

First record of *Pipa carvalhoi* (Miranda-Ribeiro, 1937) (Anura: Pipidae) in the state of Sergipe, northeastern Brazil

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ABSTRACT: The Pipidae family is represented by seven frog species in South America and Panama, strictly linked to aquatic environments. *Pipa carvalhoi* is currently distributed in the states of Bahia, Ceará, Espírito Santo, Minas Gerais, Paraíba and Pernambuco, in Brazil. We report the first record of *Pipa carvalhoi* for the state of Sergipe, Brazil, in the Conservation Unity Monumento Natural Grota do Angico, Poço Redondo municipality. This study significantly expands the distribution of the species in northeastern Brazil.

The Pipidae family is represented by seven species in South America and Panama (Frost 2013). These anuran species are strictly linked to aquatic environments and rarely use terrestrial environments (Wells 2007). Species in this family have a peculiar reproductive mode in that male and female frogs perform acrobatics in the water for fertilization of their eggs on the back of the female, after which, the tadpoles develop in water or continue its development on female dorsum until the metamorphosis (Trueb and Cannatella 1986; Duellman 2005; Arzabe *et al.* 2010).

In Brazil, the genus *Pipa* is represented by four species: *Pipa arrabali* Izecksohn, 1976, *Pipa carvalhoi* (Miranda-Ribeiro, 1937), *Pipa pipa* (Linnaeus, 1958) and *Pipa snethlageae* Müller, 1914. *Pipa carvalhoi* was described by Miranda-Ribeiro (1937), from the type locality Poço Redondo municipality, state of Pernambuco. Currently, it is known to be distributed in the states of Bahia, Ceará, Espírito Santo, Minas Gerais, Paraíba and Pernambuco (Arzabe *et al.* 2010; Frost 2013).

We report the first record of *Pipa carvalhoi* (Figure 1) for the state of Sergipe, Brazil. The observation occurred on February 25, 2011, in the State Conservation Unit Monumento Natural Grota do Angico (9°39'50" S, 37°40'57" W; 200 m above sea level) (Figure 2), municipality of Poço Redondo. The specimen of *Pipa carvalhoi* (SVL: 38.16 mm) was collected in a temporary pond in an anthropic environment, with many grasses, near a rocky outcrop. The collected specimen was fixed in 10% formalin and preserved in 70% alcohol, and deposited in the Herpetological Collection of the Universidade Federal



FIGURE 1. *Pipa carvalhoi* (C00177), State Conservation Unity Monumento Natural Grota do Angico, state of Sergipe, Brazil. Photo by C.B. De-Carvalho.

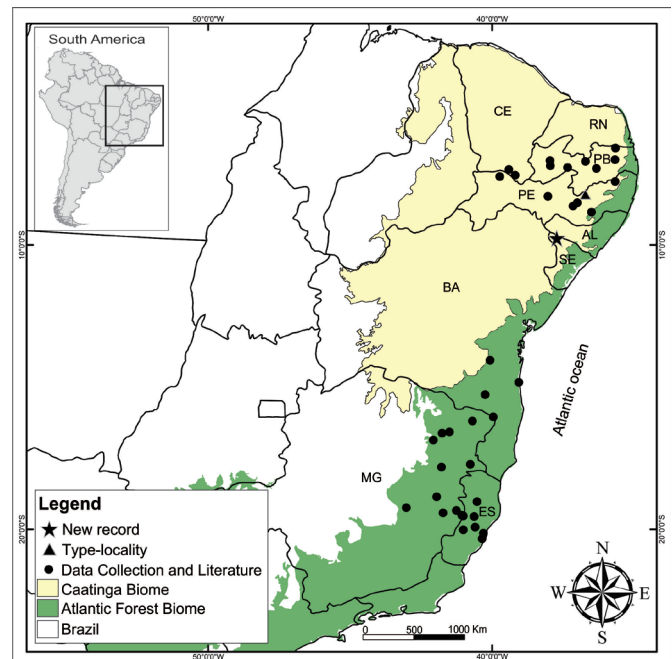


FIGURE 2. Geographic distribution of *Pipa carvalhoi* with data obtained from the following literature records: Trueb and Cannatella 1986; Caramaschi 1989; Arzabe 1999; Arzabe *et al.* 2005; Borges-Nojosa and Santos 2005; Canedo *et al.* 2006; Vieira *et al.* 2007; Silva *et al.* 2010; and Data Collection: MZUSP 51890-97, MZUSP 80464-73, UFBA 11028, MUFAL 8573-76. States abbreviations: AL = Alagoas, BA = Bahia, MG = Minas Gerais, PE = Pernambuco, PB = Paraíba, RN = Rio Grande do Norte, Sergipe = SE, Ceará = CE and Espírito Santo = SE.

de Sergipe (CHUFS - Voucher C00177), São Cristóvão municipality, Sergipe state, Brazil.

Our record extends the geographic distribution of *Pipa carvalhoi* by about 300 km relative to its type-locality toward South. This study significantly expands the distribution of the species in northeastern Brazil. Species identification was based on Miranda-Ribeiro (1937) and the nomenclature used in this study follows the taxonomy suggested by the Brazilian Society of Herpetology (Segalla et al. 2012). The specimen was collected under the license (permit #10504-1) granted by the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis – IBAMA.

ACKNOWLEDGMENTS: We sincerely thank the collaboration of Marcelo Felgueiras Napoli and Camila Trevisam (UFBA), Hussam Zaher and Carolina Castro-Mello (MZUSP), Barnagleison Lisboa (MUFAL) for access to data collection, and CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) for fellowships.

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RECEIVED: April 2013

ACCEPTED: February 2014

PUBLISHED ONLINE: May 2014

EDITORIAL RESPONSIBILITY: Marcelo N. de C. Kokubum