

## New record of *Aplastodiscus weygoldti* (Cruz & Peixoto, 1987) in the municipality of Mimoso do Sul, Espírito Santo State, southeastern Brazil (Anura, Hylidae)

Guilherme Ramos da Silva <sup>1,2,3,\*</sup>, Cyro de Luna-Dias <sup>3</sup>, Fabio Silva Fernandes dos Santos Hepp<sup>2,3</sup>, Ana Maria Paulino Telles de Carvalho-e-Silva <sup>4</sup> & Sergio Potsch de Carvalho-e-Silva<sup>3</sup>

Currently, the world's amphibians are in massive decline (Gardner, 2001). Habitat loss, pollution and infectious diseases are listed as some of the causes of this decline (Stuart et al., 2008). However, is difficult to infer the level of threat for many species as a result of deficient information on distribution, habitat use and biology (Young et al., 2001). The current divulgation aims to contribute to the knowledge regarding the geographic distribution of *Aplastodiscus weygoldti* (Cruz and Peixoto, 1987).

The genus *Aplastodiscus* is currently composed of fifteen species, of which *A. weygoldti* is distributed throughout Central and south-eastern Brazil to adjacent Argentina (Frost, 2010). *Aplastodiscus weygoldti* is characterized by the following characteristics: green colour, red iris, moderate-sized and slender body, head as long as wide, broad muzzle in dorsal view, slightly marked rostral canthus, supra- straight or almost straight tympanic fold, starting from the back corner of the eye, passing over the upper edge of the tympanum and continuing to after insertion of the arm, medium-sized eyes apart from each other in little more than 1/3 of head width, leg (femur and tibia) is slightly shorter than snout-vent length, supra-anal crest and calcaneus

appendage are absent (Cruz and Peixoto 1987). Peixoto and Pimenta (2004) suggested *A. weygoldti* to be Near Threatened (NT) as the distribution of the species comprised less than 5000 km<sup>2</sup>. However, the Global Amphibian Assessment (GAA) team listed *A. weygoldti* as Data Deficient (DD) (Stuart et al., 2008) due to the limited amount of distribution data available for the species. A revaluation of the conservation status of *A. weygoldti* is therefore highly preferred.

During field work in September 2010 within the Serra das Torres (21.03499 S, 41.25022 W, State of Espírito Santo), between the municipalities of Atilio Vivácqua, Mimoso do Sul and Muqui, tadpoles of *A. weygoldti* were encountered (Fig. 1a). The observed tadpoles were found in streams at altitudes between 900 and 950 meters on a mountain which presents different types of Atlantic Forest physiognomies: seasonal semideciduous, submontane dense ombrophilous and montane dense ombrophilous. Several tadpoles were collected and deposited in the Amphibian Collection of the Departamento de Zoologia, Universidade Federal do Rio de Janeiro (ZUF RJ 12536 – ten tadpoles and one in metamorphosis) and the Amphibian Collection of the Universidade Federal do Estado de Rio de Janeiro (UNIRIO 4155 - one froglet; UNIRIO 4156 - one tadpole and one metamorph). The permit for collecting zoological material was provided by the Instituto Chico Mendes (ICMBio) – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais e Renováveis (IBAMA) and filed under number 12164-2. One tadpole (UNIRIO 4155) was kept in captivity until metamorphosis in order to confirm the identity of the species. The specimen (Fig. 1b and 1c) presented the following measurements: snout-vent length 22.1 mm, head length 7.5 mm, head width 7.5 mm, femur length 10.7 mm and tibia length 10.3 mm. Coloration in life and morphological characteristics correspond to *A.*

