



First record of *Siphlophis compressus* (Daudin, 1803) (Serpentes, Dipsadidae) from the state of Roraima, Brazil

Arthur Diesel Abegg^{1*}, Arthur de Sena Santos², Flora Roncolato Ortiz¹, Cleria Mendonça de Moraes⁴ and Marco Antonio de Freitas⁵

1 Instituto Butantan, Laboratório Especial de Coleções Zoológicas, Avenida Vital Brazil, 1.500, São Paulo, Brazil. **2** Universidade de Brasília, Departamento de Zoologia, CEP: 70.910-900, Brasília, DF, Brazil. **3** Instituto Butantan, Laboratório Especial de Coleções Zoológicas, Avenida Vital Brazil, 1.500, São Paulo, Brazil. **4** Universidade Federal de Roraima, Programa de Pós-Graduação em Química, Bloco, Núcleo de Pesquisa e Pós-Graduação de Ciências e Tecnologia, Campus Paricarana, Av. EneGareez 2413, Aeroporto, Boa Vista, RR, Brazil. **5** Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio), ESEC Murici, Rua Marino Vieira de Araújo 32, Cidade Alta, CEP 57820-000, Murici, AL, Brazil.

Corresponding author: Arthur Diesel Abegg: arthur_abegg@hotmail.com

Abstract

We present the first record of *Siphlophis compressus* from the state of Roraima, Brazil. This report, from the Serra do Tepequém, extends this species' distribution in Brazil by 789 km to the northwest of the nearest previous locality recorded (Manaus, Amazonas, Brazil).

Key words

Amazon rainforest, geographical distribution, Amajari.

Academic editor: Diego Santana | Received 18 March 2016 | Accepted 17 May 2017 | Published 4 August 2017

Citation: Abegg AD, Santos AS, Ortiz FR, Moraes CM, Freitas MA (2017). First record of *Siphlophis compressus* (Daudin, 1803) (Serpentes, Dipsadidae) from the state of Roraima, Brazil. Check List 13 (4): 251–254. <https://doi.org/10.15560/13.4.251>

Introduction

Snakes of the genus *Siphlophis* Fitzinger, 1843 (Dipsadidae, Xenodontinae, Pseudoboini) are distributed in Central and South America (Duellman 1978). The genus currently comprises seven species: *S. ayauma* Sheehy, Yanéz-Muñoz, Valencia and Smith, 2014, *S. cervinus* (Laurenti, 1768), *S. compressus* (Daudin, 1803), *S. leucocephalus* (Günther, 1863), *S. longicaudatus* (Andersson, 1901), *S. pulcher* (Raddi, 1820) and *S. worontzowi* (Prado, 1940). Species of the genus utilize a wide diversity of habits. *Siphlophis cervinus*, for example, is active at night (Martins and Oliveira 1998) and is semi-arboreal (arboreal data: Martins and Oliveira 1998; terrestrial data: Dixon and Soini 1986), while, *S. leucocephalus* is terrestrial (Argôlo 2004) and diurnal (Alencar et al. 2013, Gaiarsa et al. 2013).

Siphlophis compressus is a semi-arboreal snake (Gaiarsa et al. 2013), which can be found in trees and on the ground (Martins and Oliveira 1998, Bernarde and Abe 2006). This species is specialized in capturing and ingesting lizards (Fraga et al. 2013), but occasionally feeds on anurans, snakes, lizard eggs, and mammals (Sazima and Argôlo 1994, Martins and Oliveira 1998, Prudente et al. 1998, Marques et al. 2001, Alemu and Rowley 2008, Alencar et al. 2013).

Siphlophis compressus has a wide distribution in South America, occurring from Bolivia to Trinidad. In Brazil it occurs in 2 forested biomes, Amazonia and Atlantic Forest, encompassing 14 Brazilian states: Amazonas, Acre, Rondônia, Pará, Amapá, Mato Grosso, Rio de Janeiro, Minas Gerais, Espírito Santo, Bahia, Sergipe,

