## An unusual record of ophiophagy and necrophagy in the common boa *Boa constrictor* in the Brazilian Atlantic Forest

VANESSA DO NASCIMENTO BARBOSA<sup>1</sup>, JÉSSICA MONIQUE DA SILVA AMARAL<sup>1\*</sup>, SEBASTIÃO SILVA DOS SANTOS<sup>1</sup>, ÉLIDA FRANCISCO DA SILVA<sup>2</sup>, JOHN LINNIK<sup>2</sup> & FREDERICO GUSTAVO RODRIGUES FRANÇA<sup>1,2</sup>

<sup>1</sup>Programa de Pós-Graduaçãoem Ecologia e Monitoramento Ambiental, Universidade Federal da Paraíba, Paraíba, Brazil <sup>2</sup>Laboratório de Ecologia Animal da Universidade Federal da Paraíba, Paraíba, Brazil <sup>\*</sup>Corresponding author e-mail: jessica\_monique.amaral@hotmail.com

The common boa (*Boa constrictor*) is a large snake, reaching more than 3 metres long. It is widely distributed in South America and recognised as an opportunistic and generalist predator, feeding on invertebrates, fish, birds, mammals, amphibians and lizards, primarily using constriction to subdue its prey (Henderson et al., 1995; Quick et al., 2005; Pizzato et al., 2009; Marques et al., 2019). Herein, we present the first record of ophiophagy and necrophagy for a common boa that ingested a dead Patagonian green racer *Pseudablabes* (*Philodryas*) patagoniensis (Girard, 1858).

On 24th April 2021 at 1030 h, a juvenile female *Boa constrictor* (Fig. 1) was found in a coastal sand dune (restinga) environment of Área de Proteção Ambiental da Barra do Rio Mamanguape, Paraíba state, north-east Brazil (6° 46'40.96'' N, 34° 55'20.90'' W, WGS 84; altitude 6 m a.s.l.). It had a snout-vent length of 909 mm; tail length 93 mm and weighed 0.575 kg (measurements were taken using metric tape, digital caliper and pesola spring scales). The snake was captured during fieldwork (under collection permit SISBIO nº 74327-1), placed in a cloth bag, and then taken to the laboratory.

During handling to take measurements, it regurgitated a *P. patagoniensis* (snout-vent length 593 mm; tail length 255 mm) (Fig. 1).

The snake began to regurgitate its prey by its tail, indicating that it was consumed head first. During prey identification we verified the presence of several sarcosaprophagous dipteran larvae in the carcass (Fig. 1) indicating that the *P. patagoniensis* was already dead when consumed by the *B. constrictor*. Although snakes commonly accept carrion in captivity, necrophagy by snakes in the wild is uncommon, mainly because snakes prefer to consume live prey and because carcasses are quickly consumed by sarcosaprophagous fauna (Sazima & Strüssmann, 1990; Marques et al., 2017). However, when scavenging, the absence of injury risk and low energy expenditure may confer some benefits.

The common boa was sexed using a probe, marked with visible implant elastomer and then released at the place of capture.



**Figure 1**. Ophiophagy of dead *Pseudablabes patagoniensis* by *Boa constrictor* - **A.** The juvenile female of *B. constrictor*, **B.** The regurgitated *P. patagoniensis*, **C.** Close up of the *P. patagoniensis* carcass showing a sarcosaprophagous dipteran larva (red arrow)

## ACKNOWLEDGEMENTS

We thank the ICMbio for collection permits in APA Barra do Rio Mamanguape (SISBIO 68444-1), and to Isabella M.M.C. Pedrosa for your help with the English. EFS and JLSM thank the PRAC/ and PRG/UFPB for undergraduate scholarships V.N.B. and J.M.S.A thank the CAPES by Masters' scholarship and F.G.R.F. thanks the financial support from CNPq (Universal grant 404671/2016-0).

## REFERENCES

- Henderson, R.W., Micucci, T.W.P., Puorto, G. & Bourgeois, R.W. (1995). Ecological correlates and patterns in the distribution of Neotropical boines (Serpentes, Boidae): a preliminary assessment. *Herpetological Natural History* 3: 15-27.
- Quick, J.S., Reinert, K.H., Cuba, E.R. & Odun, R.A. (2005). Recent occurrence and dietary habits of *Boa constrictor* on Aruba, Dutch West Indies. *Journal of Herpetology* 39: 304-307.

- Marques, O.A.V., Coeti, R.Z., Braga, P.A. & Sazima. I. (2017). A rotten choice: feeding attempt by a coral snake (*Micrurus frontalis*) on a dead pitviper (*Bothrops jararaca*) that had swallowed a bulky rodent. *Herpetology Notes* 10: 137–139.
- Marques, O.A.V., Eterovic, A. & Sazima, I. (2019). Serpentes da Mata Atlântica - Guia Ilustrado para as florestas costeiras do Brasil. São Paulo: Ponto A, Cotia. II + 319pp.
- Pizzatto, L., Facure, K. & Marques, O.A.V. (2009). Food habits of Brazilian boid snakes: overview and new data, with special reference to *Corallus hortulanus*. *Amphibia*-*Reptilia* 30: 533-544.
- Sazima, I. & Strüssmann, C. (1990). Necrofagiaem serpentes brasileiras: exemplos e previsões. *Revista Brasileira de Biologia* 50: 463–468.

Accepted: 19 November 2021