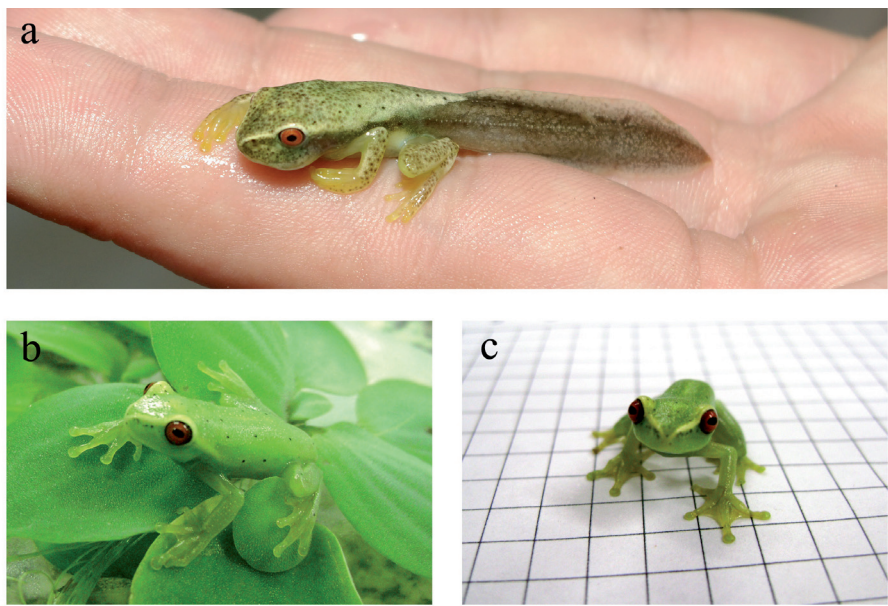
1 Universidade Estadual do Piauí, Campus Professor Alexandre Alves Oliveira, Avenida Nossa Senhora de Fátima s/n. CEP. 64202-220. Parnaíba, PI, Brazil.

2 Programa de Pós Graduação em Zoologia, Universidade Federal do Rio de Janeiro, Museu Nacional, Quinta da Boa Vista, CEP 20940-040. Rio de Janeiro, RJ, Brazil.

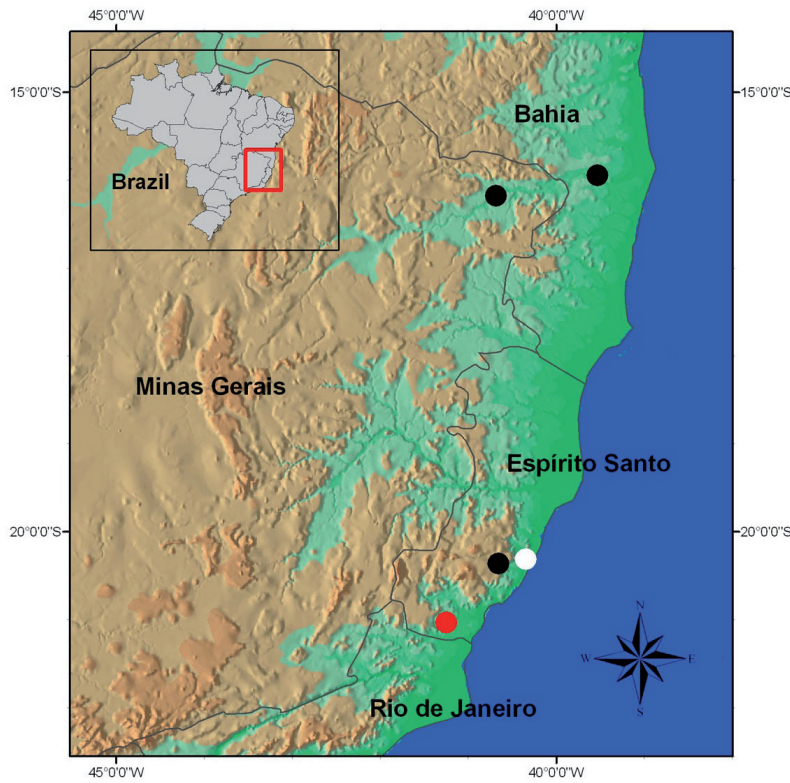
3 Universidade Federal do Rio de Janeiro, Instituto de Biologia, Departamento de Zoologia. Caixa Postal 68044., CEP. 21941-590. Rio de Janeiro, RJ, Brazil.

