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### The advertisement call of the poorly known *Leptodactylus tapiti* (Anura, Leptodactylidae)

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The genus *Leptodactylus* consists of approximately 80 species distributed in four nominal groups (Frost 2011). The *fuscus* group harbors approximately 30 small species with terrestrial nests, deposited in male built burrows on soft soils. *Leptodactylus tapiti* Sazima & Bokermann 1978 was described from Veadeiros, currently Alto Paraíso municipality, Goiás State, Brazil. The species is restricted to the region of Chapada dos Veadeiros (Frost 2011), where it occurs in areas of water-saturated soils associated with open fields (Sazima & Bokermann 1978). Since its original description, nothing was published about the species, and its advertisement call remains unknown. Herein, we describe its advertisement call.

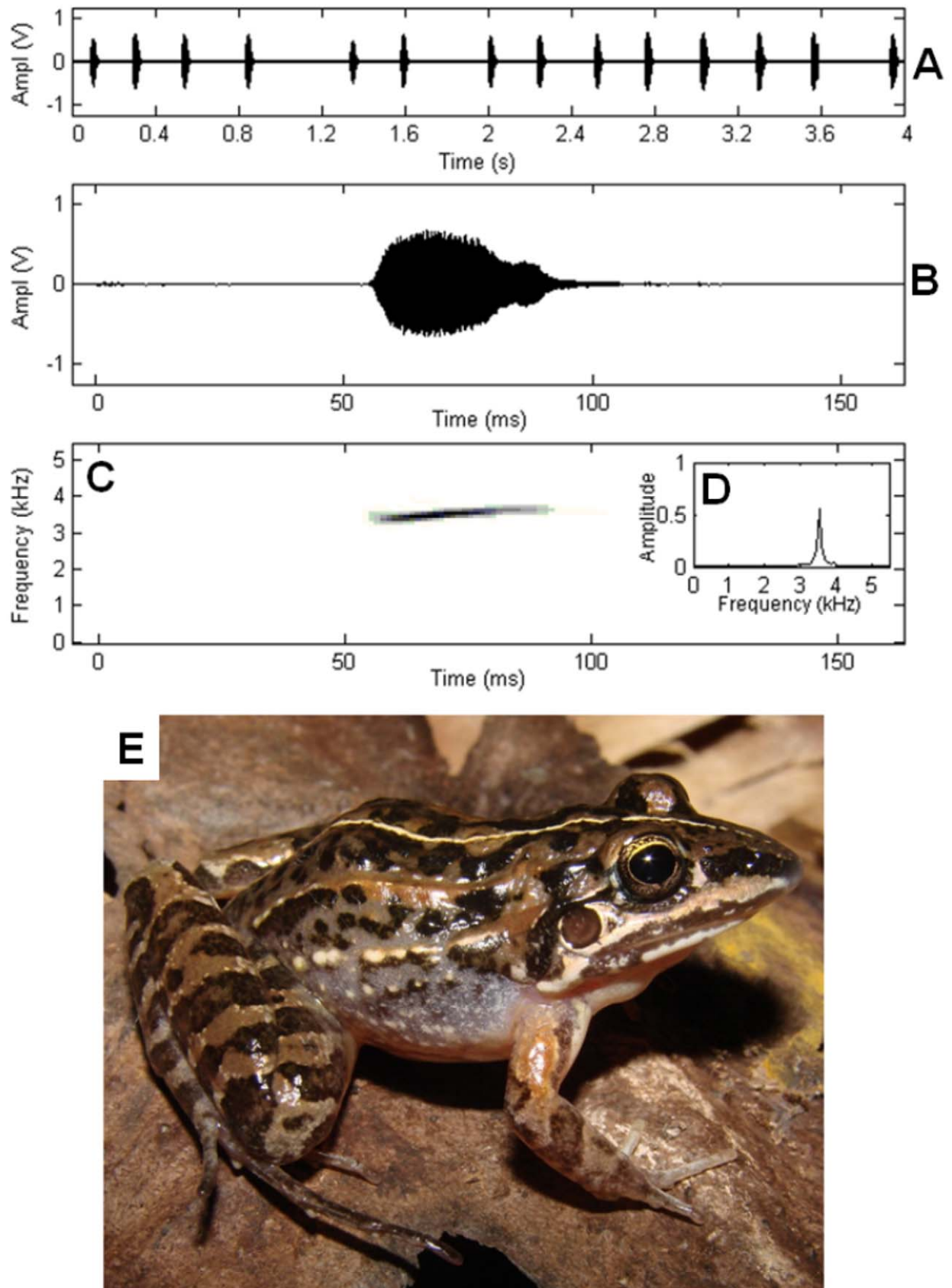
*Leptodactylus tapiti* was collected at the type locality (14°04'35"S; 47°30'38.5"W, 1345 m a.s.l.) on November 21, 2006. We recorded calls with a Sony TCM-5000 analogical recorder equipped with a Sennheiser ME-67 directional microphone (air temperature 20°C, humidity 80%). We digitalized (22 kHz sample ratio, 16 bits resolution) calls in CoolEdit 2.0 and analyzed them in Sound Ruler<sup>®</sup> (Griddi-Papp 2007). Voucher specimens are deposited at the Coleção Herpetológica da Universidade de Brasília (CHUNB 49545-49547).

