

Zootaxa 3647 (3): 499–500 www.mapress.com/zootaxa/

Copyright © 2013 Magnolia Press

Correspondence



http://dx.doi.org/10.11646/zootaxa.3647.3.8 http://zoobank.org/urn:lsid:zoobank.org:pub:36D38DA2-F051-4513-A2EB-E4BBFB513CDB

Advertisement call of *Scinax strigilatus* (Spix, 1824) (Anura: Hylidae) from southern Bahia, Brazil

CAIO VINICIUS DE MIRA MENDES¹, EUVALDO MARCIANO JUNIOR¹, DANILO SILVA RUAS¹, RENAN MANOEL DE OLIVEIRA² & MIRCO SOLÉ³

¹Graduate Program in Ecology and Biodiversity Conservation, Universidade Estadual de Santa Cruz, Rodovia Jorge Amado, km 16, 45662-900 Ilhéus, Bahia, Brazil

²Graduate Program in Zoology, Universidade Estadual de Santa Cruz, Rodovia Jorge Amado, km 16, 45662-900 Ilhéus, Bahia, Brazil ³Department of Biological Sciences, Universidade Estadual de Santa Cruz, Rodovia Jorge Amado, km 16, 45662-900 Ilhéus, Bahia, Brazil

Scinax strigilatus (Spix, 1824) is a member of the *Scinax catharinae* species group that inhabits forested streams in the Atlantic Rainforest of southern Bahia, northeastern Brazil. The loss of the holotype resulted in years of nomenclatural confusion solved with the designation of a neotype and the redescription of the species by Pimenta *et al.* (2007). Aiming to contribute to the taxonomic status and natural history of the species, we describe herein the advertisement call of *Scinax strigilatus* (Fig. 1A).

Calls of one male (SLV = 25.4 mm; n = 7; air temperature = 23° C; MZUESC 10510) were record at Serra Grande Mountain, Itamaraju ($16^{\circ}59'35''$ S, $39^{\circ}35'40''$ W) on 27 April 2012, and calls from another male (SLV = 27 mm; n = 40; air temperature = 21.2° C; MZUESC 10889) were record at Reserva Ecológica Michelin, Igrapiúna ($13^{\circ}49'15''$ S, $39^{\circ}11'52''$ W) on 18 September 2012. Both areas are in southern Bahia, northeastern Brazil. The first recorded individual was found calling while perched on the vegetation of a stream bank, with two more calling males located at a distance of about two meters. The second male was calling alone, also from the vegetation of a stream bank. We used a Marantz PMD 660 digital audio recorder with a unidirectional Yoga HT-320A microphone. Calls were analyzed at a resolution of 16 bits and 48 kHz sampling rate, mono channel. Waveform and spectrogram (Fig. 1B and C) were made using Raven Pro 3 and analyzed with a Fast Fourier Transformation of 256 points, 50% overlap for an entire call and Window Hamming. Terminology follows Duellman and Trueb (1994). Data are presented as mean \pm SD (range).

The advertisement call of *S. strigilatus* is pulsed, with one note per call, with mean 6.51 ± 0.41 pulses per call (5-8 pulses). The mean call duration was 0.014 ± 0.0013 (0.011-0.017 seconds). The interval between calls was 11.47 ± 10.68 (1.89 - 55.39 seconds). Pulse per second rate was 455 ± 56 (294.11-545.45 second). The mean dominant frequency was 3.279 ± 150.7 kHz (2.625-3.379 kHz). There is an increasing modulation of the amplitude until the middle of the call, followed by decreasing modulation. There are not noticeable harmonics (Fig. 1C).

The call of *S. strigilatus* has a pulsed structure, common to the calls of the genus *Scinax* (Pombal *et al.* 1995). Within the *S. catharinae* clade (sensu Faivovich 2002), the call of *S. strigilatus* is more similar to that of *S. heyeri* and *S. luizotavioi* considering that the variation in the number of pulses per call in the three species overlap (Peixoto & Weygoldt 1987; Lourenço *et al.* 2009). As in *S. luizotavioi*, *S. strigilatus* has one note per call, while all other species of the group have more than one note per call.

Nonetheless, the call of *S. strigilatus* differs from the call of all other species in the group by having the shortest call duration (0.011-0.017 seconds). The call duration of other species ranges from 0.08 s in *S. luizotavioi* (0.08-0.54 seconds) (Lourenço *et al.* 2009) to 52.04 s in *S. berthae* (3.2–52.04 seconds) (Pereyra *et al.* 2012).

Its pulsed, but not harmonic structure, distinguishes the call of *S. strigilatus* from that of *S. albicans*, *S. catharinae* (Heyer 1980) and *S. machadoi* (Bokermann & Sazima 1973), which are pulsed and harmonic.

The dominant frequency of the call of *S. strigilatus* (2.625-3.379 kHz) is higher than that of *S. skaios* (2.20-2.24 kHz) (Pombal *et al.* 2010) and lower than that of *S. agilis* (5.6-7.92 kHz) (Nunes *et al.* 2007), *S. argyreornatus* (5.0-6.5 kHz) (Pombal *et al.* 1995), *S. aromothyella* (4.76-5.53 kHz) (Pereyra *et al.* 2012), *S. berthae* (4.41-5.36 kHz) (Pereyra *et al.* 2012), *S. centralis* (3.20-4.89 kHz) (Pombal & Bastos, 1996; Bastos *et al.* 2011), and *S. machadoi* (3.5 kHz) (Bokermann & Sazima 1973).