

NATURAL HISTORY NOTES

TRACHYCEPHALUS TYPHONIUS

(amazon milk frog): PREDATION. The genus *Trachycephalus* includes twelve species distributed across the lowlands of Mexico, Central and South America where they can be found east of the Andes, south to northern Argentina and eastern Brazil (Frost, 2011). These species are known to produce a secretion that can be irritating to skin and mucous membranes (Rodríguez & Duellman, 1994).

Between the various pressures that affect the community structure of frogs, predation is considered an important factor (Duellman & Trueb, 1994). Although predation events are difficult to observe, we believe that they are frequent, as potential predators are logged and must be fed with some regularity (Pombal Jr., 2007).

Amphibians are a relevant component of the trophic chain in natural ecosystems, being common prey for a great variety of vertebrates (fishes, reptiles, birds and mammals), arthropods (ants, beetles, water bugs, spiders and crabs), and even carnivorous plants (Duellman & Trueb, 1994; Toledo, 2005; Toledo et al., 2007). Here we report the predation of an adult amazon milk frog, *T. typhonius* by the wolf fish, *Hoplias* sp.1 (see Graça & Pavanelli, 2007).

On September 2011, an adult of *Hoplias* sp.1 (25 cm TL) was collected during field work of the project PELD (Pesquisas Ecológicas de Longa Duração, "A Planície Alagável do Alto Rio Paraná" - site 6) in the upper Paraná river basin floodplain, state of Paraná, Brazil. The fish was sacrificed with an overdose of anaesthetic Benzocaine, which we then dissected. A medioventral incision was made to expose the stomach, which was sectioned longitudinally. The stomach content was removed and we observed a prey already in an advanced stage of digestion. We identified this item as an adult of *T. typhonius* (Figure 1).

Previous records of amphibian predation by species of the genus *Hoplias* are scarce. Haddad & Bastos (1997), reported the predation of *Rhinella ornata* by *Hoplias cf. malabaricus*; Queiroz (2012), on predation of *Physalaemus biligonigerus*



Figure 1. Example of *Trachycephalus typhonius*.

by *Hoplias* sp and Andrade et al. (2012), on predation of *Leptodactylus macrosternum* by *Hoplias malabaricus*. Most reports of amphibian predations by fishes available in the literature are members of the family Angillidae, Centrarchidae, Characidae and Salmonidae (see Toledo et al., 2007).

The wolf fish is an ambush predator, with a "sit-and-wait" strategy when hunting (Winemiller, 1989; Sabino & Zuanon, 1998; Petry et al., 2010). It prefers benthic habits, being found in rivers and lakes, especially in shallow water environments and near submerged or marginal vegetation (Bistoni et al., 1995; Resende et al., 1996; Sabino & Zuanon, 1998). We hypothesized that predation of *T. typhonius* by *Hoplias* sp.1 occurred opportunistically, by the presence of the treefrog floating in the water near or inside the bank of aquatic macrophytes.

The diet of species of the genus *Hoplias* is composed mainly of fish prey (Loureiro & Hahn, 1996; Carvalho et al., 2002; Corrêa & Piedras, 2009). However, this is the first record of *T. typhonius* in its diet.

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