

First record of *Bothrops taeniatus* Wagler, 1824 (Reptilia: Viperidae) for the state of Acre, Brazil

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ABSTRACT: An adult specimen of *Bothrops taeniatus* Wagler, 1824 was found in the Municipality of Assis Brasil, in the Rio Acre Ecological Station, Acre, Brazil. This is the first record of this species for the state of Acre, extending the species distribution globally by approximately 164 Km west.

The genus *Bothrops* includes twenty seven species of snakes with distributions across Brazil, particularly in the low Amazonian forests (Campbell and Lamar 2004; Bernils and Costa 2012). One of these species is *Bothrops taeniatus* Wagler 1824, a species ranging across the Guyanas, Suriname, Venezuela, Bolivia, Colombia, Ecuador, Peru and Brazilian Amazon (Campbell and Lamar 2004). In Brazil, the species has been recorded in the states of Amazonas, Pará, Rondônia, Mato Grosso, Goiás (although the record precedes this state's division into Goiás and Tocantins), Roraima and Maranhão (Cunha and Nascimento 1975; Avila-Pires *et al.* 2009). This venomous snake is nocturnal, preferring forested areas where it feeds on small vertebrates (Cunha and Nascimento 1993; Campbell and Lamar 2004).

From 2–17 February 2006, we conducted an expedition to inventory the herpetofauna in the Rio Acre Ecological Station, a protected area situated in the Brazilian state of Acre, on margin of Acre River near the border with Peru. The survey, which constituted part of the data collection for the establishment of a management plan for this protected area, used active search and employed two observers for six hours a day during six days. During this survey a single individual of *B. taeniatus* (Figures 1 and 2) was found (10°57'14" S; 70°18'59" W, 300 masl) within the Municipality of Assis, at 9.00 am, resting upon a small branch close to the ground. The specimen was collected (IBAMA-029/2005-CG-FAU) and deposited at the Federal University of Acre (CHUFAC 380).

This is the first record of this species for the state (Figure 3), extending the overall distribution of the species approximately 164 Km west (Harvey *et al.* 2005) and the distribution of the species within Brazil 440 Km southwest (Campbell and Lamar 2004). This finding confirms the claims of Pierini *et al.* (1996), who despite mentioning the occurrence of the species for the state, did not present a reference specimen or detailed geographic information to substantiate the claim.



FIGURE 1. Lateral view of a male *Bothrops taeniatus*, found under twigs at the Rio Acre Ecological Station, Acre, Brazil (Photo by Bento Viana).



FIGURE 2. Dorsal view of a male *Bothrops taeniatus* (CHUFAC 380), Rio Acre Ecological Station, Acre, Brazil (Photo by Bento Viana).