We constructed a spectrogram with FFT 265, resolution of 230 points, and 256 points of length. The call duration was obtained directly from the oscillogram. For the dominant frequency we considered the call region with the largest amplitude and calculated it from the power spectrum. We recorded 45, 50, and 31 calls of three different males. The description is based on the mean values calculated for each individual. As the call shows ascendant modulation, we present the minimum and maximum frequencies values observed for each note.

The call lacks harmonics, showing slightly ascendant modulated notes. Calls were emitted at a rate of  $3.0 \pm 1.5$  (1.5–4.5; N=126) notes per second. The note duration is  $37.7 \pm 2.6$  ms (31.5–43.9, N=126). The dominant frequency is  $3409 \pm 88$  Hz (3273–3617; N=126). The minimal frequency is  $3325 \pm 90$  Hz (3100–3445; N=126), and the maximum frequency is  $3582 \pm 82$  Hz (3359–3703, N=126). The high dominant frequency of *Leptodactylus tapiti* calls distinguishes it from *L. albilabris*, *L. bufonius*, *L. caatingae*, *L. camaquara*, *L. cunicularius*, *L. cupreus*, *L. dydimus*, *L. elenae*, *L. fragilis*, *L. fuscus*, *L. gracilis*, *L. jolyi*, *L. labrosus*, *L. longirostris*, *L. mystaceus*, *L. mystacinus*, *L. notoaktites*, *L. plaumanni*, *L. poecilochilus*, *L. sertanejo*, and *L. spixi* calls (combined dominant frequency range: 358–3060 Hz, Bilate *et al.* 2006, Caramaschi *et al.* 2008, Giaretta and Costa 2008, Carvalho and Ron 2011). Call duration in *Leptodactylus tapiti* (>1000ms) is distinct from the calls of *L. furnarius*, *L. latinasus*, and *L. marambaiae* (20–100 ms; Bilate *et al.* 2006). Note length differentiates the calls of *L. tapiti* from *L. troglodytes* (60 ms; Nunes and Juncá 2006).

*Leptodactylus tapiti* uses open fields with rock outcrops and sandy, shallow soils that are water saturated in the rainy season. Males call exposed, but some do so from the entrance to burrows built under rocks. Apparently, males call in synchronized chorus at the same site. Five other species belonging to the *fuscus* group occur at Chapada dos Veadeiros (*L. furnarius*, *L. fuscus*, *L. mystaceus*, *L. mystacinus*, and *L. sertanejo*), but only *L. tapiti* is found in sandy soil plots in rocky meadows. All other species use muddy soil areas, often located in lower elevation areas than sites used by *L. tapiti*.

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**FIGURE 1.** Oscillogram of the call of *Leptodactylus tapiti* (A), oscillogram of one note (B), audiospectrogram (C), powerspectrum (D), and unvouchered adult male (E) from the type locality, Chapada dos Veadeiros, Goiás State, Brazil. Photo: Reuber Brandão.

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