

# *Aparasphenodon bruno* Miranda-Ribeiro, 1920 (Anura: Hylidae): Distribution extension and geographic distribution map for Bahia state, Brazil

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**ABSTRACT:** The casque-headed frog *Aparasphenodon bruno* is recorded for the first time in the municipalities of Ilhéus and Igrapiúna, southern region of Bahia state, northeastern Brazil. The new record of *A. bruno* in the municipality of Igrapiúna, represents an increase of its known geographic distribution of approximately 150 km north from its nearest locality (airline), in municipality of Una, state of Bahia, representing now the northernmost known record for this species.

The genus *Aparasphenodon* Miranda-Ribeiro 1920 is currently represented by four species: *A. arapapa* Pimenta, Napoli and Haddad 2009; *A. bokermanni* Pombal 1993; *A. bruno* Miranda-Ribeiro 1920, and *A. venezolanus* (Mertens 1950). All species of the genus occur in the coastal region of Brazil, except *A. venezolanus* (Lynch and Ramírez 2000; Frost 2013). The tree frogs of the genus *Aparasphenodon* are commonly called “Casque-headed Treefrogs”, due the strongly ossified skull (Pombal 1993).

The species *Aparasphenodon bokermanni*, recorded in the municipality of Guaramirin, Santa Catarina state, Brazil, represents the southernmost locality for the genus in the Atlantic Forest. To date, the occurrence of *A. arapapa* between the municipalities of Cairu and Ituberá, in a region known as Baixo Sul in the south of the Bahia state, represents the northernmost record for the genus, in the coastal region in Brazil (Woehl and Woehl 2003; Pimenta, *et al.* 2009; Mollo Neto and Teixeira Jr 2012).

*Aparasphenodon bruno* (Figure 1) is mostly distributed along the coast of São Paulo, Rio de Janeiro and Espírito Santo states, inland Minas Gerais state and southern Bahia state (Feio *et al.* 1998; Argôlo 2000; Silvano and Pimenta 2003; Rocha *et al.* 2004; Mollo Neto and Teixeira

Jr 2012). The species is relatively common in the Restinga, a typical environment found along the southeastern coast of Brazil consisting in sand dunes covered by greatly diversified vegetation (Rizzini 1997), where it is usually found associated to bromeliads (Mesquita *et al.* 2004; Rocha *et al.* 2008). *Aparasphenodon bruno* is also found in lowland forests of the Atlantic Forest biome (Feio *et al.* 1998; Silva-Soares *et al.* 2010). Males can be found calling from bromeliad phytotelmata, cactus, lianas or trunks (Mesquita *et al.* 2004). The tadpole inhabits temporary ponds and was described by Wogel *et al.* (2006).

According to Pimenta *et al.* (2009), *Aparasphenodon bruno* is distinguished from its known congeners in the Atlantic Forest of Brazil by a dorsum marbled with irregular dark brown markings, and arms and legs with transverse dark brown stripes or irregular dark brown markings.

The new records of *Aparasphenodon bruno* are reported here based on two specimens collected during field surveys conducted respectively in the years 2007 and 2010 in two areas in the south of the state of Bahia, Brazil.

The first record was made in the Reserva Ecológica Michelin, municipality of Igrapiúna (13°49'15"S and 39°11'52"W) in March 2007 in an Atlantic Forest fragment. One adult male (UESB 623) was found in the forest fragment called “Vila 5”. The second record is from the urban area of the municipality of Ilhéus (14°47'28"S and 39°01'54"W), where one adult male (MZUESC 8052) was collected in February 2010.