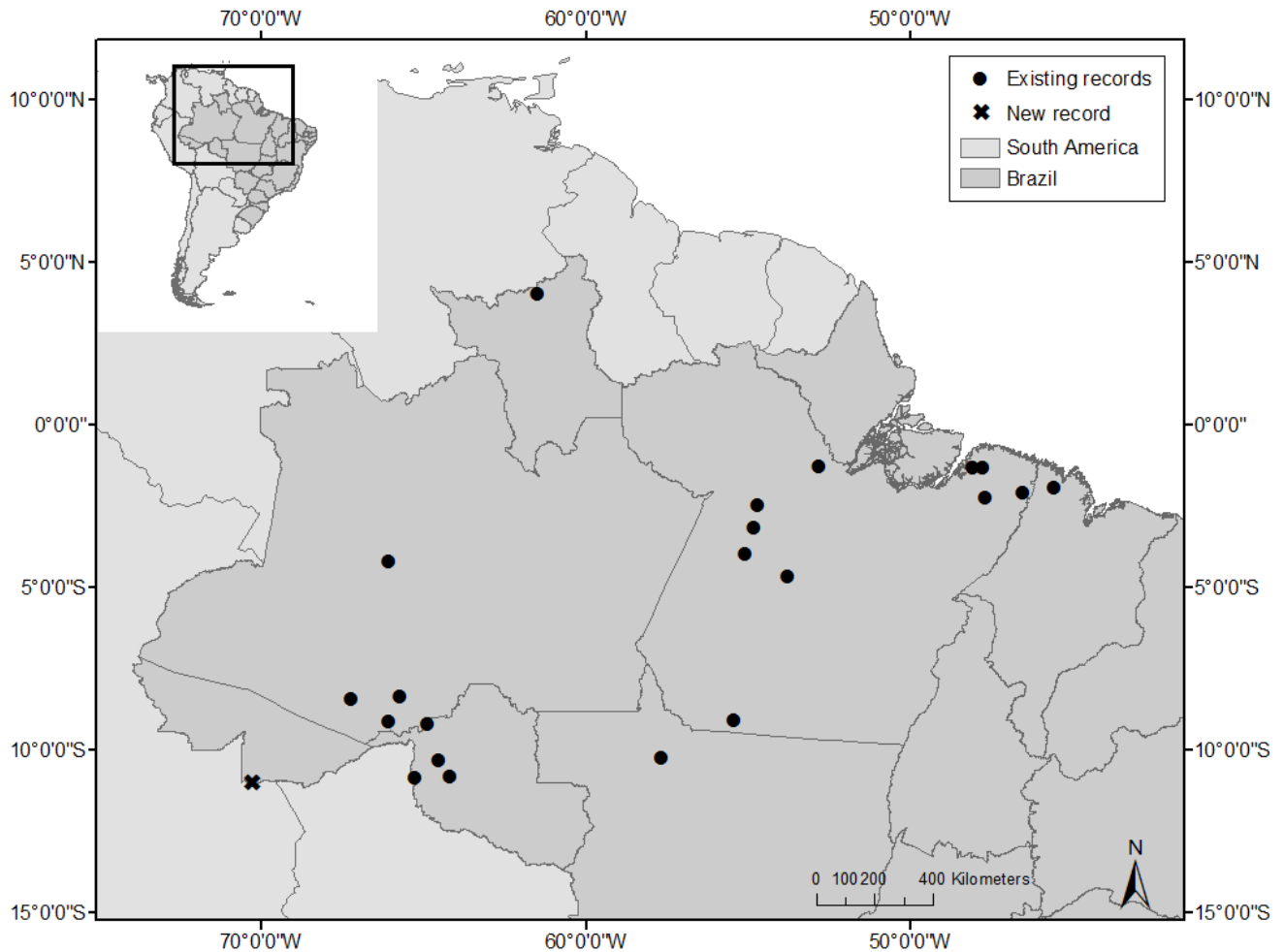


FIGURE 3. Distribution map for *Bothrops taeniatus* in Brazil, based on the existing spatially explicit records (Campbell and Lamar, 2004; Frota et al. 2007; Avila-Pires et al. 2009), and a new record for the Rio Acre Ecological the Station, Acre, Brazil.

This record is valuable as it fills a gap in the species distribution, furthering the idea that it does have a somewhat continuous distribution throughout the Amazon (Campbell and Lamar 2004). Nonetheless systematic surveys should be undertaken as to improve our understanding of the distribution of this species and other widely distributed but poorly surveyed Brazilian species of amphibians and reptiles (Freitas et al. 2011a, b; Freitas et al. 2012). The confirmation of the presence of *B. taeniatus* in Acre is furthermore important to improve the identification of snakes involved in snakebite incidents, which is often crucial for diagnosis and treatment. This is especially important in states with a high incidence of snakebites in the state of Acre (Pierini et al. 1996) and snake species with recently recorded accounts of bites on humans (Torrez et al. 2009).

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LITERATURE CITED

- Avila-Pires T.C.S, L.J. Vitt, S.S. Sartorius and P.A. Zani. 2009. Squamata (Reptilia) from four sites in southern Amazonia, with a biogeographic analysis of Amazonian lizards. *Boletim do Museu Paraense Emílio Goeldi Ciências Naturais* 4(2): 99–118.
- Bérnils, R.S. and H.C. Costa. 2012. *Brazilian reptiles: List of species*. Version 2012.1. Electronic document accessible at <http://www.sbherpetologia.org.br/>. Sociedade Brasileira de Herpetologia. Captured on 30 September 2012
- Campbell, J.A. and W.W. Lamar. 2004. *The Venomous Reptiles of the Western Hemisphere*. Volume II. Ithaca: Comstock Publishing Associates. 475 p.
- Cunha, O.R. and F.P. Nascimento. 1975. Ofídios da Amazônia V - *Bothrops*

- lichenosus* Roze, 1958, sinônimo de *Bothrops castelnaudi* Duméril, Bibron e Duméril, 1854, com nova descrição e comentários. *Boletim do Museu Paraense Emílio Goeldi. Nova série: Zoologia* (80): 1–14.
- Cunha, O.R. and F.P. Nascimento 1993. Ofídios da Amazônia. As cobras da região leste do Pará. *Publicações Avulsas do Museu Paraense Emílio Goeldi* 31: 1–218.
- Freitas, M.A., D.P.F. França and D. Veríssimo. 2011. First record of *Cercosaura eigenmanni* (Griffin, 1917) (Squamata: Gymnophthalmidae) for the state of Acre, Brazil. *Check List* 7(4): 516.
- Freitas, M.A., D.P.F. de França, and D. Veríssimo. 2011. Distribution extension of *Uracentron flaviceps* (Guichenot, 1855)(Reptilia: Squamata): Second record for the state of Acre, Brazil. *Check List* 7(6): 823–824.
- Freitas, M.A., D. Veríssimo, S. de Albuquerque, T.O. Lima. 2012. Distribution extension for the lizard *Enyalius lechii* (Boulenger, 1885) (Squamata: Leiosauridae): Third record for the state of Rondônia, Brazil. *Herpetology Notes* 5: 33–34
- Frota, J.G., A.P. Santos-Jr, H.M. Chalkidis and A.G. Guedes. 2007. As serpentes da região do baixo rio Amazonas, oeste do Estado do Pará, Brasil (Squamata). *Biociências* 13(2): 211–220.
- Harvey, M.B., E.J. Aparicio and A.L. Gonzales. 2005. Revision of the venomous snakes of Bolivia. II: the pitvipers (Serpentes: Viperidae). *Annals of Carnegie Museum* 74(1): 1–37.
- Pierini, S., D. Warrell, A. De Paulo and R.Theakston. 1996. High incidence of bites and stings by snakes and other animals among rubber tappers and Amazonian Indians of the Jurua Valley, Acre State, Brazil. *Toxicon* 34(2): 225–236.
- Torrez, P.Q., M.R. Duarte, F.O.S. França, L. Figueiredo, P. Abati, L.R. Campos, P.P.O. Pardal, M. Quiroga, M. Mascheretti and M. Boulos. 2009. First report of an accident with the speckled forest pit viper (*Bothriopsis taeniata*) in Brazil. *Revista da Sociedade Brasileira de Medicina Tropical* 42(3): 342–344

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