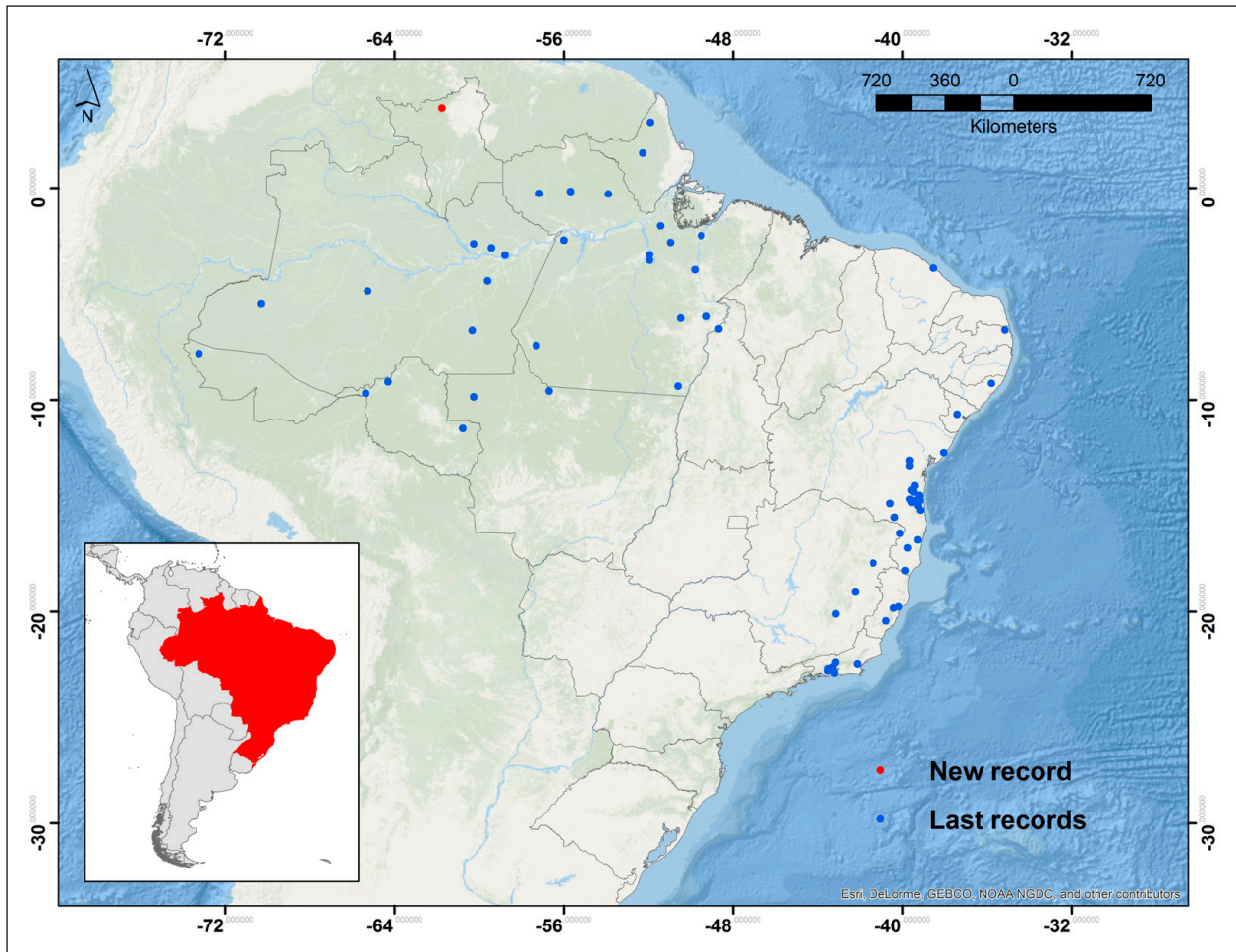


Figure 1. Geographic distribution map of *Siphlophis compressus* in Brazil according to Guedes et al. (2011), with additions made by Marques et al. (2013) and Freitas (2014).

Alagoas, Paraíba and Ceará, although in Ceará, only 1 record is known (from a humid area of city of Fortaleza; Guedes et al. 2011).

In this study, we present the first record of *S. compressus* from the state of Roraima, which also represents an additional record from the Amazon Forest. This new record extends the distribution of *S. compressus* about 789 km to the northwest of the city Manaus, Amazonas (Fig. 1) (Guedes et al. 2011).

Methods

On 10 August 2015, at 8 pm, we found an individual of *S. compressus* (Fig. 2) foraging on the forest ground of Serra do Tepequém (03.7683, -061.7602, datum WGS84, elev. 620 m, in municipality of Amajari, state of Roraima, Brazil. The Serra do Tepequém is composed of a flat plateau, located in the northwestern region of Roraima, with altitudes ranging from 600 to 1200 m above sea level. Its vegetation types comprises open areas (fields, savannas and valleys), surrounded by continuous patches of Amazon Forest.

After we photographed the specimen, we collected it (Collection permit SISBIO 7422-1). The voucher specimen is housed in the Museu de Zoologia da Universidade

de São Paulo (MZUSP 22598). During the capture, the individual vibrated its tail as a defensive display, as previously reported by Fraga et al. (2013) and Gaiarsa et al. (2013).

Results

Siphlophis compressus is easily distinguished from its congeners and other similar taxa because its reddish coloration on the back and head, and the transverse black stripes, as already verified by Fraga et al. (2013). These basic characteristics make it unique and easily identifiable. Furthermore, our specimen also has the characteristics described by Savage (2002), and Guedes et al. (2011): head distinct from the neck; moderately long tail (20–24% of total length); large eyes; 8 or 9 supralabials, with 1 or 2 bordering the orbit; 9 infralabials; 2 postoculars; temporals patterns composed of (2 + 3) or (2 + 2 + 3); smooth dorsal scales (19/19/15) with 2 apical pits; 228–258 ventrals; and 110–125 subcaudals.

