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SHORT NOTE

Predation on *Amerotyphlops brongersmianus* (Squamata, Typhlopidae) by *Bothrops moojeni* (Squamata, Viperidae) in west Brazil

Depredación de *Amerotyphlops brongersmianus* (Squamata, Typhlopidae) por *Bothrops moojeni* (Squamata, Viperidae) en el oeste de Brasil

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ABSTRACT

Ophyophagy is a common feeding habit in snakes; however, there are few records of this behavior for the genus *Bothrops*. Here, we report the first case of predation of *Bothrops moojeni* upon *Amerotyphlops brongersmianus*. Our record reinforces the known generalist habit of *Bothrops moojeni* and indicates an opportunistic diet.

Keywords. Diet, ophyophagy, pitvipers, snakes, wormsnakes

RESUMEN

Ofiofagia es un hábito alimenticio común en serpientes, sin embargo, hay pocos registros de este comportamiento para el género *Bothrops*. En el presente trabajo reportamos el primer caso de depredación de *Bothrops moojeni* en *Amerotyphlops brongersmianus*. Nuestro registro refuerza el conocimiento del hábito generalista de *Bothrops moojeni* e indica una dieta oportunista de esta especie.

Palabras clave. Dieta, ofiofagia, serpientes, serpientes-gusano, víboras

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All the species of snakes are carnivorous, and most of them are generalists regarding the prey (Martins *et al.* 2002). Ophiophagy, when a species feeds on snakes, is not a rare feeding habit in snakes; such is the case of the mussuranas (*Clelia* spp.) and the king cobra (*Ophiophagus hannah* Cantor, 1836) (Marques *et al.* 2016).

Bothrops moojeni Hoge, 1966 is a nocturnal, large pit viper distributed in central and southeastern Brazil, throughout riparian forests and adjacent open areas in the Cerrado morphoclimatic domain (Campbell and Lamar 2004). Its diet is composed mainly by mammals, frogs, and lizards (Nogueira *et al.* 2003). Nogueira *et al.* (2003) also recorded snakes on the *B. moojeni* diet; however, the authors did not specify the identity of the preyed species. Here, we report the first case of predation of *Bothrops moojeni* upon two individuals of *Amerotyphlops brongersmianus* (Vanzolini, 1976), a fossorial snake widely distributed in South America, inhabiting various habitats (Dixon and Hendricks 1979).

On 1º February 2018, during a fieldwork at Parque Estadual das Nascentes do Rio Taquari (18º15'87" South, 53º41'767" West, 450 m) in Alcinópolis municipality, Mato Grosso do Sul state, Midwest Brazil, we captured an adult of *B. moojeni* (ZUFMS-REP 3318, SVL = 750 mm, tail = 170 mm) (Collection permit SISBIO #45889/1 and IMASUL #71/400151/2018). During the analysis of parasitism in the body of *B. moojeni*, we found two individuals of *A. brongersmianus* in the stomach of *B. moojeni* (ZUFMS-REP 3319, SVL = 60.68 mm and ZUFMS-REP 3320, SLV = 120.32 mm) (Fig. 1). All the three snakes are housed at Coleção Zoológica da Universidade Federal de Mato Grosso do Sul.

There are few records of ophiophagy for the genus *Bothrops* (e.g. *B. leucurus* – Fagundes *et al.* 2009; *B. atrox* - Oliveira and Martins 1996; *B. jararacussu* - De Roodt and Lanari 2015; *B. moojeni* – Nogueira *et al.* 2003). Previous studies indicate that the genus is composed by generalist species, feeding on small rodents, amphibians, lizards, and fish (*B. jararaca* - Hartmann *et al.* 2009, *B. atrox* - Bernarde and Abe 2010).

Bothrops moojeni also shows an ontogenetic diet shift, varying from ectothermic to endothermic prey throughout

Figure 1. Two individuals of *Amerotyphlops brongersmianus* (SVL = 60.68 mm, ZUFMS-REP 3319 and SLV = 120.32 mm, ZUFMS-REP 3320) preyed by an adult of *Bothrops moojeni* (SVL = 750 mm, ZUFMS-REP 3318).

its life (Nogueira *et al.* 2003), with adults preying more frequently on mammals (França *et al.* 2008). This is the first record of *A. brongermianus* as prey of *B. moojeni*. Besides our observation, this fossorial snake was already reported as prey of *Bothrops leucurus* Wagler, 1824 and *Micrurus ibiboboca* (Merrem, 1820) (Baptista *et al.* 2016, Marques *et al.* 2016). Our record reinforces the known generalist habit of *B. moojeni* and indicates an opportunistic diet, with the snake feeding on preys that share and inhabits the same habitat.

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AUTHOR'S CONTRIBUTION

KC, ICO, JLMMS and DJS collected data; JGOJr and SM led the writing with contributions from all authors, interpretation and discussion of the results.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.