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
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 musselsnakes (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 (18°15’87” South, 53°41’767” 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 inhabit the same habitat.

LITERATURE CITED


AUTHOR’S CONTRIBUTION
KC, ICO, JLMMS and DJS collected data; JGO Jr 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.