

## *Leptodactylus chaquensis* Cei, 1950 (*Leptodactylidae*, *Leptodactylinae*): extension of the distribution in state of Rio Grande do Sul, southern Brazil

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(With 1 figure)

The Cei's white-lipped frog *Leptodactylus chaquensis* Cei, 1950 is a common and widespread species in South America on the east of Andes, with known records for Argentina, Bolivia, Paraguay, Uruguay, and Brazil (Frost, 2016). In the Brazilian territory, this species has been recorded in the states of Acre, Minas Gerais, Mato Grosso, Mato Grosso do Sul, Paraná, São Paulo, Rondônia, and Rio Grande do Sul (see Oda et al., 2014).

In the state of Rio Grande do Sul (RS), southern Brazil, *L. chaquensis* has been found in low and middle elevations of southern Paraná Basin (municipalities of Bossoroca, São Vicente do Sul and Uruguaiana: Garcia and Vinciprova, 1998) and Pre-Cambrian shield areas (municipalities of São Sepé: Santos and Cechin, 2008, Caçapava do Sul: Trindade et al., 2010 and São Gabriel: Bolzan et al., 2014). Among these records, the municipality of São Sepé, in the northwestern border of the RS Pre-Cambrian shield, represents the currently known southeastern limit of the distribution of *L. chaquensis*. Herein, we report a new record of *L. chaquensis* in the eastern border of RS Pre-Cambrian shield, extending its distribution in the Brazilian Pampa.

On 23 May 2015 at 09:00 pm an adult *L. chaquensis* female (snout-vent length = 68.56 mm) was collected in a shrub grassland in a locality known as "Fortaleza", municipality of São Lourenço do Sul ( $-31.3431^{\circ}$ ,  $-52.1182^{\circ}$ ; 90 m a.s.l.), central-eastern border of the RS Pre-Cambrian shield. The landscape in this area is characterized by a mosaic of cultivated fields (soy), shrub grasslands, riparian and slope forest remnants. Water bodies consist of streams, artificial ponds, and small bogs. The *L. chaquensis* female was found in syntopy with the anuran species *Leptodactylus latrans* (Steffen, 1815), *Leptodactylus gracilis* (Duméril & Bibron, 1840), *Physalaemus biligonigerus* (Cope, 1861) (Leptodactylidae), and *Odontophrynus americanus* (Duméril

& Bibron, 1841) (Odontophryidae). The specimen was deposited in the Herpetological Collection of the Federal University of Rio Grande (CHFURG 3302), Rio Grande, Rio Grande do Sul, Brazil.

Three diagnostic morphological features were used to distinguish *L. chaquensis* from *L. latrans*, a similar sympatric species that occurs in the study area: (1) Presence of a non-triangular post-tympanic dark stripes in *L. chaquensis*, and triangular-shaped stripes in *L. latrans*; (Figure 1); (2) Presence of interrupted auxiliary dorsal folds, extending from the eye to the sacral region in *L. chaquensis*, which are absent in *L. latrans*; (3) Posterior surface of the thigh is greenish in *L. chaquensis*, and with conspicuous spots in *L. latrans* (Maneyro and Carreira, 2012; Sá et al., 2014). These characters are useful to distinguish both species, but it should be pointed out that some *L. latrans* populations have individuals with thigh coloration similar to that of *L. chaquensis*.

The present record extends the known distribution of *L. chaquensis* approximately 190 km southeastward to the municipality of São Sepé, the nearest locality with a previous record (Santos and Cechin, 2008). All records for the state are associated with formations with a predominance of low and middle elevations (up to 300 m a.s.l.) locally known as "coxilhas" (Dantas et al., 2010). Therefore, considering the present and previous records and the considerable effort on anurofauna sampling in RS coastal plain (e.g Braun and Braun, 1980; Gayer et al., 1988; Loebmann and Vieira, 2005; Colombo et al., 2008; Oliveira et al., 2013), the distribution of *L. chaquensis* in Brazilian Pampa may be restricted to Pre-Cambrian geological formations and the southern Paraná Basin.



**Figure 1.** *Leptodactylus chaquensis* (CHFURG 3302, CRC = 67.55 mm) (above) and *Leptodactylus latrans* (CHFURG 3300, CRC = 75.96 mm) (below) from the municipality of São Lourenço do Sul, state of Rio Grande do Sul, southern Brazil (Image credits: Daniel Loebmann).

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