

# Amphibia, Anura, Brachycephalidae, *Brachycephalus hermogenesi* (Giaretta and Sawaya, 1998): new species record in the state of Paraná, southern Brazil and geographic distribution map

Adrielle Karlokoski Cunha de Oliveira<sup>1</sup>, Igor Soares de Oliveira<sup>1</sup>, Marília Teresinha Hartmann<sup>2</sup>, Nelson Rodrigues da Silva<sup>3</sup> and Luís Felipe Toledo<sup>3</sup>

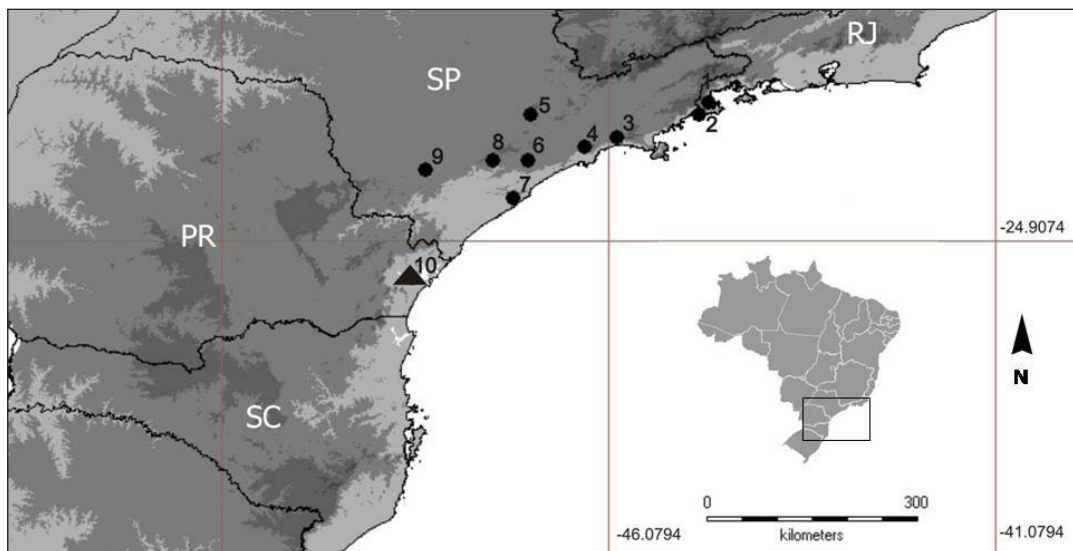
- 1 Universidade Federal do Paraná, Setor de Ciências Biológicas, Pós graduação em Ecologia e Conservação. Coronel Francisco H. dos Santos s/n. CEP 81531-980, Curitiba, PR, Brasil.
  - 2 Universidade Federal da Fronteira Sul, Campus Erechim. Dom João Hoffman, 313. CEP 99700-000. Erechim, RS, Brasil.
  - 3 Universidade Estadual de Campinas, Instituto de Biologia, Museu de Zoologia Prof. Adão Cardoso. Albert Einstein s/n. CEP 13083-970, Campinas, SP, Brasil.
- \* Corresponding author. E-mail: [adrielle\\_cunha@yahoo.com.br](mailto:adrielle_cunha@yahoo.com.br)

**ABSTRACT:** Currently, the distribution of *Brachycephalus hermogenesi* (Giaretta and Sawaya, 1998) ranges from the state of Rio de Janeiro to the state of São Paulo. Herein, we report for the first time the occurrence of *B. hermogenesi* in the state of Paraná, southern Brazil.

*Brachycephalus hermogenesi* (Giaretta and Sawaya, 1998) is one of the smallest tetrapods of the planet (adult snout-vent length 8.7 mm in males and 10.5 mm in females), belonging to the anuran family Brachycephalidae (Frost 2010). Currently, this species is categorized as "Least Concern" as it is abundant where is known to occur and presents a wide geographic distribution, including several protected areas (Pimenta *et al.* 2007; Silvano and Caramaschi 2008).

*Brachycephalus hermogenesi* is known to occur in elevated and coastal pristine forests of the Atlantic Forest domain. The species was described from Picinguaba (23°22' S, 44°50' W), Parque Estadual da Serra do Mar, municipality of Ubatuba, state of São Paulo (Giaretta

and Sawaya 1998). At the time of its description the species distribution was restricted to the type locality and to the neighboring municipality of Parati (23°13' S, 44°43' W), state of Rio de Janeiro (Giaretta and Sawaya 1998). The species was later reported to occur in Reserva Florestal de Morro Grande (23°39' to 23°48' S, 47°01' to 46°55' W), Estação Ecológica de Boracéia (23°39'11" S, 45°53'21" W), Reserva Biológica de Paranapiacaba (23°47' S, 46°19' W), Juitituba (23°57' S, 47°03' W), Tapiraí (23°57' S, 47°30' W), Ribeirão Grande (24°05' S, 48°22' W) and Estação Ecológica Juréia-Itatins (24°27' S, 47°14' W), all in the state of São Paulo (Dixo and Verdade 2006; Pimenta *et al.* 2007; Verdade *et al.* 2008).



**FIGURE 1.** Distribution of *Brachycephalus hermogenesi*: 1 – municipality of Parati; 2 – Picinguaba, municipality of Ubatuba; 3 – Estação Ecológica de Boracéia, municipality of Salesópolis; 4 – Reserva Biológica de Paranapiacaba, municipality of Santo André; 5 – Reserva Florestal do Morro Grande, municipality of Cotia; 6 – municipality of Juitituba; 7 – Estação Ecológica Juréia-Itatins; 8 – municipality of Tapiraí; 9 – municipality of Ribeirão Grande; 10 – Castelhanos, municipality of São José dos Pinhais. Dots represent locations already presented in literature and triangle indicates the new location of occurrence for the species. RJ: state of Rio de Janeiro; SP: state of São Paulo; PR: state of Paraná; SC: state of Santa Catarina.

One specimen of *B. hermogenesi* (snout-vent length 6.3 mm) was collected walking on the leaf litter in a riparian forest area, during the day (21 °C) after heavy rain, in an anuran inventory (January 18, 2008) at an Atlantic Forest site in Castelhanos locality (25°47' S, 48°54' W, 291 m a.s.l.) (Figure 1) within the Área de Proteção Ambiental (APA) de Guaratuba, in the municipality of São José dos Pinhais, state of Paraná (Cunha *et al.* 2010). The individual collected was not seen in vocalization, but several other individuals of the same species were calling at the site during the collection. The specimen was deposited at the amphibian collection of the Museu de Zoologia "Prof. Adão José Cardoso", Unicamp, Campinas, São Paulo (ZUEC 16602). The specimen was identified by comparison to additional specimens deposited in ZUEC collection and the original description, mainly due to characters such morphology of the head, the reduced number of toes, narrow stripes forming a black "x" on the dorsum and lateral portion of the body darker than dorsum (Giaretta and Sawaya 1998). Other two individuals were observed in field survey at the same place in separate occasions, but escaped. The geographic distribution of *B. hermogenesi* is, therefore, extended by 223 km southern from the nearest point in São Paulo state (Estação Ecológica Juréia-Itatins; Verdade *et al.* 2008). This is also the southernmost distribution record for the species and the first record for the state of Paraná.

The present record provides an important contribution to the knowledge of the geographic distribution of *B. hermogenesi*, showing that this species is more widespread

than previously thought, according to Pimenta *et al.* (2007) and Verdade *et al.* (2008).

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