

Morphometry of *Hemidactylus agrius* (Squamata: Gekkonidae) hatchlings from a semi-arid area in northeastern Brazil

Daniel Cunha Passos^{1*} and Diva Maria Borges-Nojosa¹

Hemidactylus agrius Vanzolini, 1978 (Fig. 1) is a little-studied lizard from northeastern Brazil, restricted to the Caatinga (Vanzolini, 1978; Vanzolini, Ramos-Costa and Vitt, 1980) and Cerrado (Andrade et al., 2004) domains. Information on reproduction of this gecko is scarce, and hitherto limited to clutch size data only (Bezerra et al., 2011). Herein we present new data on hatchling size and incubation time for *H. agrius*, from a semi-arid area in Pentecoste municipality, state of Ceará, northeastern Brazil (3°49'S; 39°20'W).

During field work from July 2008 to June 2009 we found five nests of *H. agrius*, with a total of thirteen eggs. Details concerning these nests were recorded in Bezerra et al. (2011). The eggs were taken to the laboratory of herpetology at the Núcleo Regional de Ofiologia da Universidade Federal do Ceará

(NUROF – UFC), where they were monitored until hatching, when the identification of the species could be determined. The eggs were incubated in a terrarium (10 × 23 × 34 cm) on a mixture of damp sand and leaf litter in the laboratory at ambient temperature and light regimes. Hatchling voucher specimens were placed in the scientific collection Coleção Herpetológica da Universidade Federal do Ceará – CHUFC, preserved in 70% ethanol. The length and diameter of eggs were measured before hatching. Body measurements (snout-vent length, tail length, head length, head height and head width) of newborns were taken immediately upon hatching. The measurements were made with a digital caliper of 0.01 mm precision (mean ± one standard deviation) and rounded to the nearest 0.1 mm.

Although it was not possible to define the incubation



Figure 1. *Hemidactylus agrius* from state of Ceará, northeastern Brazil. Photograph: Paulo Mesquita.

¹ Núcleo Regional de Ofiologia, Universidade Federal do Ceará (NUROF-UFC), Campus do Pici, Centro de Ciências, Bloco 905, CEP: 60455-760, Fortaleza, Ceará, Brazil.

* Corresponding author;

e-mail: biologodanielpassos@gmail.com

time of eggs since the date of laying was unknown, the period of incubation in the laboratory ranged between 6 and 59 days. These results conform with the incubation time reported for a sympatric congener *H. mabouia*

Table 1. Data on thirteen *Hemidactylus agrius* hatched in the Núcleo Regional de Ofiologia da Universidade Federal do Ceará. Snout-vent length (SVL), tail length (TL), head length (HL), head high (HH), head width (HW), egg length (EL), egg diameter (ED), and standard deviation (SD). Measurements are in millimeters, and incubation time is in days.

Voucher	SVL	TL	HL	HH	HW	EL	ED	Incubation time
CHUFC L 4103	21.4	18.8	5.8	3.5	4.6	9.2	8.4	59
CHUFC L 4104	22.0	19.6	6.4	3.5	4.8	9.2	8.4	59
CHUFC L 4105	21.7	20.2	6.1	3.4	5.2	10.0	8.1	46
CHUFC L 4106	22.3	28.4	6.5	3.8	5.1	10.0	9.4	46
CHUFC L 4107	22.4	14.7	6.1	3.6	4.8	10.9	9.0	48
CHUFC L 4108	21.9	NA	6.4	3.4	4.9	9.6	9.1	48
CHUFC L 4109	22.4	22.2	6.3	3.5	5.3	10.1	9.1	51
CHUFC L 4119	20.3	18.4	6.4	3.5	5.0	10.0	8.6	31
CHUFC L 4120	20.9	17.0	6.5	3.2	5.0	10.1	8.6	31
CHUFC L 4127	20.7	17.1	6.2	3.3	4.8	NA	8.9	7
CHUFC L 4128	20.3	17.6	6.4	3.3	4.9	NA	8.6	7
CHUFC L 4129	23.1	22.6	6.7	3.5	5.1	NA	NA	6
CHUFC L 4130	23.4	21.7	6.9	3.9	5.4	NA	NA	6
Minimum	20.3	14.7	5.8	3.2	4.6	9.2	8.1	-
Maximum	23.4	28.4	6.9	3.9	5.4	10.9	9.4	-
Mean	21.3	19.4	6.4	3.5	5.0	9.4	8.4	-
SD	1.1	3.6	0.3	0.2	0.2	0.5	0.5	-

under laboratory settings, in which incubation ranged from 54 to 62 days at 27-29°C (Krysko, Sheehy and Hooper, 2003). The measurements of eggs and juveniles are presented in Table 1. This constitutes the first record of morphometric characterization of newborns for *H. agrius*, contributing to the knowledge of the reproductive biology of this species.

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