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Hypsiboas semilineatus predation on *Dendropsophus elegans* (Anura: Hylidae) in southern Bahia, Brazil

CAIO V. M. MENDES¹, DANILO S. RUAS¹ & MIRCO SOLÉ²

¹⁾ Graduate in Ecology and Biodiversity Conservation, Universidade Estadual de Santa Cruz, Rodovia Ilhéus-Itabuna, km 16, 45662–900 Ilhéus, Bahia, Brazil.

²⁾ Department of Biological Sciences, Universidade Estadual de Santa Cruz, Rodovia Ilhéus-Itabuna, km 16, 45662–900 Ilhéus, Bahia, Brazil.

> Corresponding author: Caio V. M. Mendes, e-mail: caio_vina@yahoo.com.br Manuscript received: 12 November 2011

Amphibians play an important role in trophic chains by ingesting a variety of food items and being themselves preyed upon by a large group of animals at the same time (DUELL-MAN & TRUEB 1994). During the reproductive period, many species exhibit gregarious behaviour, becoming concentrated potential prey for both invertebrate and vertebrate predators (DUELLMAN & TRUEB 1994, TOLEDO 2005).

Hypsiboas semilineatus (SPIX, 1824) is a medium-sized hylid frog belonging to the *H. semilineatus* group (FAIVO-VICH et al. 2005). This species inhabits the Atlantic rainforest on the coast of Brazil, occurring from the state of Pernambuco to the state of Santa Catarina (HEURSEL & HADDAD 2002, FROST 2011) where it is frequently associated with permanent water bodies in forest areas. *Dendropsophus elegans* (WIED-NEUWIED, 1824) is a small hylid frog belonging to the *Dendropsophus leucophyllatus* group (FAIVOVICH et al. 2005). This species has a wide geographic distribution in the Atlantic rainforests of eastern Brazil, ranging from the state of Rio Grande do Norte to the state of Paraná (VAN SLUYS et al. 2011, FROST 2011).

On March 05, 2011, at 20.30 h, during fieldwork at "Reserva Ecológica Michelin" (13°49'35" S, 39°08'32" W, approximately 90–400 m a.s.l.) in the municipality of Igrapiúna, southern Bahia state, we collected an adult male *H. semilineatus* (SVL 5.28 cm, weight 5.71 g, Fig. 1A) at a permanent pond where this species occurred syntopically with *D. elegans*. The specimen collected was placed in a plastic bag and transported to the laboratory. The frog's stomach was flushed following the methodology proposed by SOLÉ et al. (2005) and a specimen of *D. elegans* (SVL 1.16 cm, weight 0.12 g, Fig. 1B) was retrieved from the stomach content.

Most frogs that predate upon other frogs can be characterized as convenience predators, because they are not spe-

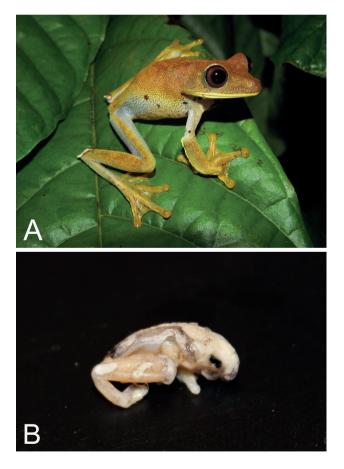


Figure 1. The predator *Hypsiboas semilineatus* (voucher MZUESC 9293) (A) and the prey *Dendropsophus elegans* (B) recorded at the "Reserva Ecológica da Michelin", municipality of Igrapiúna, southern Bahia, Brazil.

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cialized in preying on anurans, yet feed on them with some regularity. In some cases frogs can represent a considerable amount of the volume of prey consumed: In a Ceratophrys cornuta population from Peru, DUELLMAN & LIZANA (1994) found frogs to make up 17.15% of the volume of all ingested prey. In a Lithobates catesbeianus population from St. Lawrence County, New York, frogs made up 26.4% of all ingested prey volume (STEWART & SANDISON 1972). However, reports of hylids preying upon other species of amphibians are scarce (TOLEDO et al. 2007). By applying the methodology of stomach-flushing in males of Hypsiboas faber, SOLÉ et al (2004) found two species of frogs as prey: Scinax granulatus and Aplastodiscus perviridis. In a review of frogs as prey of vertebrates, TOLEDO et al. (2007) found 243 records of predation, of which 33 (13.6%) corresponded to frogs preying upon other frogs, but only one record of hylids as predators. Recently, MOURA & FEIO (2010) reported a H. faber preying upon a S. aff. perereca, and CEN-TENO et al. (2010) recorded H. albomarginatus preying on a S. littoralis. This is the first report of a predation event on an anuran by H. semilineatus. As no comprehensive studies on the diet of this species have been published until now we do not know if anurans might play an important role in its diet or if they are only sporadically ingested. Further studies on a larger set of individuals are needed to answer this question.

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