4 Universidade Federal do Estado do Rio de Janeiro, Departamento de Zoologia, Instituto de Biociências, Laboratório de Biotecnologia de Anfíbios, Av. Pasteur 458/402, Urca, CEP. 22290-240. Rio de Janeiro, RJ, Brazil.

\*Corresponding author; e-mail: grscinax@gmail.com



**Figure 1.** Tadpole (a) and froglet (b and c) of *Aplastodiscus weygoldti* (UNIRIO 4156 and UNIRIO 4155 respectively). Photos: Cyro de Luna-Dias (a) and Ana M. T. de Carvalho-e-Silva (b and c).



**Figure 2.** Geographic distribution of *Aplastodiscus weygoldti*. Red circle: new record in Serra das Torres, ES. White circle: type locality in Santa Tereza, ES. Black circles: other records in the states Bahia, Espírito Santo and Minas Gerais.

*weygoldti* tadpoles collected at the type locality (Cruz and Peixoto 1987).

In the available literature *A. weygoldti* has been reported from the type locality (Santa Teresa, altitude about 800 m) by Cruz and Peixoto (1987) and the municipality of Domingos Martins (unregistered altitude) (Orrico et al. 2006) in the state of Espírito Santo. Additional records from the state of Bahia (Fazenda Palmeira, Municipality of Itapebi) and the state of Minas Gerais (Fazenda Limoeiro, Municipality of Almenara, altitude about 320 m) were presented by respectively Peixoto and Pimenta (2004) and Ferreira et al. (2005). The upper altitude limited hitherto reported was 858 m. Conclusively, the current record of *A. weygoldti* in Serra das Torres extends the species distribution with about 94 km south-westwards from the municipality of Domingos Martins (20°22'14"S; 40°39'32"W) and its altitudinal upper limit with ca. 100 meters (Fig. 2).

**Acknowledgements.** We thank Maria das Graças de Castro Sedano and Valdeir de Castro Sedano for hospitality and help in field samplings, and to Marcia Gomes and Oswaldo Peixoto for confirming the identity of the species..

## References

- Cruz, C.A.G., Peixoto, O.L. (1987 "1985"): Espécies verdes de Hyla: o complexo "Albofrenata" (Amphibia, Anura, Hylidae). Arquivos da Universidade Federal Rural do Rio de Janeiro **8**: 59-70.
- Ferreira, P.L., Pantoja, D.L., Feio, R.N. (2005): Geographic distribution: *Hyla weygoldti*. Herpetological Review **36**: 332.
- Frost, D.R. (2010): Amphibian Species of the World: an online reference. V5.4 (8 April, 2010) available in: <http://research.amnh.org/herpetology/amphibia/index.html>. American Museum of Natural History, New York, USA.
- Gardner, T. (2001): Declining amphibian populations: a global phenomenon in conservation biology. Animal Biodiversity and Conservation **24**: 25-44.
- Orrico, V.G.D., Carvalho-e-Silva, A.M.P.T., Carvalho-e-Silva, S.P. (2006): Redescription of the advertisement call of *Aplastodiscus arildae* (Cruz & Peixoto, 1987) and description of the call of *Aplastodiscus weygoldti* (Cruz & Peixoto, 1987) with general notes about the genus in Southeastern Brazil (Anura, Hylidae). Revista Brasileira de Zoologia **23**(4): 994-1001.
- Peixoto, O.L., Pimenta, B. (2004). *Aplastodiscus weygoldti*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.4. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on 01 November 2010.
- Stuart, S.N., Hoffmann, M., Chanson, J.S., Cox, N.A., Berridge, R.J., Ramani, P., Young, B.E. (eds.). (2008). Threatened Amphibians of the World, p 615 and 744. Lynx Edicions, Barcelona, Spain; IUCN; Gland, Switzerland; and Conservation International, Arlington, Virginia, USA.
- Young, B.E., Lips, K.R., Reaser, J.K., Ibanez, R., Salas, A.W., Cedeno, J.R., Coloma, L.A., Ron, S., La Marca, E., Meyer, J.R., Munoz, A., Bolanos, F., Chaves, G., Romo, D. (2001): Population declines and priorities for amphibian conservation in Latin America. Conservation Biology **15**: 1213-1223.