On the snake *Siphlophis worontzowi* (Prado, 1940): notes on its distribution, diet and morphological data

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**Abstract:** We provide geographic data for the poorly known dipsadid *Siphlophis worontzowi* including the first records to the Tocantins state and on the left bank of Madeira River at Rondônia State. Our data also extend its distribution on Mato Grosso State. We also provide new morphometric, meristic and ecological data to the knowledge of this species.

**Key words:** herpetofauna, Amazon dipsadid, ecology, natural history

The snake *Siphlophis worontzowi* (Prado 1940) is an Amazonian dipsadid widely distributed occurring from Santarém, Pará state, Brazil to Tinkanari, Cuzco, Peru (Prado 1940; Silva-Jr. 1993; Zaher and Prudente 1999; Santos-Jr. et al. 2003; Vries-endorp et al. 2004; Frota et al. 2005; Bernarde and Abe 2006, Moravec et al., 2009; Costa et al. 2010; Kawashita-Ribeiro et al. 2011; Bernarde et al. 2012; Matos and Melo-Sampaio 2013). Although these records cover a wide area of the Amazon basin they account only for a few localities; all of them on the south (right bank) of Amazon and Madeira Rivers. Both rivers are known to be important vicariant barriers for many faunal groups separating sister lineages (Ayres and Cluttonbrock 1981) and known to be important vicariant barriers for many faunal groups separating sister lineages (Ayres and Cluttonbrock 1981) and South (right bank) of Amazon and Madeira Rivers. Both rivers account only for a few localities; all of them on the south (right bank) of Amazon and Madeira Rivers. Both rivers are known to be important vicariant barriers for many faunal groups separating sister lineages (Ayres and Cluttonbrock 1981).

The genus *Siphlophis* is considered a forest dweller with semi-arboreal and nocturnal habits, feeding mainly upon lizards (Martins and Oliveira 1998; Marques et al. 2001; Mollo Neto et al. 2013). Despite the information provided for some species of the genus, littile is still known about the biology of the species *Siphlophis worontzowi*. The few specimens mentioned in the literature were found in forested areas, primary or disturbed forests, usually climbing or roosting on the vegetation generally at night (Bernarde and Abe 2006; Moravec et al. 2009; Costa et al. 2010). Its dietary preferences are also poorly known and Prudente et al. (1998), Bernarde and Abe (2006) and Gaiarsa et al. (2013) describe only four items: three lizard species (*Iphisa elegans*, *Gonatodes humeralis* and *Hemidactylus mabouia*) and a frog without identification.

Herein, we add new distributional data on this poorly known species providing the first record on the left bank of Madeira River at Rondônia State and the first record on the Tocantins State. Our data also extend its distribution south-eastward over the state of Mato Grosso, Brazil. Additionally we present new morphometric and meristic data as well as habitat and diet information.

We analyzed eleven specimens of *Siphlophis worontzowi* deposited at the Herpetological Collection of Museu de Zoologia da Universidade de São Paulo (MZUSP), São Paulo, Brazil. Five of them were found during a three-year (2010–2012) sampling project taken at forests of Rondônia state. This area comprises both banks of Madeira River (for detailed effort spent and habitat description see Teixeira et al. 2013), an area dominated by *várzea* forest, with dense leaf litter and relatively open canopy.

Specimens examined add five new localities to the currently known distribution of the species (Figure 1). Two individuals (MZUSP 19290 and MZUSP 19289) (Figure 2a, b) were collected on April 2011 at Babaculândia municipality (06°59′43″S, 047°32′47″W, 160 m above sea level [a.s.l.]) in the gallery forest of Tocantins River, Tocantins state, representing the first record of *S. worontzowi* for the state. These two specimens also represents the easternmost record for the species, extending its distribution range ca. 900 km from the closest record at Santarém, Pará (Santos-Jr. et al. 2003). This last record creates a large gap in its distribution along central-eastern Pará, probably due to incipient sampling effort (Cunha et al. 1985; Nascimento et al. 1991; Prudente and Santos-Costa 2005; da Silva et al. 2011; Bernardo et al. 2012) allied to its local rariness.

