

Physalaemus cicada Bokermann, 1966 (Anura: Leiuperidae): Distribution extension

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ABSTRACT: The genus *Physalaemus* is widely distributed over South America, east of Andes. *Physalaemus cicada* belongs to the *Physalaemus cuvieri* group, is widely distributed over the Caatinga and is usually found in lentic and/or temporary water bodies. Herein, we extend its geographical distribution providing the first record of *Physalaemus cicada* for Piauí state, in the municipality of Picos.

The genus *Physalaemus* Fitzinger, 1896 is characterized by traits regarding skin texture, several osteologic features, and reproductive mode (Nascimento *et al.* 2005). The genus comprises 45 species (Frost 2011), distributed in seven species group: *Physalaemus cuvieri* group, *P. signifer* group, *P. albifrons* group, *P. deimaticus* group, *P. gracilis* group, *P. henselii* group and *P. olfersii* group; being defined based on morphometrics, external morphology, color patterns, and osteological characters, occurring over most of South America east of Andes (Nascimento *et al.* 2005).

The *Physalaemus cuvieri* group is composed of: *P. albonotatus* (Steindachner, 1864), *P. centralis* Bokermann, 1962, *P. cicada* Bokermann, 1966, *P. cuqui* Lobo, 1993, *P. cuvieri* Fitzinger, 1826, *P. ephippifer* (Steindachner, 1864), *P. erikae* Cruz and Pimenta, 2004, *P. fischeri* (Boulenger, 1890) and *P. kroyeri* (Reinhardt and Lütken, "1862" 1861) (Nascimento *et al.* 2005).

Physalaemus cicada can be characterized by medium size, slender body, absence of visible inguinal gland, belly immaculate with some brown spots on the sides of abdomen and throat. Coloration of the inguinal region yellow (Bokermann 1966).

The species is commonly found in the Caatinga, calling partially submerged, near the water or on aquatic vegetation in temporary and/or lentic ponds (Vieira *et al.* 2007).

It occurs in states of Alagoas (Lisboa and Haddad 2009), Bahia (Bokermann 1966; Nascimento *et al.* 2005; Santana and Juncá 2007), Ceará (Nascimento *et al.* 2005; Loebamnn and Mai 2008), Minas Gerais (Nascimento *et al.* 2005; Silveira 2006; Linares and Mello 2011), Paraíba (Vieira *et al.* 2007; Vieira and Arzabe 2008), Pernambuco (Borges-Nojosa and Santos 2005) and Sergipe (Caldas *et al.* 2010).

On 04 February 2011, we collected seven adult males of *Physalaemus cicada* (Figure 1) calling in a temporary pond in the municipality of Picos, Piauí state. The municipality of Picos is located in the southeastern Piauí

(07°5'15.88", 41°24'1.67", elevation 206 m), and according to Lima *et al.* (2000) the climate is defined as semi-arid, with an average annual rainfall less than 900 mm, two to three months of rainfall unevenly distributed and mean annual temperatures 27.3°C. The vegetation found in the study area is classified as a shrub savanna and savanna vegetation (Eiten 1983). Other eleven species were also found in the same pond: *Rhinella granulosa*, *Rhinella jimi*, *Dendropsophus nanus*, *Phyllomedusa nordestina*, *Scinax gr. ruber*, *Scinax x-signatus*, *Leptodactylus fuscus*, *Leptodactylus macrosternum*, *Physalaemus cuvieri*, *Pseudopaludicola gr. mystacalis* and *Elachistocleis piauiensis*.



FIGURE 1. Dorsal view of an adult male of *Physalaemus cicada* (ZUFRJ 12797, snout-vent length 18 mm) from municipality of Picos, Piauí state, Brazil. Photo: R. A. Benício.

Voucher specimens were deposited in the Coleção Herpetológica Jorge Jim of the Laboratório de Pesquisa Experimental e Ciências Biológicas da Universidade Federal do Piauí (UFPI), Campus Picos (CHJJ 0501-0505) and Coleção de Anfíbios of the Universidade Federal do Rio de Janeiro (ZUFRJ 12797-12798).

The permit for collecting zoological material was provided by Instituto Chico Mendes de Biodiversidade

(ICMBio) – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais e Renováveis (IBAMA) (Proc. number - SISBIO/22508-1).

This is the first record of *P. cicada* at Piauí state, extending its known distribution in about 286 km

southwestwards from the municipality of Nova Russas, Ceará state ($04^{\circ}41'07.5''$ S, $40^{\circ}33'56.7''$ W) (Loebamnn and Mai 2008), and about 263 km northeastwards from the municipality of Carnaíba, Bahia state ($09^{\circ}27'06''$ S, $41^{\circ}52'43''$ W) (Nascimento et al. 2005) (Figure 2).



FIGURE 2. New distributional record of *Physalaemus cicada* in the municipality of Picos, Piauí state, Brazil (red dot), and the closest published records from the municipality of Carnaíba, state of Bahia (black dot) and of Nova Russas, state of Ceará (white dot).

ACKNOWLEDGMENTS: We thank Programa Institucional de Bolsas de Iniciação Científica – PIBIC/UFPI for financial support, Pedro M. S. Nunes and anonymous referee for valuable suggestions to the manuscript, and Cyro de Luna Dias for confectioning the map.

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RECEIVED: April 2011

ACCEPTED: May 2012

PUBLISHED ONLINE: August 2012

EDITORIAL RESPONSIBILITY: Pedro Murilo Sales Nunes