

NOTES ON GEOGRAPHIC DISTRIBUTION

Amphibia, Anura, Leiuperidae, *Physalaemus cicada* Bokermann, 1966: Distribution extension and geographic distribution map

Barnagleison Silva Lisboa ¹

Célio Fernando Baptista Haddad ²

¹Universidade Federal de Alagoas, Museu de História Natural, Setor de Zoologia.
Rua Aristeu de Andrade, 452, Farol. CEP 57051-090. Maceió, AL, Brazil. E-mail: bslgleison@gmail.com

²Universidade Estadual Paulista, Instituto de Biociências, Departamento de Zoologia.
Caixa Postal 199. CEP 13506-900. Rio Claro, SP, Brazil.

The Neotropical frogs, genus *Physalaemus* Fitzinger, 1826, currently comprises 42 valid species (Frost 2009) distributed from northern to southern South America, east to the Andes (Nascimento et al. 2005). *Physalaemus cicada* Bokermann, 1966 inhabits open areas of *Caatinga* (states of Ceará, Bahia, Paraíba, and Pernambuco), *Cerrado* and Atlantic Forest biomes (state of Minas Gerais) (Nascimento et al. 2005; Silveira 2006; Loebmann and Mai 2008).

On April 2009, we collected six adult males of *P. cicada* (Figure 1) calling in a temporary pond in the municipality of São José da Tapera, state of

Alagoas ($09^{\circ}33'28''$ S, $37^{\circ}22'51''$ W; 255 m). This is the first record of the species for state of Alagoas, extending ca. 546 km northeast from the type locality (municipality of Maracás, state of Bahia) (Bokermann 1966) and ca. 156 km southeast from municipality of Betânia, state of Pernambuco (Borges-Nojosa and Santos 2005), the nearest locality to the state of Alagoas where the species was previously observed (Figure 2).

Voucher specimens were deposited at the herpetological collection of the Museu de História Natural, Universidade Federal de Alagoas, Brazil (MUFAL 7466-7471).



Figure 1. Adult male of *Physalaemus cicada* collected in the municipality of São José da Tapera, state of Alagoas, northeastern Brazil. Photo by B. S. Lisboa.

NOTES ON GEOGRAPHIC DISTRIBUTION

Other seven species were registered in the same pond: *Rhinella jimi*, *R. granulosa*, *Phyllomedusa nordestina*, *Scinax x-signatus*, *Dendropsophus soaresi*, *Leptodactylus fuscus*, and *L. gr. ocellatus*.

Two localities where the species was recorded in the state of Minas Gerais (Matias Cardoso and Pedra Azul) were considered transition areas of *Cerrado* with other Brazilian biomes by Silveira

(2006). Feio and Caramaschi (1995) found anuran species typical of *Caatinga* in the medium Jequitinhonha river, northeast Minas Gerais, an area of transition between *Cerrado*, *Caatinga* and, Atlantic Forest. The municipality of João Pinheiro, entirely included in the *Cerrado*, represents the extreme meridional limit of the geographic distribution known for *P. cicada* (Silveira 2006).

