Copyright © 2011 · Magnolia Press

Article



## A new genus of neobatrachian frog from southern Patagonian forests, Argentina and Chile

NÉSTOR G. BASSO<sup>1,3</sup>, CARMEN A. ÚBEDA<sup>2</sup>, MARÍA M. BUNGE<sup>2</sup> & LIZA B. MARTINAZZO<sup>1</sup>

<sup>1</sup>Centro Nacional Patagónico (CENPAT–CONICET). Bvd. Brown 2915, U9120ACF Puerto Madryn, Chubut, Argentina <sup>2</sup>INIBIOMA (Universidad Nacional del Comahue – CONICET). Quintral 1250, R 8400 FRF – Bariloche, Argentina <sup>3</sup>Corresponding author. E-mail: nbasso@cenpat.edu.ar

## Abstract

In 1975 Lynch named a new species of frog based on two specimens from Puerto Eden, Wellington Island, southern Chile, tentatively allocated to the genus *Telmatobius*. *Telmatobius grandisonae* Lynch was later included by the same author in his genus *Atelognathus*. Based on a reappraisal of the type material and the description of the internal and external morphology, karyotype, tadpole morphology and molecular evidence from recently discovered specimens collected at Lago del Desierto, southern Argentina, we describe the monotypic genus *Chaltenobatrachus*, with *Telmatobius grandisonae* (Lynch) serving as the type species. *Chaltenobatrachus* differs from *Atelognathus* mainly in having a uniform bright green dorsal coloration, with brown to reddish warts; orange iris with gold spots; fingers with interdigital membrane; frontoparietals well developed; small nasals;well ossified sphenethmoid; anteriorly expanded homosternum; skin of tadpole transparent; oral disc with protruding anterior and lateral papillae; diploid number 2n = 32 chromosomes. The genetic distances between *Chaltenobatrachus* and *Atelognathus* meet or exceed most other intergeneric comparisons.

Key words: Chaltenobatrachus gen. nov., Chaltenobatrachus grandisonae comb. nov., Batrachylinae, systematics

## Introduction

Lynch (1975) described the species *Telmatobius grandisonae* based on two preserved specimens collected during December 1958 at Puerto Eden, Wellington Island, by the Royal Society Expedition to South Chile. Both specimens, an adult male (holotype) and a juvenile female (paratype), are deposited at the British Museum (Natural History).

The same author (Lynch 1978), in a re-evaluation of the relationships and classification of the telmatobiine leptodactylid frogs from Patagonia, placed *grandisonae* in his new genus *Atelognathus*, but he remarked that *Atelognathus grandisonae*, the most southern species of the genus, differs from all other species of *Atelognathus* mainly in some osteological characters, and stated that "more material is required to verify the generic assignment".

In January 1997, during field work in the area of Lago del Desierto (49°04'41"S, 72°54'17"W), Santa Cruz Province, southern Patagonia, Argentina (Figure 1), one of us (CAU) collected several adults and tadpoles of a neobatrachian frog with a combination of traits that we could not assign to any of the described genera. The external characteristics of the adult specimens resemble Lynch's description of the species *A. grandisonae*. In 1997, during a stay at the Field Museum of Natural History, one of us (NGB) had the opportunity to receive on loan the holotype and paratype of *A. grandisonae* through the generosity of Drs. Barry T. Clarke and Colin McCarthy. In January 2005 and 2007 two new field trips were carried out to obtain more specimens for DNA and karyological studies and a comprehensive knowledge of their distribution and habitat.

The specimens collected at Lago del Desierto (Figure 2), along with another specimen deposited at the Argentinean Museum of Natural History (MACN 36084), collected by G. Gil and A. Serret at Lago Nansen (48°5'S, 72°25'W), Perito Moreno National Park, Santa Cruz, Argentina (Cei & Gil 1996) show the same features as species collected at Wellington Island, a locality distant ~100 km airline W from Lago del Desierto. Data from these specimens and their comparison with closely related forms support the recognition of a new genus. Here we provide a