

# Range extension and geographic distribution of *Amphisbaena mitchelli* Procter, 1923 in the state of Pará, Brazil

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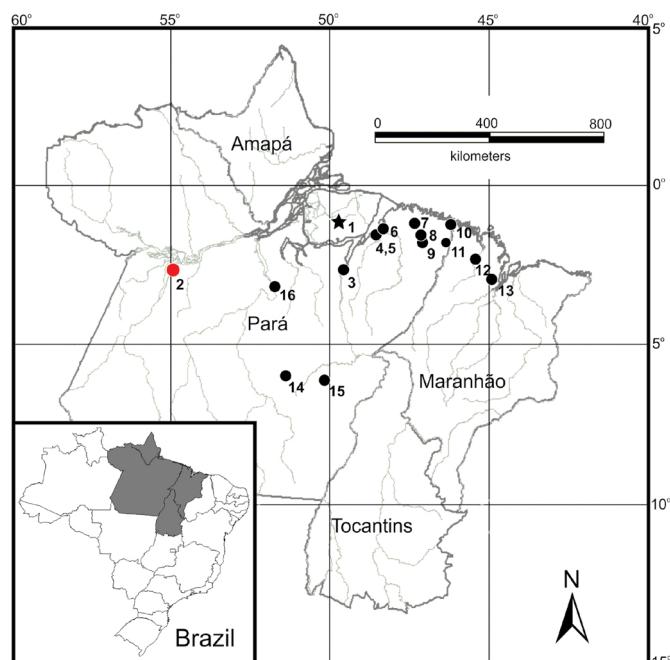
**ABSTRACT:** We present here a new record for *Amphisbaena mitchelli* for the western of Pará State, northern Brazil. The specimen was found in the municipality of Belterra, on the right bank of the Tapajós River, and represents an expansion ca. 350 km west of the previously known geographic distribution of the species.

DOI: 10.15560/10.5.1229

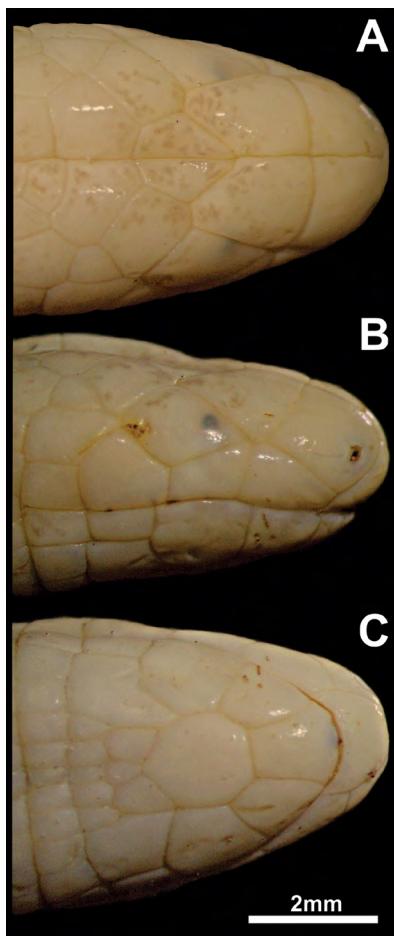
*Amphisbaena mitchelli* Procter, 1923 was described from Ilha do Marajó, state of Pará, Brazil, based on a specimen deposited in the British Museum of Natural History (BMNH 1946.8.2.31) (Gans 1963). This relatively small species is characterized by two elongated (oval) pre-cloacal pores, 203–220 body annuli, 26–29 caudal annuli, autotomic site in the sixth and seventh tail annuli, 12–14 dorsal and 14–16 ventral segments on a midbody annulus. After its description, four publications have presented new distribution data for *A. mitchelli* (Gans 1963, 1964; Hoogmoed and Avila-Pires 1991; Mott *et al.* 2011; Teixeira Jr. *et al.* 2014) and all the known records have been from the northwestern portion of the state of Maranhão to the east of the state of Pará, Brazil (Figure 1). Here we present a new record for *A. mitchelli*, which was collected in the western portion of the state of Pará. This new record contributes to the knowledge of the geographical distribution of this poorly known species.