Three new records from Mato Grosso state also extend the distribution of *S. worontzowi*. The specimen MZUSP 11345 from São José do Rio Claro municipality (ca. 13°25′S, 056°42′W), extends ca. 350 km southwards and 450 km southeastwards the species distribution from the closest records at Alta Floresta municipality, Mato Grosso state and Espigão D’Oeste municipality, Rondônia state, respectively (Zaher and Prudente 1999; Bernarde and Abe 2006; Costa et al. 2010). MZUSP 11251 was collected at Cláudia municipality, located in the east-central part of Mato Grosso state (ca. 11°29′S, 054°53′W) and ca. 200 km southeastwards from the closest record at Alta Floresta municipality (Costa et al. et al. 2010). MZUSP 11323, was collected at night on 14 June 1997, climbing the vegetation ca. 50 cm above the ground at Juruena
municipality (10°19'25" S, 058°29'84" W, 272 m a.s.l.), 100 km from Aripuanã and 230 km from Alta Floresta, the closest records (Costa et al. 2010). The sixth specimen analyzed, MZUSP 19797, is from Porto Velho municipality, Rondônia state (Approximately coordinate: 08°45' S, 063°54' W) about 100 km from Samuel Power Plant (Silva-Jr. 1993).

An unpublished record of Siphlophis worontzowi from Campo Grande municipality, Mato Grosso do Sul state, was based on an individual housed at the Herpetological collection of the Instituto Butantan (IB 29074), São Paulo, Brazil (M. Gaiarsa, pers. comm.). Unfortunately, this individual is probably lost now. It was recorded in the collection catalogue previously to a fire accident on May 2010, which destroyed most of the specimens housed there. As we could not properly verify its identity, we only indicate its putative presence in Mato Grosso do Sul. If confirmed, this record would be the first of S. worontzowi in this state extending its distribution southwards in about 800 km from the closest record at São José do Rio Claro, Mato Grosso, Brazil (this study).

Among the five specimens collected at Porto Velho, three were found at the right bank of Madeira River. MZUSP 19464 and MZUSP 20782 were found near the old district of Mutum-Paraná (09°36'14.85" S, 065°03'31.35" W, 106 m a.s.l.), on 20 April 2011 and 14 October 2012, respectively, at night. The former was found around 22:00 climbing a palm leaf 2 m above the ground; the later was moving in the leaf litter around 20:00. MZUSP 20781 (Figure 3A) was found at night on 9 October 2012 (around 23:00) near the district of Abunã (09°35'52.87" S, 065°21'48.64" W, 115 m a.s.l.), 5 m above the ground, active on the vegetation. This specimen had fed upon a Copeoglossum nigropunctatum (Spix, 1825) (MZUSP 103868), a lizard commonly found at that area (pers. observ.), representing a new diet record for this species. The skink was partially digested but most of the body was preserved.
Figure 2. *Siphlophis worontzowi*. A: MZUSP 19290. B: MZUSP 19289, both from Babaçulândia municipality, Tocantins state, Brazil.

Figure 3. *Siphlophis worontzowi*. A: MZUSP 20781 found at the right bank of Madeira River. This specimen had preyed upon a *Copeoglossum nigropunctatum*, note the expansion on the middle body; B: MZUSP 19751 found in the left bank of the Madeira River, both at municipality of Porto Velho, Rondônia state, Brazil.
allowing its identification. The other two specimens were found on the left bank of Madeira River. MZUSP 19751 (Figure 3B) was found on 8 July 2011, on the ground at noon, near the district of Abunã (09°38′02″S, 065°26′00″W, 114 m a.s.l.) and MZUSP 20467 on 5 February 2012, on the ground at night (around 21:00) near the Caiçara waterfall (in the vicinity of the district of Nova Mutum Paraná) (09°26′33″S, 064°50′23.72″W, 115 m a.s.l.). The previously closest records from all these five specimens were: Samuel Power Plant, Rondônia, Brazil (Silva-Jr. 1993), it is the third supralabial that contact the eye.

Table 1. Morphometric and meristic data from all eleven individual analyzed and others from literature; 1Prado, 1940; 2Costa et al. 2010; 3Moravec et al. 2009; 4Silva-Jr., 1993. **?**: lack of information; F: Female; IL: infralabials; M: Male; PrO: Pre-ocular scale; PsO: Pos-ocular scales; SL: supralabials; SVL: Snout-vent length; TL: Tail length.

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