

Bothrops moojeni (Squamata, Viperidae) predation on *Hypsiboas crepitans* (Anura: Hylidae) in southeastern Brazil

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The pitviper *Bothrops moojeni* Hoge, 1966 occurs throughout the Cerrado region of central and southeastern Brazil, mainly in open and forested riparian areas (Nogueira, Sawaya and Martins, 2003; Campbell and Lammar, 2004). This terrestrial lancehead has a generalist diet that includes mammals, frogs, lizards, snakes, birds and centipedes, also presenting an ontogenetic diet shift (Andrade, Abe and Santos, 1996), with adults preying more frequently on mammals (Nogueira, Sawaya and Martins, 2003; França et al., 2008).

Hypsiboas crepitans (Wied-Neuwied, 1824) is a large sized treefrog belonging to the *H. faber* group (Faivovich et al., 2005). It presents disjunct distribution: a metapopulation occurring from eastern Panama, through northern Colombia, Venezuela, the Guianas, including adjacent northern Brazil; and another metapopulation from northeastern Brazil, to the state of Santa Catarina, within the coastal Atlantic forest (Frost, 2011).

On 21 December 2011 at 21:00h, we observed a juvenile female *B. moojeni* (526 mm total length) foraging at the margin of a stream (17°24'03"S, 45°03'33"W, 663 m elevation, datum WGS1984) in the rural zone of the municipality of Buritizeiro, state of Minas Gerais, southeastern Brazil. The snake had the body distended in the region of the stomach. We collected the specimen (collecting permit IBAMA 30677-1/2011) and after dissection, we found an adult male *H. crepitans* (63 mm snout-vent length) in the snake's stomach, which had been ingested feet-first (Fig. 1). Voucher specimens were deposited at the herpetological collection of Museu de

Zoologia João Moojen, Universidade Federal de Viçosa, municipality of Viçosa, state of Minas Gerais, Brazil (*B. moojeni*, MZUFV 1997; *H. crepitans*, MZUFV 11704). In the stream where the snake's capture occurred, we observed several males of *H. crepitans* calling on the ground near the margin.

Literature data concerning on the diet of *B. moojeni* is scarce. França et al. (2008), studying a snake assemblage in Brazilian Central Cerrado, reported two anuran species, *Hypsiboas albopunctatus* (Spix, 1824) and *Leptodactylus fuscus* (Schneider, 1799), as well other non-identified small lizards and mammals as its preys. The present report is the first record of *H. crepitans* as prey of *B. moojeni*. Besides our observation, this hylid was already reported as prey of a giant water bug (*Belostoma sp.*) in Venezuela (Mijares-Urrutia, Arends and Hero, 1997) and the colubrid snake *Helicops angulatus* (Linnaeus, 1758) in central Brazil (Silva-Jr. et al., 2003). Camargo-Filho et al. (2008) mentioned a partially digested tree frog (probably an adult *H. crepitans*) in the stomach of the American bullfrog *Lithobates catesbeianus* (Shaw, 1802) in southeastern Brazil. Additionally, Hernández-Cuadrado and Bernal (2008) reported the spider *Trechalea sp.* preying upon *H. crepitans* embryos in Tolima, Colombia.

In a review of anurans as prey of vertebrates, Toledo, Ribeiro and Haddad (2007) found 243 reports, from which 45% were on snakes preying anurans. Among these, just eight records are from anurans as prey of vipers, all of them non-hylid anurans. França et al. (2008) reported other 58 records of anurans as prey of snakes, five of them from viperids preying hylid frogs. Therefore, among these 167 records of anurans as prey of snakes, just 3% are from hylids as part of viperids diet, suggesting that arboreal frogs may be less common in the feeding of snakes. In general, juvenile *Bothrops* feed on small terrestrial ectotherms while adults may prey upon small mammals or even present a generalist diet (Martins, Marques and Sazima, 2002). Considering that most published records of anurans preyed by

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Figure 1. A female juvenile *Bothrops moojeni* (MZUFV 1997, snout-vent length 440 mm, tail length 86 mm) with an adult male of *Hypsiboas crepitans* (MZUFV 11704, 63 mm snout-vent length) in the snake's stomach, captured at the municipality of Buritizeiro, state of Minas Gerais, Brazil.

vipers involves terrestrial anurans (see Appendix I from Toledo, Ribeiro and Haddad, 2007), the presence of *H. crepitans* males calling on the ground at the place of the observation may have facilitated the capture of the hylid prey by the juvenile *B. moojeni*.

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