Discussion

Guedes et al. (2011) mentioned that *S. compressus* may be endangered in many regions, although widely distributed



Figure 2. Specimen of *Siphlophis compressus* collected at Serra do Tepequém (03.7683, -061.7602), in the city of Amajari, Roraima, Brazil.

and abundant in some localities (MAF pers. obs.). Our record, the first from the state of Roraima, extends this species' distribution northwest by 789 km in the Amazon Forest domain. Thus, *S. compressus* is an inhabitant of almost all Brazilian states that are inserted in the Amazonia biome, except for Maranhão (Guedes et al. 2011). Surveys of the herpetofauna and related studies in the state of Roraima are scarce (Carvalho 2009), and we suggest that further studies are urgently needed in Roraima in order to improve our knowledge about the chorology of Amazonian snakes.

Acknowledgements

We are deeply indebted to Rebeca Fuzinato Dall'Agnol (EMBRAPA), who kindly provided a grammar and content review of the manuscript.

Authors' Contributions

All the authors participated in the fieldtrip, found and collected the specimen. MAF and CMM guided the preparation of the manuscript. ADA, ASS and FRO wrote the manuscript. FRO took morphological and meristic data of the specimen. ASS produced the map.

References

- Alemu JJB, Rowley JL (2008) *Siphlophis compressus* (Red-eyed Liana Snake). Cannibalism. *Herpetological Review* 39: 472–473.
- Alencar LRV, Righi AF, Nascimento LB, Morato SAA (2009) Notes of natural history. Habitat. *Siphlophis longicaudatus*. *Herpetological Bulletin* 108: 37–39.
- Argôlo AJS (2004) *As Serpentes dos Cacaiais do Sudeste da Bahia*. Editora da UESC, Ilhéus, 260 pp.
- Bernarde PS, Abe AS (2006) A snake community at Espigão do Oeste, Rondônia, southwestern Amazon, Brazil. *South American Journal of Herpetology* 1: 102–113. [https://doi.org/10.2994/1808-9798\(2006\)1\[102:ASCAED\]2.0.CO;2](https://doi.org/10.2994/1808-9798(2006)1[102:ASCAED]2.0.CO;2)
- Carvalho CM (2009) O lavrado da Serra da Lua em Roraima e perspectivas para estudos da herpetofauna na região. *Revista Geográfica Acadêmica* 3: 4–17.
- Dixon JR, Soini P (1986) *The Reptiles of the Upper Amazon Basin, Iquitos Region, Peru*. 2nd ed. Milwaukee Public Museum, Milwaukee, 154 pp.
- Duellman WE (1978) *The biology of an equatorial herpetofauna in Amazonian Ecuador*. University of Kansas, Museum of Natural History Miscellaneous Publication 65: 1–352.
- Fraga R, Lima AP, Prudente ALC, Magnusson WE (2013) *Guia de Cobras da Região de Manaus – Amazonia Central*. Editora Inpa, Manaus, 303 pp.
- Freitas MA (2014) Squamate reptiles of the Atlantic Forest of northern Bahia, Brazil. *Check List* 10 (5): 1020–1030. <https://doi.org/10.15560/10.5.1020>
- Gaiarsa MP, Alencar LR, Martins M (2013) Natural history of pseudo-bovine snakes. *Papéis Avulsos de Zoologia* 53 (19): 261–283. <https://doi.org/10.1590/S0031-10492013001900001>

- Guedes TB, Nunes GSS, Prudente ALC, Marques OAV (2011) New records and geographical distribution of the Tropical Banded Tree snake *Siphlophis compressus* (Dipsadidae) in Brazil. *Herpetology Notes* 4: 341–346.
- Marques OAV, Eterovic A, Sazima I (2001) Serpentes da Mata Atlântica: Guia ilustrado para a Serra do Mar. Editora Holos, Ribeirão Preto, 184 pp.
- Marques R, Tinóco MS, Rödder D, Browne-Ribeiro HC (2013) Distribution extension of *Thamnodynastes pallidus* and new records within the distribution of *Erythrolamprus reginae*, *Imantodes cenchoa* and *Siphlophis compressus* (Serpentes, Dipsadidae) for the north coast of Bahia, Brazil. *Herpetology Notes* 6: 529–532.
- Martins M, Oliveira ME (1998) Natural history of snakes in forests of the Manaus region, Central Amazonia, Brazil. *Herpetological Natural History* 6 (2): 78–150.
- Prudente ALC, Moura-Leite JC, Morato SAA (1998) Alimentação das espécies de *Siphlophis* Fitzinger (Serpentes, Colubridae, Xenodontinae, Pseudoboini). *Revista Brasileira de Zoologia* 15: 375–383. <https://doi.org/10.1590/S0101-81751998000200010>
- Savage JM (2002) *The Amphibians and Reptiles of Costa Rica: a Herpetofauna between Two Continents, between Two Seas*. University of Chicago Press, Chicago, 934 pp.
- Sazima I, Argolo AJS (1994) Natural history notes. *Siphlophis pulcher*. (NCN). *Prey. Herpetological Review* 25: 126–126.