Predation Record of *Dipoglossus fasciatus* (Squamata: Diploglossidae) by *Salvator merianae* (Squamata: Teiidae) in Caverna do Diabo State Park, São Paulo, Brazil

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The tegu lizard *Salvator merianae* (Duméril & Bibron, 1839) is a member of Teiidae characterized by large size, between 1200 to 1500 mm total length and weighing over 4.5 kg (Fitzgerald, 1992; Diniz et al., 2021). This species is terrestrial and exhibits a generalist diet, consuming a range of items including plants, invertebrates, fish, amphibians, reptiles, birds, and small mammals (Sazima & D'angelo, 2013; Cano et al., 2015; Kasperoviczus et al., 2015; Hipolito & Sazima, 2018; Vieira et al., 2018; Diniz et al., 2021). Reports have also indicated instances of it preying on the eggs of ground nesting birds and reptiles (Sazima & D'angelo, 2013; Bovendorp et al.,2008; Mazzotti et al., 2014; Galetti et al., 2009) and regurgitating remains from seabirds (Muscat et al., 2016). Its habitat ranges from French Guiana to Uruguay, encompassing Brazil, Bolivia, Paraguay, and Argentina. Within Brazil, it is found across various biomes and has a wide distribution within the Atlantic Forest (Dirksen & Riva, 1999; Bertoluci et al., 2009; Avila et al., 2013; Cano et al., 2015; Cassiali et al., 2016; Lima et al., 2021).

The lizard *Diploglossus fasciatus* (Gray, 1831), of the family Diploglossidae, is distributed from the Peruvian Amazon to the Atlantic Forest in southern Brazil (Avila-Pires, 1995; Marques & Sazima, 2004). Measuring from 105 to 170 mm snout-vent length, it is a terrestrial and diurnal species (Avila-Pires, 1995), and may also have arboreal habits (Marques & Sazima, 2004).

On 19 March 2023, at 2:47 pm, we recorded an event of predation in-

volving *Salvator merianae* on *Diploglossus fasciatus* in a grassy area within the Caverna do Diabo State Park (24°38′08.95″ S; 48°24′16.39″ W). The Caverna do Diabo State Park is a conservation unit encompassing 40,219.66 hectares of Atlantic Forest in the Vale do Ribeira region of the state of São Paulo. It spans across the municipalities of Barra do Turvo, Cajati, Eldorado, and Iporanga. At the time of the encounter, *S. merianae* had almost completely swallowed the *Diploglossus fasciatus*. Only a portion of the tail and hind limbs were visible outside the mouth (Figure 1). We observed the predation for 30 minutes until the *D. fasciatus* was completely ingested. We identified the prey as *D. fasciatus* based on the visible coloration and structural patterns. The species exhibits short limbs and a round tail with a tapered tip. Its coloration is vibrant, with golden tones and dark transverse bands forming rings around the tail, as described by Avila-Pires (1995).

We conducted a literature search for *Diploglossus fasciatus* predation by *Salvator merianae* using the Google Scholar platform between 2 August 2023 and 1 September 2023. The search comprised the following terms: predação OR presa OR predador OR depredación OR predación OR depredador OR predation OR prey OR predator OR diet OR dieta OR *Salvator merianae* OR *Tupinambis merianae* OR *Tupinambis teguixin* (former name of this species [Avila-Pires, 1995]) AND "*Diploglossus fasciatus*". Grey literature (technical reports, abstracts from events, monographs, dissertations, and theses) was not considered. Additionally, we consulted compilations of squamate predation, such as Schalk & Cove (2018). We encountered literature documenting Tegu lizards preying on lizards from the families Anguidae, Iguanidae, and Polychrotidae (Offner et al., 2021); Scincidae (Silva-Jr et al., 2005, Gaiotto et al., 2021); Teiidae (Silva et al., 2014); and Tropiduridae (Silva et al., 2013). However, there were no records of predation on diploglossids, making this a novel finding for the diet of *S. merianae*.

This may also be the first documented record of predation on the species *D. fasciatus*. In the literature, records of predation involving lizards of the genus *Diploglossus* as prey are extremely rare. Only one likely event of predation of *D. monotropis* (Kuhl, 1820) by *Eurypyga helias* (Selby, 1840) (Aves: Eurypygidae) was described by Acosta-Chaves & Zuñiga (2013) in Costa Rica. The scarcity of these predation events may be related to the lack of information about the natural history of *Diploglossus*, due to its discreet habits (Solórzano, 2001). On the other hand, *D. fasciatus* is reported to mimic *Rhinocricus* sp., a toxic millipede (Shear, 2015), which may discourage potential predators.

Although *D. fasciatus* is best known as inhabiting forested areas, it can also be found at forest edges and urban areas (Marques & Sazima, 2004; Costa et al., 2009), and the reported predator, *Salvator merianae*, occurs in different environments (e.g. Schaumburga et al., 2014; Muscat et al., 2016; Goetz et al., 2021). Both species are frequently observed in a forest edge area within Caverna do Diabo State Park (pers. obs.), which might have facilitated the predation event. Further field observations may unveil additional details regarding the prey-predator interaction between these species. Predation records are essential for gaining a deeper understanding of trophic relationships between species. In the case of *Diploglossus fasciatus*, data like these are crucial because it is a species with limited natural history information.

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Figura 1. *Salvator merianae* preying on a *Dipoglossus fasciatus* lizard in in Caverna do Diabo State Park, São Paulo, Brazil.