Zootaxa 2073: 1–21 (2009)
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

A new polyploid species of *Pleurodema* (Anura: Leiuperidae) from Sierra de Comechingones, Córdoba, Argentina and redescription of *Pleurodema kriegi* (Müller, 1926)

JULIÁN A. VALETTI[1,2], NANCY E. SALAS[1] & ADOLFO L. MARTINO[1,3]

[1]*National University of Rio Cuarto, Ecology, X5804BYA Rio Cuarto (Córdoba) Argentina*
[2]*CONICET*
[3]*Corresponding author: amartino@exa.unrc.edu.ar*

Abstract

We describe a new anuran species of the genus *Pleurodema* from Sierra de Comechingones, Córdoba province, Argentina and redescribe *Pleurodema kriegi* with designation of neotype. The new species has lumbar glands and according to its external morphology is cryptic with *Pleurodema kriegi*. Morphometry, bioacoustics, erythrometry and cytogenetics have allowed differentiating the new species from *Pleurodema kriegi*. The new species, *Pleurodema cordobae*, is the single species of its genus with an octoploid chromosomic complement. Its distribution is only known from type locality and two temporary ponds located 5 kilometers away from the former.

Key words: Amphibia, *Pleurodema cordobae* **sp. nov.**, Octoploid, Bioacoustics, Morphometry, Cytogenetics, Erythrometry, Redescription, Neotype, *Pleurodema kriegi*

Resumen

Nosotros describimos una nueva especie de anfibio del género *Pleurodema* de la Sierra de Comechingones, provincia de Córdoba, Argentina y redescribimos *Pleurodema kriegi* con la asignación de un neotipo. La nueva especie tiene glándulas lumbares y según su morfología externa es críptica con *Pleurodema kriegi*. La morfometría, la bioacústica, la eritrometría y la citogenética han permitido distinguir la nueva especie respecto de *Pleurodema kriegi*. La nueva especie, *Pleurodema cordobae*, es la única de su género con un complemento cromosómico octoploide. La distribución geográfica es solamente conocida para la localidad típica y dos charcas temporarias distantes 5 kilómetros.

Introduction

Sierra de Córdoba constitutes the eastern group of the Sierras Pampeanas System embracing Sierra Grande, Sierra Norte and Sierra Chica. Sierra Grande includes Sierra de Achala to the north and Sierra de Comechingones to the south (Miró 1999; Ramos 1999). The previous tectonic processes and the current morphology from Sierra Grande favoured the topographical isolation that has produced a remarkable endemic flora and fauna due to allopatric speciation processes (Cei 1972). The endemic herpetofauna from Sierra Grande is represented by the anurans *Odontophrynus achalensis* di Tada, Barla, Martori & Cei, 1984, *Rhinella achalensis* (Cei 1972) and *Pleurodema kriegi* (Müller 1926) and the saurian *Pristidactylus achalensis* (Gallardo 1964), (di Tada *et al*. 1996; Cabrera 1996).

Although polyploidy is an important evolutionary force in some groups of plants (White 1973; Otto & Whitton 2000), this mechanism is less frequent in vertebrates (Orr 1990; Holloway *et al.* 2006). However,

Accepted by M. Vences: 9 Feb. 2009; published: 16 Apr. 2009