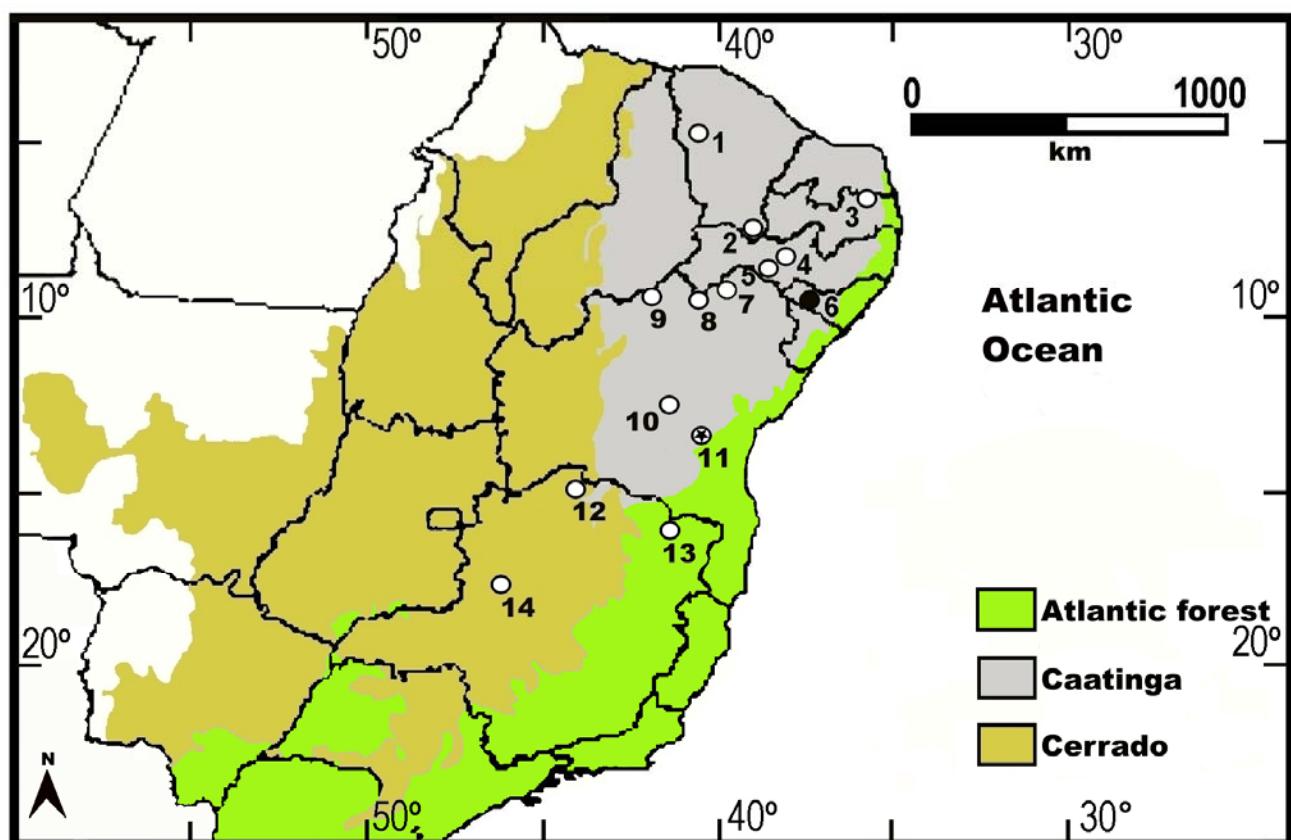


Figure 2. *Physalaemus cicada* distribution map. New record (black circle) – state of Alagoas (AL): São José da Tapera (6). Literature records (star and white circles) – state of Ceará (CE): Nova Russas (1) (Loebmann and Mai 2008), Brejo Santo (2) (Nascimento et al. 2005); state of Paraíba (PB): Araruna (3) (Arzabe et al. 2005); state of Pernambuco (PE): Betânia (4) (Borges-Nojosa and Santos 2005), Floresta (5) (Borges-Nojosa and Santos 2005); state of Bahia (BA): Curaçá (7) (Nascimento et al. 2005), Juazeiro (8) (Nascimento et al. 2005), Carnaíba (9) (Nascimento et al. 2005), Lençóis (10) (Santana and Juncá 2007), Maracás, type locality (11) (Bokermann 1966); state of Minas Gerais (MG): Matias Cardoso (12) (Nascimento et al. 2005), Pedra Azul (13) (Nascimento et al. 2005), João Pinheiro (14) (Silveira 2006).

Acknowledgements

We thank L. Araújo, G. Toledo, and S. Leal for help in fieldwork. To A. Silveira and C. Cassini for the confirmation of the identification of the species. To G. Skuk for drafting the map. CFBH thanks FAPESP and CNPq for financial support.

NOTES ON GEOGRAPHIC DISTRIBUTION

Literature cited

- Arzabe, C., G. Skuk, G. G. Santana, F. R. Delfim, Y. C. C. Lima, and S. H. F. Abrantes. 2005. Herpetofauna da Área de Curimataú, Paraíba; p. 259-274 In F. S. Araújo, M. J. N. Rodal and M. R. V. Barbosa (ed.). Análise das variações da biodiversidade do bioma Caatinga. Brasília: Ministério do Meio Ambiente.
- Bokermann, W. C. A. 1966. Notas sobre três espécies de *Physalaemus* de Maracás, Bahia (Amphibia, Leptodactylidae). Revista Brasileira de Biologia 26(3): 253-259.
- Borges-Nojosa, D. M. and E. M. Santos. 2005. Herpetofauna da área de Betânia e Floresta, Pernambuco; p. 275-289 In F. S. Araújo, M. J. N. Rodal and M. R. V. Barbosa (ed.), Análise das variações da biodiversidade do bioma Caatinga. Brasília: Ministério do Meio Ambiente.
- Feio, R. N. and U. Caramaschi. 1995. Aspectos zoogeográficos dos anfíbios do médio rio Jequitinhonha, nordeste de Minas Gerais, Brasil. Revista Ceres (42): 53-61.
- Frost, D. R. 2009. Amphibian Species of the World: an online reference. Version 5.3. Electronic Database accessible at <http://research.amnh.org/herpetology/amphibia/index.html>. New York: American Museum of Natural History. Captured on April 2009.
- Loebmann, D. and A. C. G. Mai. 2008. Amphibia, Anura, Leiuperidae, *Physalaemus cicada*: Distribution extension in the state of Ceará, Brazil. Check List 4(4): 392-394.
- Nascimento, L. B., U. Caramaschi and C. A. G. Cruz, 2005. Taxonomic review of the species groups of the genus *Physalaemus* Fitzinger, 1826 with revalidation of the genera *Engystomops* Jiménez-De-La-Espada, 1872 and *Eupemphix* Steindachner, 1863 (Amphibia, Anura, Leptodactylidae). Arquivos do Museu Nacional 63(2): 297-320.
- Santana, A. S. and F. A. Juncá. 2007. Diet of *Physalaemus cf. cicada* (Leptodactylidae) and *Bufo granulosus* (Bufonidae) in a semideciduous forest. Brazilian Journal of Biology 67(1): 125-131.
- Silveira, A. L. 2006. Anfíbios do município de João Pinheiro, uma área de cerrado no noroeste de Minas Gerais, Brasil. Arquivos do Museu Nacional 64(2): 134-139.

Received August 2009

Accepted September 2009

Published online September 2009