



## A redescription of *Leptodactylus jolyi* Sazima and Bokermann (Anura, Leptodactylidae) and the recognition of a new closely related species

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### Abstract

Based on freshly collected and recorded topotypes, we re-describe *Leptodactylus jolyi* and describe a closely related new species from the municipality of Uberlândia (MG, Brazil). As some other species of the *L. fuscus* group, the new species present longitudinal skin folds on dorsal surface of shank. *Leptodactylus marambaiae* is a short-legged species, in *L. jolyi* the shank reaches 61–65% of the SVL, and 62–68 % in the new species. Males *L. jolyi* are larger (45 mm SVL) than those of *L. gracilis* (38.5 mm), than those of *L. plaumanni* (31–35 mm), and are smaller and more slender than those of the new species (48.3–53.9). In *L. jolyi* and in the new species the vomerine teeth are in two straight transverse series, in *L. gracilis* each is a distinct arch. *Leptodactylus plaumanni* has a fast call rate (13–23/s), in *L. gracilis* it is 2.5–4/s, in *L. jolyi* it is just about 0.1–0.3/s and in the new species calls are emitted irregularly (0.02–0.3/s). *Leptodactylus jolyi* call is composed by 1–3 pulses, while the new species has a single or double-pulsed call; the call also is 25–100% longer in *L. jolyi* (mode 0.04 s, our sample) than in the new species (mode 0.02 s). We predict that populations in the Cerrado now identified as *L. jolyi* will turn out to be conspecific with the new species described herein. In the original description the call of *L. jolyi* is two times longer than that we described here based on topotypes. A possible mistake in time scale in the original description may account for this difference.

**Key words:** Amphibia, Anura, Leptodactylidae, *Leptodactylus sertanejo* sp. n., Atlantic Forest, Cerrado Biome, advertisement call, *Leptodactylus gracilis*, *Leptodactylus plaumanni*

### Introduction

*Leptodactylus jolyi* Sazima and Bokermann was described from specimens collected in human altered areas at a locality originally covered by coastal Atlantic Rain Forest in Southeastern Brazil (Sazima & Bokermann, 1978). Several authors (Sazima & Bokermann, 1978; Haddad *et al.* 1988; Frost, 2007; Eterovick & Sazima, 2004; Brasileiro *et al.* 2005) have applied this specific name to specimens from the Cerrado Biome (Oliveira & Marquis, 2002) of Southeastern and central Brazil. Published data on advertisement calls are available just for the topotypic population. As we have reencountered *L. jolyi* at its type locality and have a sample of adults of a Cerrado population, we are able to elaborate a differential diagnosis between both. Herein we provide a re-description of *L. jolyi* based on adult morphology and call. We also describe the specimens from Uberlândia (Cerrado) as a new species.

### Material and methods

Three newly collected specimens of *Leptodactylus jolyi* came from the type locality, the municipality of Rio