaemus sitesi* sp. nov. tiene una coloración corporal oscura con series de manchas con muescas en el dorso, puntos brillantes y una coloración amarilla-verdosa iridiscente al sol. *Liolaemus sitesi* sp. nov. solo se encuentra en el volcán Auca Mahuida y es terrestre, viviendo en las pendientes rocosas con suelo arenoso encontradas entre los 1300 m y la cumbre del volcán.

**Palabras claves:** Patagonia, *Liolaemus sitesi* sp. nov., filogenia complejo *rothi*, Argentina

### Introduction

Northwestern Patagonia and adjacent southern Andes, including the regions of northern Neuquén and southern Mendoza provinces in Argentina and neighboring areas of Chile are geographically very complex, with high mountains and steep volcanic peaks, deep valleys, and isolated high plateaus, products of Andean orogeny, and a subsequent history of volcanism and glaciations that produced pronounced climatic changes in the last million years (MY) (e.g. Rabassa & Clapperton 1990; Ramos & Kay 2006; Ramos & Folguera 2010). These events produced an intricate physiographic landscape that probably fostered multiple population divergence processes across different geographic and temporal scales, shaping a rich biodiversity of lizards. Today this