

Oxyrhopus petolarius (Linnaeus, 1758) (Serpentes, Dipsadidae): Distribution extension and new departmental record for Paraguay

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ABSTRACT: We present the first record of *Oxyrhopus petolarius* for Departamento Itapúa, Paraguay. This record extends the species known distribution in approximately 166 km southwest from Puerto Bertoni in Departamento Alto Paraná, representing the southernmost record for the species and highlights the importance of protecting the remaining Atlantic Forest patches in Paraguay.

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Oxyrhopus petolarius (Linnaeus, 1758) is a medium size snake belonging to the tribe Pseudoboini (Zaher *et al.* 2009; Grazziotin *et al.* 2012) with an evident ontogenetic color change (Giraudo 2001). It is characterized by a black dorsum with anterior white and posterior red bands but with black snout, adults with iridescent black dorsum with reddish diffuse bands (not forming triads) and yellowish venter, 19/19/17 dorsal scales rows, 160–211 ventrals, and 81–101 subcaudal pairs (Giraudo 2001; MacCulloch *et al.* 2009; Lopez and Prado 2012). Often recorded under the name *Oxyrhopus petola*, after taxonomic revision Savage (2011) concluded that the correct name for the species is *Oxyrhopus petolarius*. The species has a broad distribution and is found southern Mexico, through Central America, and into South America (Bailey 1970; Lynch 2009; MacCulloch *et al.* 2009). At the east of the Andes, it is known to occur south to the northernmost extreme of Provincia Misiones in Argentina (Bailey 1970; Giraudo 2001; Giraudo and Scrocchi 2002; Lopez and Prado 2012). In Paraguay, *O. petolarius* is known only from records on its eastern border with Brazil (Cacciali 2009). Based on the previous records the species reaches its southernmost record in the state of Paraná in Brazil (Bérnils *et al.* 2007).

During a review of specimens housed in the Museo Nacional de Historia Natural del Paraguay (MNHNP), San Lorenzo, Paraguay, we found an overlooked specimen of *Oxyrhopus petolarius* which was collected 1 km northeast of the headquarters of the Centro de Mecanización Agrícola (CEMA), in Departamento Itapúa near to Pirapo city, on 21 September 1997 by Norman Scott, Lucy Aquino, Ismael Mora, and Oscar Romero, 26°54'51" S, 55°29'40" W, voucher MNHNP 11800. The specimen is a juvenile male, with the following measurements and characteristics: snout-vent length 31 cm, tail length 9.3 cm, 203 ventrals, and 98 paired subcaudals; 1/1 preoculars; 2/2 postoculars;

8/8 supralabials, four and five contacting the orbit; 10/10 infralabials, one to five contacting the chinshields; temporal plates 1+3/2+2; dorsal scales 19/19/17. The dorsum of head is mostly black in this preserved specimen, with only the temporals and supralabials six, seven, and eight being white; the infralabials and gular region are completely white, and a white nuchal collar 4 scales wide is present. The dorsal coloration of the body is black with 20 white bands; the black color does not reach the ventral region, which is completely white (Figures 1 and 2).

Oxyrhopus petolarius has been recorded twice in Paraguay, once in Puerto Bertoni (Academy of Natural Sciences of Philadelphia, Philadelphia, USA, voucher ANSP 32581), and also in the Itaipú complex of protected areas (Museo Ambiental de Itaipú, Hernandarias, Paraguay, vouchers MAI 61, 62, 81, and 94, without precise



FIGURE 1. Dorsal view of *Oxyrhopus petolarius* (MNHNP 11800), Departamento Itapúa, Paraguay.



FIGURE 2. Ventral view of *Oxyrhopus petolarius* (MNHP 11800), Departamento Itapúa, Paraguay.

locality data; Duré Rodas 1995). Both records are from Departamento Alto Paraná in extreme eastern Paraguay, near the Paraná river. Therefore, our new record is only the second with precise locality data from Paraguay, and the first in Departamento Itapúa; it extends the known distribution of the species about 165 km southwest of the nearest localities in Puerto Bertoni, Paraguay, and Provincia Misiones, Argentina (see Figure 3 and Giraudo 2001). Also, this is the new southernmost overall locality record for the species.

Oxyrhopus petolarius is an endangered species categorized as Vulnerable in Paraguay and Argentina (Motte *et al.* 2009; Giraudo *et al.* 2012) mainly because of the habitat destruction in both countries, and the increase of touristic development in Argentina (Cartes 2006; Giraudo 2012). Additionally, this specimen was found in the Atlantic Forest Ecoregion, which is considered a biodiversity hotspot that lost about 90% of its original forest cover (Myers *et al.* 2000; Mittermeier *et al.* 2004).

