



## Geographic distribution of the genus *Pleurodema* in Argentina (Anura: Leiuperidae)

DAIANA P. FERRARO<sup>1,3</sup> & M. DOLORES CASAGRANDA<sup>2</sup>

<sup>1</sup>Museo de La Plata, Paseo del Bosque S/N (1900) La Plata, Buenos Aires, Argentina, CONICET. Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Ángel Gallardo 470 (1405) Buenos Aires, Argentina. E-mail: dferraro@fcnym.unlp.edu.ar

<sup>2</sup>Instituto Superior de Entomología “Dr. Abraham Willink”, Facultad de Ciencias Naturales e Instituto Miguel Lillo, Miguel Lillo 205 (4000) Tucumán, Argentina. E-mail: dolores.casagranda@gmail.com

<sup>3</sup>Corresponding author

### Abstract

Distributional ranges of South American frogs are usually poorly known. In this paper, we examined 4671 specimens of the genus *Pleurodema* deposited in Argentinean herpetological collections and used these museum data to generate distributional maps for the nine species of the genus currently known in Argentina (*P. cf. borellii*, *P. bufoninum*, *P. cf. cinereum*, *P. kriegi*, *P. guayapae*, *P. marmoratum*, *P. nebulosum*, *P. thaul* and *P. tucumanum*). Then, we contrasted the distributional ranges of each species with ecological regions proposed for the country. The species of the genus *Pleurodema* are widely distributed along northwestern, central, western, and southern Argentina from sea level up to 4275 m a.s.l., and all of them occur at protected areas of the country. We listed localities where two or more species live in sympatry. We found a correlation between point-occurrence data and distance to main roads of the country, where 50% of specimens were collected at a distance minor than 2 km from main roads. Finally, we discussed doubtful records of *Pleurodema* species taken from both museum records and literature on the basis of our knowledge about the distributional range of these species.

**Key words:** distributional ranges, Neotropical region, Amphibia

### Introduction

The frog genus *Pleurodema* Tschudi (Leiuperidae) includes 13 recognized species and is widely distributed from Panamá to southern South America (Frost 2008). In Argentina, nine species of the genus *Pleurodema* have been recorded: *P. borellii* (Peracca), *P. bufoninum* Bell, *P. cinereum* Cope, *P. kriegi* (Müller), *P. guayapae* Barrio, *P. marmoratum* (Duméril and Bibron), *P. nebulosum* (Burmeister), *P. thaul* (Lesson), and *P. tucumanum* Parker (see account at Cei 1980a). This genus presents some interesting biological features in reproductive modes (several oviposition modes), morphology (cryptic species and polymorphic species), cytogenetic aspects (diploid and polyploid species), and geographic distribution (*e.g.* species from Andean mountains, high grasslands, montane forest, Patagonian steppe, Caatingas, llanos and savannas, austral forest; Duellman & Veloso 1977; Cei 1962; Cei 1980a). The genus shows an extended but discontinuous distribution along Neotropical region, including species inhabiting more than one biogeographic region and other ones restricted to a particular region. Also, some species occur at sea level, while others reach high Andean mountains, nearly 5000 m a.s.l., living through an extensive altitudinal range.

Up to now, our knowledge about the distribution of *Pleurodema* is fragmented and based on literature referred to geographic regions (inventories of protected areas, countries, provinces, etc.), new geographical records, or enlargements of distributional range (*e.g.* Vellard 1960; La Marca 1992; Lavilla & Scrocchi 1992; Lavilla *et al.* 1992; di Tada *et al.* 1996; Úbeda 2001; Correa *et al.* 2007). The only work which provides