

## Geographic distribution of *Gastrotheca fissipes* (Boulenger, 1888) (Anura: Hemiphractidae) in the Brazilian Atlantic Forest

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The 105 species of the family Hemiphractidae Peters, 1862 occur in South America (tropical and Andean regions), Costa Rica, Panama, and Trinidad and Tobago, where they are distributed in six genera (*Cryptobatrachus*, *Flectonotus*, *Fritziana*, *Gastrotheca*, *Hemiphractus* and *Stefania*) (Frost, 2014). The genus *Gastrotheca* Fitzinger, 1843 is the richest in species (68 species), and its distribution includes Costa Rica and Panama (Central America) and northern and western parts of South America (south until northern Argentina and eastern and southeastern Brazil) (Frost, 2014). In Brazil, there are ten species of *Gastrotheca* (Mendes et al., 2012; Teixeira Junior et al., 2012; Frost, 2014).

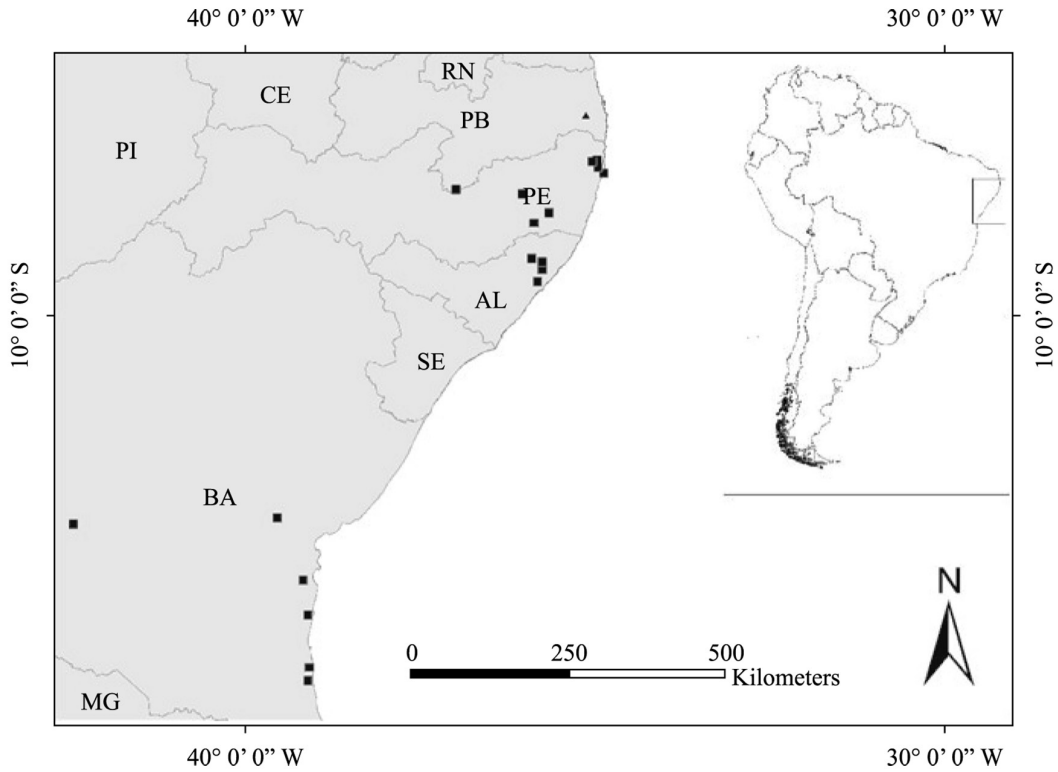
With regard to *Gastrotheca fissipes* (Boulenger, 1888) (known as the Igarauçu marsupial frog) (Frost, 2014), the most recent reports indicate that the geographic distribution of this species encompasses remnants of the Atlantic Forest, from the extreme south of the state of Bahia up to the state of Pernambuco (e.g., Santos and Carnaval, 2002; Silva et al., 2006; Amorim, 2009; Mendes et al., 2012; Frost, 2014).

The present study extends the distribution of *G. fissipes* to the forest remnant of Mata do Açude Cafundó (7° 10' 57" S, 35° 5' 33" W – 72.8 km northeast of the type locality, municipality of Igarassu, state of Pernambuco), located in the municipality of Cruz do Espírito Santo, state of Paraíba. It is also the first record of the occurrence of a

species of the family Hemiphractidae in an Atlantic Forest remnant of this state (Figures 1 and 2a-b).

Diagnosis – The specimens of *G. fissipes* were diagnosed according to the combination of characters described in the work of Izecksohn et al. (2009). The specimens of *G. fissipes* (a pregnant female: CHP-UFRPE 3734; snout-vent length (SVL) of 76.76 mm; and a non-pregnant female: CHP-UFRPE 3735; SVL of 64.31 mm) (Figure 2a-b) were collected on January 14, 2008. The pregnant female was found in the litter on the side of a roadway in the forest remnant, during a nocturnal visual search (1900-2100 h), while the non-pregnant female was captured in a pitfall trap set up in the forest fragment studied. Sex determination of the non-pregnant female was done by examining its gonads. Vouchers of the specimens examined are deposited in the Coleção Herpetológica e Paleontológica da Universidade Federal Rural de Pernambuco (CHP-UFRPE).

The present record of occurrence of *G. fissipes* resulted from a herpetofaunistic survey of long duration (June 2007 to February of 2009) and reinforces the need for new surveys in other Atlantic Forest remnants in Paraíba, aimed at improving our knowledge of species richness of local amphibians and reptiles. This species is considered bromeligenous (*sensu* Peixoto, 1995), because females release their young in the whorls of bromeliads, where they continue their development (Santos and Carnaval, 2002). The frequent extraction of bromeliads from its habitats for ornamental purposes is one of the main risks to the survival



**Figure 1.** Map of the distribution of populations of *Gastrotheca fissipes* in remnants of the Atlantic Forest in Northeast Brazil. The new locality is indicated by triangle, and squares for earlier ones.



**Figure 2.** Specimens of *Gastrotheca fissipes* from Mata do Açude Cafundó (municipality of Cruz do Espírito Santo, Paraíba State, Northeast Brazil). (a) Pregnant female and (b) non-pregnant female. Photo: Washington L.S. Vieira.

of its populations. Besides, the sale of bromeliads for landscaping can contribute to the accidental introduction of *G. fissipes* in areas different from those in which it is usually found, as has been reported for other species of frogs (e.g., Kraus et al., 1999; Christy et al., 2007).

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