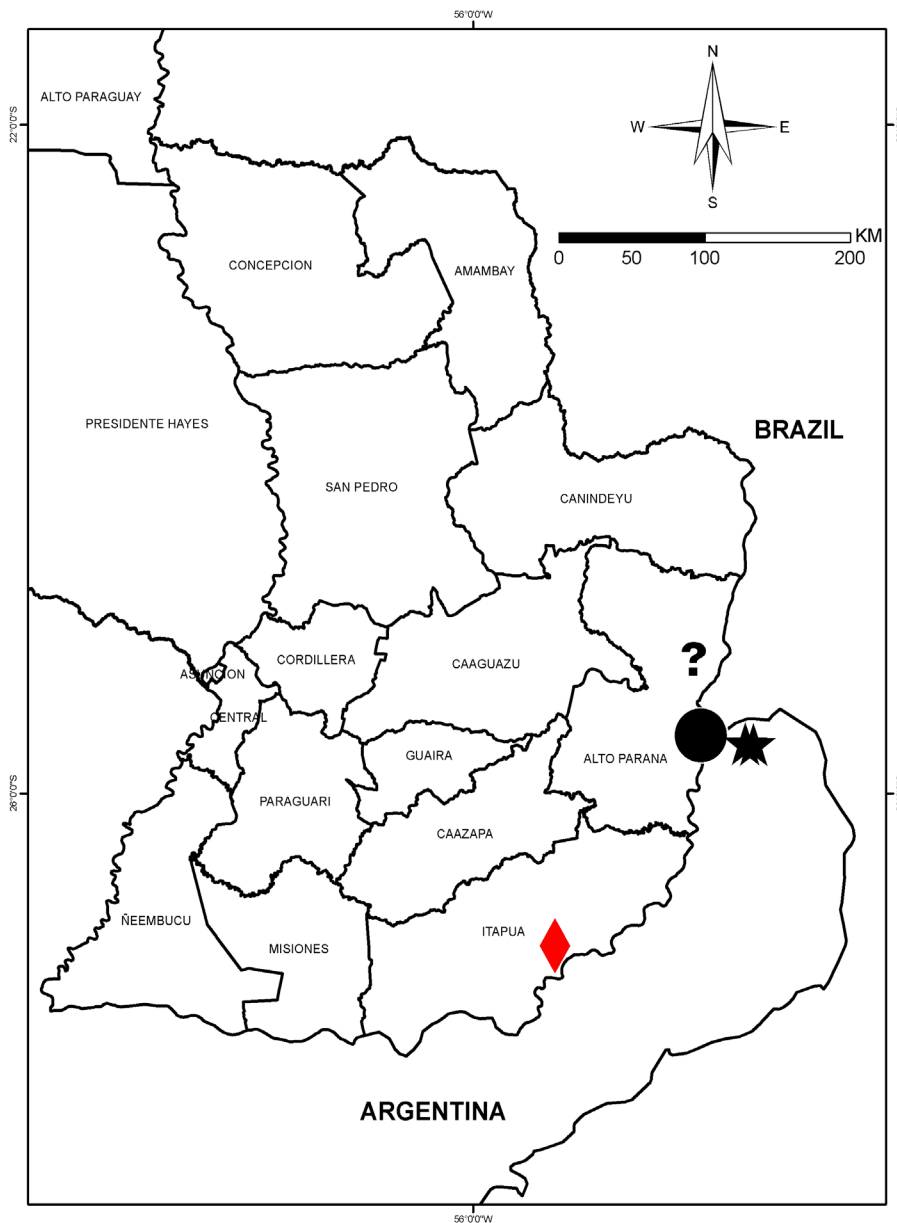


FIGURE 3. Map showing the southernmost records of *Oxyrhopus petolarius* Argentina and Paraguay and the new locality. The black stars are the records in Misiones, Argentina (Giraudo, 2001); the black circle is the Puerto Bertoni locality (ANSP 32581) in Paraguay; the question mark is the approximate locality for the Duré Rodas' (1995) record, and the red diamond represents the new record (MNHP 11800), near Pirapo city, Departamento Itapúa, Paraguay.

The few records of *Oxyrhopus petolarius* in Paraguay, and its limited known distribution in the area, highlights the importance of protecting the remaining Atlantic Forest patches in Paraguay.

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