Predation on Amphisbaena fuliginosa Linnaeus, 1758 by Anilius scytale (Linnaeus, 1758) in the southwestern Brazilian Amazon

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One of the most important aspects of an organism's life is its feeding habit, and detailed dietary information is necessary to an understanding of ecology and behaviour (e.g., Clark, 2002; Maschio et al., 2010). However, for nocturnal and fossorial snakes, most of this knowledge is only obtained through serendipitous single observations or by the analysis of stomach contents (Maschio et al., 2010).

The Coral Cylinder Snake, Anilius scytale (Linnaeus, 1758), is distributed throughout the Amazon rainforest, the Brazilian Cerrado, and the humid forests enclaves in the Caatinga biome (Beebe, 1946; Duellman, 1978; Cunha and Nascimento, 1993; Silva-Jr. and Puorto, 2001; Catenazzi et al., 2013; Maschio et al., 2010; Cruz-da-Silva et al., 2018). This species has a reddish orange dorsal colour pattern with wide black spots that fuse middorsally to form black bands and create a pattern similar to that of true coral snakes (Savage and Slowinski, 1992; Martins and Oliveira, 1999; Cruzda-Silva et al., 2018). This snake is active both during the day and at night, has fossorial habits, and is usually associated with water bodies (Martins and Oliveira, 1999; Sawaya, 2010). When threatened, individuals may exhibit the defensive behaviour of a tail display (Sawaya, 2010). Apparently, this species feeds mainly on elongate fossorial or aquatic vertebrates (Beebe, 1946; Cunha and Nascimento 1978, 1981; Greene 1983; Martins and Oliveira, 1999; Maschio et al., 2010).

Herein, we present additional information on the feeding habits of A. scytale from an understudied region of the southwestern Brazilian Amazon. The observation was made at the Military Jungle Police Base in Porto Velho Municipality, Rondônia State, Brazil (9.0921°S, 64.0278°W, elevation 107 meters; Datum SIRGAS 2000). On 4 January 2021 at 17:42 h, a local resident killed a Coral Cylinder Snake (Fig. 1A), which was latter donated to the Coleção Herpetológica at the Universidade Federal de Rondônia (UFRO-HEP). At the laboratory, the specimen was dissected and an amphisbaenid (Amphisbaena fuliginosa Linnaeus, 1758) was discovered in its stomach (Fig. 1B). Both specimens were accessioned into the collection (voucher numbers UFRO-HEP 003319 for A. scytale and UFRO-HEP 003322 for A. fuliginosa). The prey weighed 10.7 g with a total length of 196 mm, while the snake weighed 196.7 g and was four times larger than the amphisbaenian (total length 790 mm). The much smaller length of the prey reinforces the tendency of A. scytale to consume proportionally smaller and elongated prey (Maschio et al., 2010).

Amphisbaenians are popularly known as worm lizards and constitute a monophyletic group of squamate reptiles (Gans, 2005; Vidal et al., 2008), within which the family Amphisbaenidae comprises about 90% of species (Uetz et al., 2022). The Speckled Worm Lizard, Amphisbaena fuliginosa, is considered a polytypic species composed of five subspecies (Vanzolini, 2002). It has a robust body characterized by a maximum total length of 500 mm, 6-10 precloacal pores, 190-220 body rings, 23-30 tail rings, and a characteristic mosaic colour pattern on its dorsal and ventral sides (Vanzolini, 2002). This species occurs in forest areas of the Amazon (Chalkidis, 2000) and in open formations of the Brazilian Cerrado (Colli et al., 2002; Vanzolini, 2002). It is nocturnal, feeds on small invertebrates, and is predominantly fossorial, spending most of its time in underground tunnels (Gans, 1974).

This report represents a novel prey-predator interaction for an understudied site in the Brazilian

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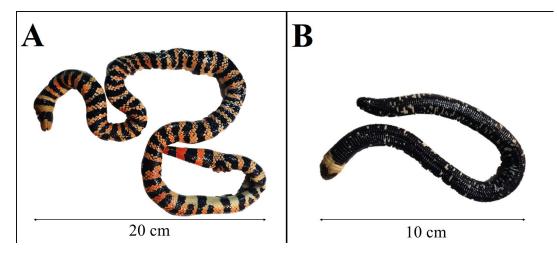


Figure 1. (A) *Anilius scytale* (UFRO-HEP 003319) from Porto Velho Municipality, Rondônia State, Brazil, killed by a farmer. (B) *Amphisbaena fuliginosa* (UFRO-HEP 003322) from the same snake's stomach. Photos by Raul A. Pommer-Barbosa.

Amazon. Most studies have so far focused on more northern and eastern localities (Cunha and Nascimento 1978, 1981; Martins and Oliveira, 1999; Maschio et al., 2007, 2010). This predation report expands the knowledge about the natural history of both species, contributing novel information about the feeding habits of *A. scytale* and the predators of *A. fuliginosa*. Basic aspects of the natural history of *A. fuliginosa* are still unknown, mainly due to its secretive habits, which make it difficult to observe and collect, and restrict natural history observations mostly to casual encounters (Nascimento, 1998).

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