Predator-prey interactions play an important role to determine abundance and population dynamics in anuran tadpoles (Hero et al., 2001; Wilbur, 1997). Both vertebrate and invertebrate predators have a great impact in both structure and composition of anuran larval communities (Wells, 2007). Within invertebrates, spiders have been recognized as one of the most important groups of tadpole predators in the Neotropics (Menin et al., 2005; Toledo, 2005). In this region, some families of Araneae (e.g., Pisauridae) are known to feed on anuran tadpoles (Bastos et al., 1994; Menin et al., 2005).

Spiders of Pisauridae family are sit-and-wait predators using the surface of the water to stalk and capture their prey (Azevedo and Smith, 2004; Bastos et al., 1994). The semi-aquatic spiders of Pisauridae family, such as species of the genus *Thaumasia* (Perty, 1833), find their prey through vibrations on the surface of the water. Once these spiders find and capture a prey, they carry their prey to a terrestrial retreat site (i.e., leaf and/or soil on the edge of the water body) and consume it (Pereira, 2009). Here, we report a predation event by the semi-aquatic spider *Thaumasia* sp. preying upon a treefrog tadpole *Itapotihyla langsdorffii* (Duméril and Bibron, 1841).

We observed this event at Parque Estadual das Restingas de Bertioga, municipality of Bertioga, São Paulo state, southeastern Brazil (−23.7989; −45.9978, 10 m above sea level). At that moment, both prey and predator were on top of a leaf of an herbaceous plant, 14 cm above water surface, and at the edge of a small pond. The chelicerae of the spider pierced tadpole’s head, which was likely dead. We recorded the event and collected both spider and tadpole. The spider was deposited in Coleção de Artrópodes of Instituto Butantan (voucher #: IBSP 160900) and the tadpole was deposited in the collection of Museu de Zoologia of Universidade Estadual de Campinas (voucher #: ZUEC 17770).

The water bugs (Hemiptera: Belostomatidae) and dragonfly naiads (Odonata: Libellulidae) have been widely used in experimental studies investigating the effects of predation on tadpole population dynamics and community structure in similar ecosystems (e.g., Kopp et al., 2006; Heyer et al., 1975). Our recent observation indicates that spiders may also serve as model organisms in studies on predator-prey interactions at Neotropical region, as both (i.e. tadpoles and spiders) are very abundant in ponds and lakes in this region (Costa-Pereira et al. 2007). Tadpoles of *Itapotihyla langsdorffii* were recently described by Pimenta and Canedo (2007), but little is known about their microhabitat use or basic ecology. We observed tadpoles of *I. langsdorffii* swimming in the same pond. These tadpoles were swimming constantly to the bottom of the pond, and emerging again up to surface. We believe that semi-aquatic spiders may take advantage of this behavior to capture tadpoles, i.e., when spiders are floating on surface of water, they can prey the tadpoles that are emerging up to the surface.

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References


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