On 20 October 2010, a specimen of *Amphisbaena mitchelli* (Figures 2 and 3) was captured by local residents of Vila Americana, an urban area of the municipality of Belterra, on the right margin of the Tapajós River and was delivered to one of the authors (LCC). The locality is in the west of the state of Pará, Brazil ( $02^{\circ}38'19.78''$  S;  $54^{\circ}56'30.86''$  W; center of the urban area). The specimen was deposited in the collection of the Linha de Pesquisa em Herpetologia da Amazônia (LPHA), Laboratório de Pesquisas Zoológicas, Faculdades Integradas do Tapajós, municipality of Santarém, state of Pará, Brazil. Meristic data follow Gans and Alexander (1962) and morphometric data follows Perez *et al.* (2012). The measurements were taken with digital calipers having 0.01 mm precision, except for the snout-vent length, which was measured using a flexible ruler

to the nearest millimeter. The voucher specimen (LPHA 4942) has the following morphological characteristics: 145 mm snout-vent length, an autotomized tail of 7.5 mm, 5.3 mm head length (3.7% of snout-vent length), 3.9 mm midbody diameter, two elongate precloacal



**FIGURE 1.** Geographical distribution of *Amphisbaena mitchelli*. Black symbols represent records from literature (Hoogmoed and Avila-Pires 1991; Mott *et al.* 2011; and Teixeira Jr. *et al.* 2014); star represents the type-locality; red circle represents the new record for the municipality of Belterra, state of Pará, Brazil. Localities: 1, Ilha do Marajó (type locality); 2, Belterra; 3, Rio Tocantins (*cf.* Hoogmoed and Avila-Pires 1991); 4, Belém; 5, Ananindeua; 6, Santo Antônio do Tauá; 7, Peixe-boi; 8, Ourém; 9, Santa Luzia, Capitão Poço; 10, Viseu; 11, Colônia Nova; 12, Paruá; 13, Puraqueú; 14, Carajás; 15, Parauapebas; and 16, Juruá, Rio Xingu.



**FIGURE 2.** Specimen of *Amphisbaena mitchelli* (LPHA 4942) from municipality of Belterra, Pará state, Brazil. (A) Dorsal, (B) lateral and (C) ventral view of head.

pores (Figure 3), 213 body annuli, three lateral annuli and seven tail annuli, 13 dorsal and 16 ventral segments in an annuli at a midbody.

This is the first record of *Amphisbaena mitchelli* for the lower Tapajós River and extends the known distribution ca. 350 km west of the nearest localities (Figure 1). This new record suggests that the area of occurrence of *A. mitchelli* is broader than previously recorded, and that its occurrence in the lower Amazon region has been underestimated. Additionally, considering the importance of the zoogeographic information for conservation planning and systematic studies (Nogueira et al. 2011), new surveys are still needed to add to the knowledge of the geographical distribution of many poorly known South American amphisbaenian species [e.g., *Amphisbaena acrobeles* (Ribeiro, Castro-Mello & Nogueira, 2009); *A. arda* Rodrigues, 2003; *A. carli* Pinna, Mendonça, Bocchiglieri & Fernandes, 2010; *A. cuiabana* (Strüssmann & Carvalho, 2001); *A. kraoh* Vanzolini, 1971; *A. neglecta* Dunn & Piatt, 1936; *A.*



**FIGURE 3.** Ventral view of tail, cloaca and precloacal pores of *Amphisbaena mitchelli* (LPHA 4942) from municipality of Belterra, Pará state, Brazil.

*talisae* Vanzolini, 1995; *Mesobaena huebneri* Mertens, 1925; *Mesobaena rhachicephala* Hoogmoed, Pinto, Rocha & Pereira, 2009].

**ACKNOWLEDGEMENTS:** We thank E. Xavier for delivering the captured specimen. We are thankful of P.H. Pinna, P.M.S. Nunes and anonymous reviewer for comments and suggestions; and C.S. Oliveira for help with photographs.

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RECEIVED: February 2014

ACCEPTED: September 2014

PUBLISHED ONLINE: October 2014

EDITORIAL RESPONSIBILITY: Pedro Nunes