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Predation of *Mussurana bicolor* (Serpentes, Dipsadidae) upon *Leptodactylus podicipinus* (Anura, Leptodactylidae) in the Pantanal, Brazil

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Studies on snake trophic ecology are important to understand several of their evolutionary traits (Kardong et al., 1996; Sherratt et al., 2018). However, reports on predation events are dependent on fortuitous observations in the wild due their secretive habits, and dependence of such observations limits the understanding of snake trophic ecology (Bernarde, 2007). Snakes of the tribe Pseudoboini have been the focus of natural history studies (e.g., Alencar et al., 2013; Gaiarsa et al., 2013), which have shown a general tendency to prey on lizards and snakes. Therefore, most of the *Mussurana* species present ophiophagous behavior, but data on the diet of *Mussurana bicolor* (Peracca, 1904) are scarce, and the few records regarding its trophic ecology suggest it as one of the few pseudobonine that feeds on amphibians (Gaiarsa et al., 2013). *Mussurana bicolor* is distributed in Southwestern Brazil, Paraguay and North of Argentina, and it occurs in open areas of the Pantanal and Chaco regions (Gaiarsa et al., 2013). *Leptodactylus podicipinus* (Cope, 1862) is a small and widely distributed leptodactylid frog, occupying open formations of Paraguay, Argentina, Bolivia, northwestern Uruguay, and central Brazil (Frost, 2018). It has been recorded as prey for some vertebrate species (e.g., Briso et al., 2014; Oda et al., 2014), showing its important role in the trophic chain where it occurs. In this work, we observed an attempt of predation of *Mussurana bicolor* upon the frog *Leptodactylus podicipinus*.

During field work on Base de Estudos do Pantanal (-19.576578ºS, -57.018904ºW), municipality of Corumbá, state of Mato Grosso do Sul, Brazil, we observed an individual of *Mussurana bicolor* (IBSP 90288, snout-vent length [SVL] 425.00 mm) in a predation attempt upon a female of *Leptodactylus podicipinus* (ZUFMS-AMP 11333, SVL 37.90 mm). This attempt of predation was observed at 21:00h in a permanent swamp. When we found this predatory event, the snake was biting the frog in the posterior members while constricting it (Fig. 1).

Mussurana snakes are well known by their ophiophagus predatory habits, feeding on different terrestrial, semi-aquatic and fossorial snakes (Alencar et al., 2013).

Figure 1. Predation attempt of *Mussurana bicolor* (IBSP 90288) upon *Leptodactylus podicipinus* (ZUFMS-AMP 11333) in the Pantanal, Base de Estudos do Pantanal, municipality of Corumbá, state of Mato Grosso do Sul, Brazil.

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Despite the few records on *M. bicolor*'s diet in the same studied area, there is a record of it preying upon the water snake *Helicops leopardinus* (Fiorillo et al., 2013), reinforcing the ophiofagous habit of *Mussurana* species, even in the Pantanal wetland. *M. bicolor* is one of the few species of the genus feeding on amphibians (Gaiarsa et al., 2013), showing that this species has a wider range of prey than its congeners.

The present report is the first record of *L. podicipinus* as prey of *M. bicolor*, and the fourth of an anuran as its prey (Strüssmann, 1992; Yanosky et al., 1996; Gaiarsa et al., 2013). Given the high abundance of *L. podicipinus* in the Pantanal, its common occurrence throughout the year (Prado et al., 2005), this observed predator-prey interaction between *M. bicolor* and *L. podicipinus* might suggest that it is frequent in the Pantanal, where both species co-occur.

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