

Predation on the lizard *Alopoglossus angulatus* (Squamata: Gymnophthalmidae) by the Smoky Jungle Frog, *Leptodactylus pentadactylus* (Anura: Leptodactylidae) in Central Amazonia

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Invertebrates seem to account for the majority of the diet of most anurans (Duellman and Trueb, 1994). However, some large anurans, such as *Ceratophrys cornuta*, *Rhinella marina*, and *Lithobates catesbeianus* (Savage, 2002; Duellman, 2005; Wu et al., 2005), and also species of the genus *Leptodactylus* (Gouveia et al., 2009; Solé et al., 2009; Fonseca et al., 2012) are known to prey on vertebrates (fishes, anurans, reptiles, and small mammals). In such cases, vertebrates are ingested more or less frequently, but usually as part of a generalist and opportunistic diet rather than being selectively preyed by the frogs (Wells, 2007). Nevertheless, despite being only occasionally eaten, vertebrates provide important contributions in terms of ingested biomass (Duellman and Lizana, 1994; França et al., 2004).

The Smoky Jungle Frog, *Leptodactylus pentadactylus* (Laurenti, 1768), is a large Neotropical anuran, distributed along the Amazon basin in Bolivia, Brazil, Colombia, Ecuador, French Guiana, Peru, and Suriname (Heyer, 2005). It has nocturnal and terrestrial habits, usually occurring in lowlands near streams in primary forest (Rodríguez and Duellman, 1994; Faria da Costa et al., 2013). A previous study (Galatti, 1992) in Central Amazonia showed that *L. pentadactylus* feeds on a variety of arthropods and other invertebrates, while Duellman (1978) also found anuran remains in the stomach of one individual. Despite the lack of information on the diet of this species, it seems that *L.*

pentadactylus has a generalist diet. In this study, we report the first case of *L. pentadactylus* preying on a squamate.

On 31 January 2013 at 20:17h, we retrieved a small lizard, *Alopoglossus angulatus* (Linnaeus, 1758) (snout-vent length: 40.32 mm; Figure 1) while stomach-flushing (Solé et al., 2005) a subadult *L. pentadactylus*. The frog, measuring 99.8 mm (snout-vent length) was captured as part of a population study, near the margin of a stream, in the urban forest fragment of the Universidade Federal do Amazonas (UFAM; -3.104472°S, -59.978583°W; 52 m a.s.l.; DATUM = WGS84), Manaus, Amazonas, northern Brazil. The procedure was done on location and the frog was subsequently released on the same place where it was captured. The state of decomposition of the lizard was not advanced (fragmented tail and thorn left posterior member), so we were able to measure and identify it to the species level, based on morphological characteristics (size, body, and head scales) and its geographic distribution (Avila-Pires, 1995). The lizard was fixed with 10% formalin and conserved in 70% ethanol and was deposited in the Paulo Bührnheim Zoological Collection at Universidade Federal do Amazonas, Manaus, Brazil (CZPB-UFAM-Reptilia 0048).

Alopoglossus angulatus is a small amazonian lizard, commonly associated with damp leaf litter near water bodies where it consumes arthropods (Vitt et al., 2007; Vitt et al., 2008). Since *A. angulatus* shares the same kind of habitat and prey with *L. pentadactylus*, and also shows nocturnal activity (Hoogmoed and Avila-Pires, 1989), encounters between the two species may be frequent. While we do not know how the predation took place, the frog could have used a sit-and-wait strategy to capture the lizard, or the lizard could have accidentally entered the frog's burrow during daytime. Regardless, this report further establishes *Leptodactylus pentadactylus* as a generalist and opportunistic feeder.

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Figure 1. *Alopoglossus angulatus* found in the stomach of the *Leptodactylus pentadactylus*, campus of the Universidade Federal do Amazonas, Manaus, Amazonas, Brazil. Scale: in cm.

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