

## New records of anuran prey for *Thamnodynastes strigatus* (Günther, 1858) (Serpentes: Colubridae) in a high-elevation area of southeast Brazil

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The South American dipsadine snakes of the genus *Thamnodynastes* are generally regarded as being mainly predators of amphibians, with some species also consuming lizards and small mammals (Marques et al. 2001, 2005; França et al. 2008). *Thamnodynastes strigatus*, one of the largest species in the genus (reaching up to about 700 mm in snout-vent length - SVL), is widely distributed in cisandean South America ranging from southeastern and southern Brazil to Paraguay and Argentina (Franco and Ferreira, 2002). Published reports of food habits of *Thamnodynastes strigatus* have shown that it consumes primarily frogs, and occasionally also fishes, small mammals, lizards and small snakes (Bernarde et al. 2000; Ruffato et al. 2003; Souza et al. 2003a, b; Kopp and Wachlevski, 2005). Most of those records came from sites in southern Brazil, except for that of Kopp and Wachlevski (2005), which came from a montane region in the state of Minas Gerais, in southeast Brazil. In the present note, we report some amphibian prey recovered from the digestive tracts of *Thamnodynastes strigatus* (Fig. 1) from a high-elevation montane area of southeast Brazil.

Between October and December 2007, two of us (PAS and DSN) collected seven adult specimens of *T. strigatus* in the surroundings of Morro do Couto (22° 22' 22" S, 44° 42' 10" W; altitude ca. 2450 m), at the Itatiaia National Park, state of Rio de Janeiro, Brazil. The snakes and their respective stomach contents were deposited at the Herpetological Collection of the Museu Nacional, Rio de Janeiro (MNRJ 18201-06; 18347).

Dissection of the specimens revealed that three of them had remains of frogs in their stomachs. One of the snakes (MNRJ 18203; female, 401 mm SVL) contained the posterior limbs of a hylid frog, *Hypsiboas latistriatus* (tibia length = 15.7 mm). The second specimen (MNRJ 18347; male, 338 mm SVL) contained three individuals of *Ischnocnema holti* (Brachycephalidae), of which one was much digested (only the anterior portion remained) and the other two (26 mm and 37 mm SVL) were partially digested but nearly entire. The third snake (MNRJ 18201; female, 448 mm SVL) contained the remains of an adult specimen of *Melanophryniscus moreirae* (Bufonidae) (tibia length = 8.3 mm). The latter record is interesting for two reasons. First, because *T. strigatus* is a nocturnal snake and *Melanophryniscus moreirae* is a diurnal frog [Kopp and Wachlevski (2005) also reported a diurnal frog (*Crossodactylus cf. bokermanni*) as prey of



**Figure 1.** *Thamnodynastes strigatus* from the Itatiaia National Park, state of Rio de Janeiro, Brazil. Photo: P. Almeida Santos.

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**Figure 2.** Ventral view of an adult male of *Melanophryniscus moreirae* from Itatiaia National Park, state of Rio de Janeiro, Brazil, showing its aposematic coloration. Photo: P. Almeida-Santos.

*T. strigatus* in another montane area]. Secondly, because *Melanophryniscus moreirae*, like other members of the genus, is an aposematically coloured species (Fig. 2) whose skin contains toxic substances (Daly *et al.*, 1984, 2007). We suspect that *M. moreirae* may be a frequent prey of *T. strigatus* at the area, as most of the snakes collected (and a few others that were only observed) were found wandering during the day on sites (Fig. 3) where this frog commonly occurs in high densities. This is the first record of predation on *M. moreirae* and



**Figure 3.** Temporary puddle where three individuals of *Thamnodynastes strigatus* were collected in different days at the Itatiaia National Park, state of Rio de Janeiro, Brazil. This puddle is frequently used as a reproductive site by *Melanophryniscus moreirae*. Photo: P. Almeida-Santos.

indicates that *T. strigatus* is not deterred by that frog's chemical defenses. Bufonids of the genus *Rhinella* (= *Bufo*), which produce toxic secretions, have previously been reported as prey of *T. strigatus* (Bernarde *et al.* 2000; Ruffato *et al.* 2003), which reinforces the idea that this species (and possibly other congeners) may be immune or resistant to certain anuran toxins.

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