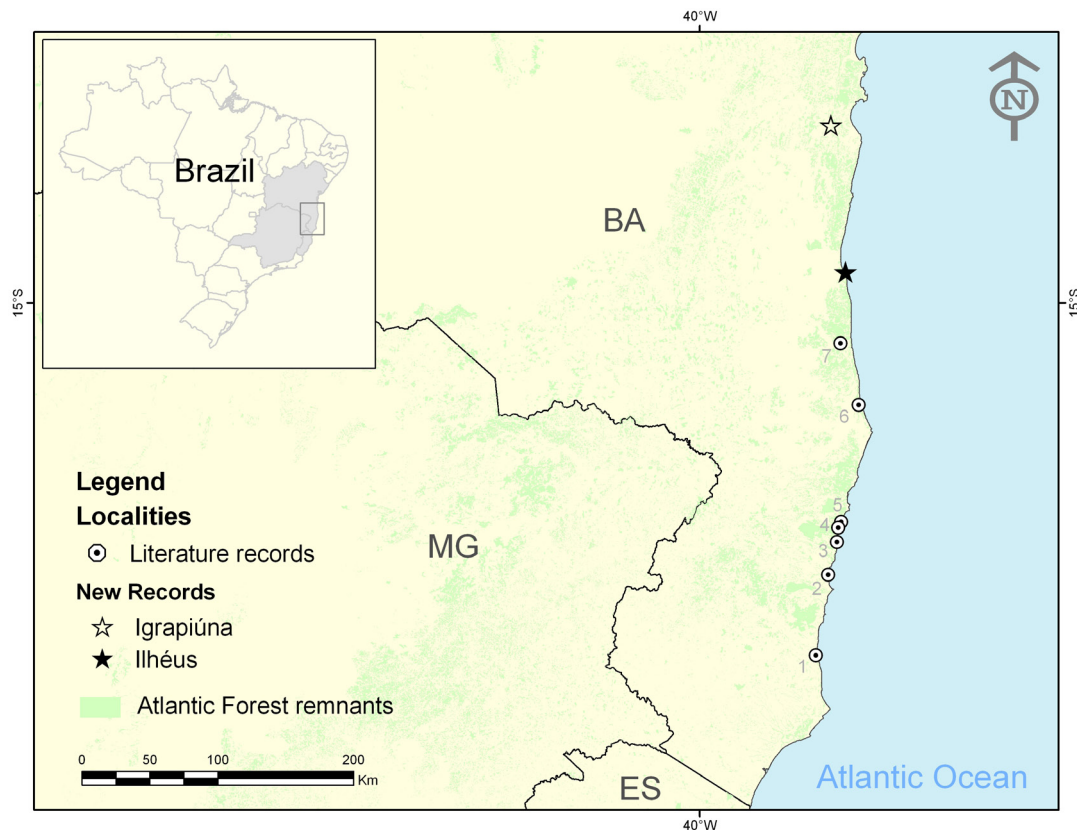
The specimens were euthanized with lidocaine 2% (Xylocaína®), fixed in 10% formalin and preserved in 70% ethanol, and deposited in the Coleção de Anfíbios da Universidade Estadual do Sudoeste da Bahia, Vitória da Conquista (UESB) and Museu de Zoologia da Universidade Estadual de Santa Cruz (MZUESC). The collecting permit was issued by the Instituto Chico Mendes de Conservação da Biodiversidade (ICMBIO) (Permanent License 13708-1 and 12394-2).



**FIGURE 1.** Adult male of *Aparasphenodon bruno* from the municipality of Ilhéus, state of Bahia, Brazil. Photo by Iuri R. Dias.

These new records of *Aparasphenodon brunoi* from the municipalities of Ilhéus and Igrapiúna represent an increase of its known geographic distribution of approximately 150

km north from its nearest locality (airline), municipality of Una, Bahia State, Brazil (Figure 2). Igrapiúna represents now the northernmost known record for this species.



**FIGURE 2.** Know distribution of *Aparasphenodon brunoi* in Bahia state, Brazil. (1) Prado (Silvano et al. 2003); (2) Caraíva (Mollo Neto and Teixeira Jr 2012), (3) Arrial D'Ajuda (Mollo Neto and Teixeira Jr 2012) (4)Trancoso (Rocha et al. 2008); (5) Porto Seguro (Silvano and Pimenta 2003); (6) Canavieiras (Silvano and Pimenta 2003); (7) Una (Argôlo 2000).

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