



Article

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A new species of *Phymaturus* of the *patagonicus* clade (Squamata, Liolaemidae) from isolated plateau of southwestern Rio Negro Province, Argentina

JOSÉ ALEJANDRO SCOLARO^{1,2,§}, FAUSTO MÉNDEZ DE LA CRUZ³ & NORA R. IBARGÜENGOYTÍA⁴

¹Centro Nacional Patagónico, CONICET, H.L. Jones 143 - 9120 Puerto Madryn, Chubut, Argentina

²Universidad Nacional de la Patagonia San Juan Bosco, Facultad de Ciencias Naturales, Julio A. Roca 115, 1° Piso - 9100 Trelew, Chubut, Argentina

³Laboratorio de Herpetología, Instituto de Biología, Universidad Nacional Autónoma de México, D.F., 04510, México

⁴INIBIOMA - CONICET. Universidad Nacional del Comahue. Quintral 1250, San Carlos de Bariloche, Río Negro (8400), Argentina.

[§]Corresponding author. E-mail: scolaro@cenpat.edu.ar

Abstract

A new *Phymaturus* species called *Phymaturus sinervoi*, is described in the present study. The new species is a member of the “*Phymaturus patagonicus*” group from Patagonia. It lives at about 1100 m of altitude in a volcanic rocky habitat near to Cari Laufquen plateau, in the southern-central steppe of Rio Negro Province, Argentina. The new species and the neighbouring related species of the genus from the “*patagonicus*” group are morphologically compared, and its distribution and natural history are pointed out.

Key words: *Phymaturus sinervoi*, Liolaemidae, Patagonian Reptiles, rock-dwelling lizards, Argentina

Introduction

Within this South American lizard family Liolaemidae, only three contrastingly different genera have been recognized, one being a monotypic lineage (*Ctenoblepharys*) and another (*Liolaemus*, with >220 species), one of the most extraordinary examples of evolutionary radiation known among living vertebrates (Pincheira-Donoso *et al.* 2008c, Avila *et al.* 2010). The third genus, *Phymaturus*, shows an intermediate species richness with 35 species (Pincheira-Donoso *et al.* 2008c; Corbalán *et al.* 2009; Avila *et al.* 2011). Species numbers are not, however, the only contrasting features found among these lizard lineages. Indeed, while *Liolaemus* has started to be regarded as an interesting example of adaptive radiation given its dramatic diversity in phylogenetic, ecological and phenotypic features (Schulte *et al.* 2000; Espinoza *et al.* 2004; Pincheira-Donoso *et al.* 2008a, 2008b, 2009), *Phymaturus* has been suggested to be a more consistent candidate example of relatively poor diversification at the ecological and life-history dimensions, mediated by phylogenetic niche conservatism (Scolaro *et al.* 2008). These differences in the species richness between these two clades were even more accentuated until recently, when the diversity of *Phymaturus* (in contrast to *Liolaemus*) remained substantially more underestimated, being known only for a few species (Cei, 1986; Etheridge 1995). In the recent years, several new *Phymaturus* species have started to be proposed from different areas of the Andes and Patagonia, which has resulted in the discovery of a fascinating diversity, especially at the level of patterns of coloration (Lobo & Quinteros 2005b, 2010; Pincheira-Donoso *et al.* 2008c; Fig. 1). Within *Phymaturus* (Cei 1986; Etheridge 1995) two groups have been recognized: the *palluma* (= *flagellifer*) group, with larger species, found mainly on both sides of the central Andes slopes, from southern Puna regions and Famatina mountain range, to north-western Patagonia. On the other hand, the *patagonicus* group, smaller in size, inhabits mainly the extra-Andean outcrops and volcanic plateaus of central Patagonia. Espinoza *et al.* (2004), in a phylogenetic study combining molecular and morphological data, also recognize two groups, but Lobo and Quinteros (2005a) found mixed results in a morphological study, with the *patagonicus* group recovered as paraphyletic in some analyses. However, Etheridge (1995) provided strong evidence about the monophyly of this genus based in several characters, including wide and flattened head and body, tail with regular whorls of spiny