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SHORT COMMUNICATION

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Breeding of the anguid lizard *Diploglossus lessonae* in north-east Brazil

RENATO M.R. JUNIOR[1,3*], CAUÃ M. DE ARAUJO[1,3], RAPHAEL DE S. LIMA[1,3], RAFAEL G. JANSEN[1,3] & MATEUS DA S. BONFIM[2,3,4]

[1]Universidade Católica do Salvador, Avenida Prof Pinto de Aguiar, Salvador, Bahia, 41740-090, Brazil
[2]Universidade Federal Rural de Pernambuco, Rua Dom Manoel de Medeiros, s/n, Dois Irmãos, Recife, PE, 52171-900, Brazil
[3]Centro de Ecologia e Conservação Animal - ECOA, Universidade Católica do Salvador, Avenida Prof. Pinto de Aguiar, Salvador, Bahia, 41740-090, Brazil
[4]Laboratório de Estudos Herpetológicos e Paleoherpetológicos, Universidade Federal Rural de Pernambuco, Departamento de Biologia, Rua Dom Manoel de Medeiros, s/n, Dois Irmãos, Recife, PE, 52171-900, Brazil

[*]Corresponding author e-mail: renatomrjr@hotmail.com

The anguid lizard *Diploglossus lessonae* Peracca, 1890, known locally as the "chalango-liso", is an active forager, with diurnal, semifossorial habits, and is associated with leaf litter, fallen tree trunks and rock crevices (Passos et al., 2011; Caldas et al., 2016). It has a serpentine, elongated body, with a reduction or disappearance of constrictions between the head, torso and tail (Vanzolini, 1958). The species is endemic to Brazil and occurs in the north-east of the country, with a wide distribution in this region. It is encountered in semiarid areas of caatinga (Rodrigues et al., 2005), as well as higher altitude swamps (Borges-Nojosa & Caramaschi, 2005) and Atlantic Forest regions (Schmidt & Inger, 1951; Freire, 1996). Currently, there is little available information regarding its ecology, while information about reproductive aspects is even more limited. Here, we present a report on the birth of *D. lessonae* neonates and their colouration.

On 29 September 2022, at around 09:00 h, an adult female *D. lessonae* was captured in a caatinga area in the municipality of Ruy Barbosa (12° 17'02" S, 40° 29'38" W), in the centre-north meso region of Bahia state, north-east Brazil. The capture was conducted in strict compliance with the legal guidelines established by the Authorisation for Scientific Activities with reference number #51743, granted by the Biodiversity Authorisation and Information System - SISBIO, ensuring the legality and ethics of the process. The animal was taken to the Animal Conservation and Ecology Centre – ACEC, located at the Universidade Católica do Salvador UCSal, and added to the herpetology collection. However, a swollen abdomen, uncommon for the species, was observed; consequently the specimen was kept under observation in a terrarium (53 cm x 26 cm x 26 cm), containing 6 cm of soil covered by 2 cm of leaf litter, with the soil temperature monitored continuously. After 58 days of observation, maintaining average soil temperature of 28 °C, the birth of three young was recorded. Their mean dimensions (± SD) were head width 8.07 ± 0.67 mm, head length 11.03 ± 1.56 mm, snout-vent length 55.73 ± 4.33 mm, tail length 42.97 ± 2.72 mm, and weight 2.67 ± 0.58 g. The female's body dimensions were recorded after birth of the young and were – head width = 15.2 mm; head length = 19 mm; SVL = 184.4 mm; regenerating tail length = 45.3 mm; weight = 9.9 g. Given that Vitt (1985) indicated that the typical adult weighs about 54 g, the recorded weight of the female is exceptionally light. It seems that this may be explained by the fact that the female had recently given birth, did not accept any of the food that was offered, and had lost part of her tail.

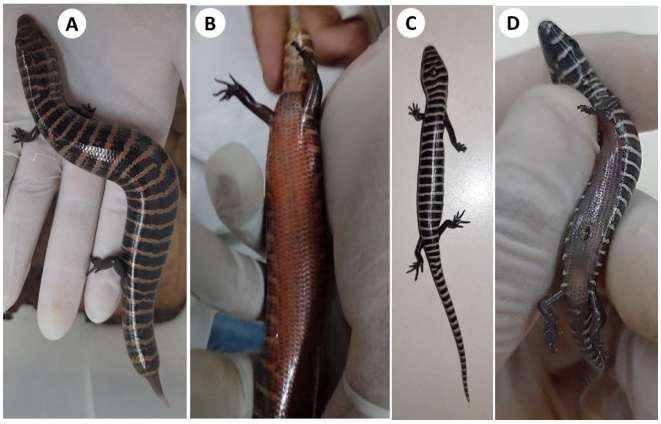

Figure 1. Adult female and neonate *Diploglossus lessonae* from Bahia state, north-east Brazil - **A.** Adult female dorsal view, **B.** Adult female ventral view, **C.** Neonate born to the female, dorsal view, **D.** Neonate born to female ventral view

The female was monitored consistently from arrival but no eggs or eggshells were observed, which was strange since it has been stated that this is an egg-laying (oviparous) species (Vitt, 1985; 1992a). Our observation suggests that this species must be either viviparous or even ovoviviparous. Furthermore, we observed that the colouration of the neonates and adult differed. While the adult had black-brown transverse stripes on a brownish/pink background and was red ventrally (Fig. 1 A&B), the young had black transverse bands dorsally against a white background but ventrally they were translucent reddish-brown (Fig. 1 C&D). It has been recorded that the young have red bellies and that this is a case of Batesian mimicry of the venomous millipede *Rhinocricus albidolimbatus*, which is coloured with red and white rings and is sympatric with *D. lessonae* (Vitt, 1992b). However, it seems that the red colouration takes time to develop in the young lizards.

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