

## Correspondence

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### Advertisement call of the rare, explosive breeding caatinga horned frog *Ceratophrys joazeirensis* Mercadal de Barrio, 1986 (Anura, Ceratophryidae)

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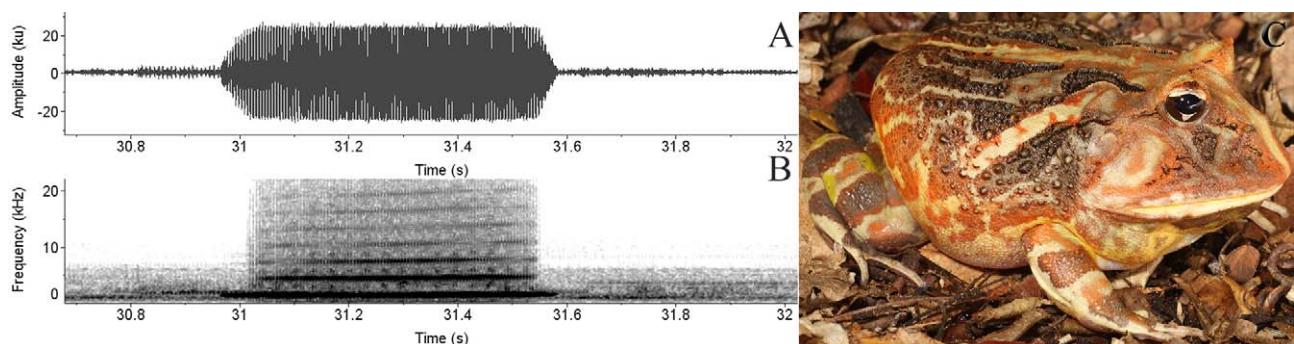
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The present study describes for the first time the advertisement call of *Ceratophrys joazeirensis* Mercadal de Barrio, 1986. This rare explosive breeding species is endemic to the semi-arid Caatinga biome and is known only from four localities in northeastern Brazil: Municipality of Juazeiro, State of Bahia (type locality); Municipalities of Araruna and Triunfo, State of Paraíba; and Municipalities of Passa e Fica, State of Rio Grande do Norte (Mercadal de Barrio, 1986; Vieira *et al.* 2006; Santos *et al.* 2009).

Recordings from a single male were made on 13 October 2010 (26°C) at an artificial temporary pond (10°43'11.83"S, 40°21'19.54"W, 455 m a.s.l., datum WGS1984) on the side of a dirt road on the way to the Poço Pelado, Municipality of Pindobaçu, State of Bahia, northeastern Brazil. Calls were recorded with a Marantz PMD-660 digital recorder and Sennheiser ME 66 shotgun microphone. Digital recordings were carried out at 44 kHz at 16 bit sampling size and saved in wav format. The recorded male and the recordings are housed in the Herpetological Collection of the Universidade Federal de Minas Gerais, Brazil. (UFMG 6170; SVL=19.17 mm).

Description and terminology of call characters follow Duellman and Trueb (1994). Call duration, note duration, note interval (measured directly from the waveform), frequency range (measured directly from the spectrogram) and peak frequency of the call were analyzed using the software Raven Pro 1.4 (Cornell Lab of Ornithology Research Program Bioacoustics Workstation). Audio-spectrograms were produced with frame length and 256 points FFT, frame overlap = 75% and Hamming function.

The advertisement call of *C. joazeirensis* consists of a single multipulsed note with 618–721 ms (n=26 calls) of duration, 108–130 pulses/call (n=25 calls), pulse rate of 171.2–184.2 pulses/sec (n=25 calls), and interval between calls of 1.5–3.6 s (n=23 calls; Table 1). Dominant frequency coincides with the fundamental frequency of 1550.4 Hz (n=26 calls), and there was no variation in dominant frequency. In the spectrogram, six sidebands were observed in all available calls (Figure 1).



**FIGURE 1** *Ceratophrys joazeirensis* (A) Oscillogram and (B) Spectrogram of the advertisement call. (C) Living adult recorded male (UFMG 6170).

The genus *Ceratophrys* Wied-Neuwied, 1824 is currently composed of eight species (Frost, 2012) of which only *C. cornuta* (Linnaeus, 1758), *C. cranwelli* Barrio, 1980 and *C. ornata* (Bell, 1843) have their advertisement calls described.