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Leptophis ahaetulla (Linnaeus, 1758) (Serpentes, Colubridae): first record for the state of Rio Grande do Sul, Brazil

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Abstract: We present the first record of *Leptophis ahaetulla* for the State of Rio Grande do Sul, Brazil. Between November and December 2014, and February 2015, three specimens were found, respectively: one male dead on a highway at the Parque Estadual do Espinilho, a conservation unit located at the municipality of Barra do Quaraí; and two females collected in an anthropic landscape of Salso farm at the municipality of Uruguaiana, Rio Grande do Sul, Brazil. Meristic data and coloration enables the identification of these specimens as *Leptophis ahaetulla marginatus*.

Key words: *Leptophis ahaetulla*; geographic distribution; Rio Grande do Sul; Pampa biome

The Neotropical snake genus *Leptophis* Bell, 1825 encompasses semi-arboreal and diurnal snakes, with slender and elongated bodies, a head well-distinguished from the neck, and coloration pattern characterized by a predominantly green, copper or bronze, with or without longitudinal stripes or narrow cross-cutting bands (Albuquerque 2008). Eleven species of the *Leptophis* genus are currently recognized, broadly distributed in Central and South America (Uetz and Hošek 2015).

Leptophis ahaetulla (Linnaeus, 1758) presents the broadest geographical distribution in this genus, occurring in North America, Central America, and in most of South America, from Mexico to Northeastern Argentina and Northern Uruguay (Oliver 1948; Giraudo 2001, Carreira et al. 2005, Albuquerque 2008), with 10 currently recognized subspecies (Uetz and Hošek 2015). In Brazil, the species is reported to occur from the extreme North to the state of Paraná, occupying a wide range of biomes, including the Amazon, Pantanal, Cerrado, Caatinga and Atlantic Forest (Cunha and Nascimento 1978; Vanzolini et al. 1980; Strüssmann and Sazima 1993; Martins and Oliveira 1999; Colli et al. 2002; Albuquerque et al. 2007, Albuquerque 2008). Four subspecies of *L. ahaetulla* are thought to occur in Brazil (*L. a. ahaetulla, L. a liocercus, L. a. marginatus,* and *L. a. nigromarginatus*) (Costa and Bérnils 2014), and *L. a. marginatus* has the southernmost geographic distribution (Giraudo 2001). According to Albuquerque (2008) *L. a. marginatus* (referred to as *L. marginatus* in his thesis) is reported to occur from southeastern Bolivia, across Mato Grosso and Mato Grosso do Sul, to western São Paulo in Brazil, southward through Uruguay and Paraguay into northern Argentina. Recently, three specimens of *L. ahaetulla* were collected in the Pampa Biome in Rio Grande do Sul State. The color pattern described by Oliver (1948) and Albuquerque (2008) for the subspecies (but see comments above) listed as *L. a. marginatus* matches the one found in these specimens, which expand south-western the distribution of subspecies in Brazil, and also reports it for the first time to the State of Rio Grande do Sul. Here, we describe those new specimens.

Three specimens of *L. ahaetulla* were found in the domains of the Pampa biome in Rio Grande do Sul state. The first individual was caught by Christian Beier on 15 November 2014. The specimen was dead at the BR 472 (km 642) (30°11′42.0″ S, 057°29′20.5″ W; Figure 1), a highway stretch that passes through the Parque Estadual do Espinilho, a conservation unit under integral protection located at the municipality of Barra

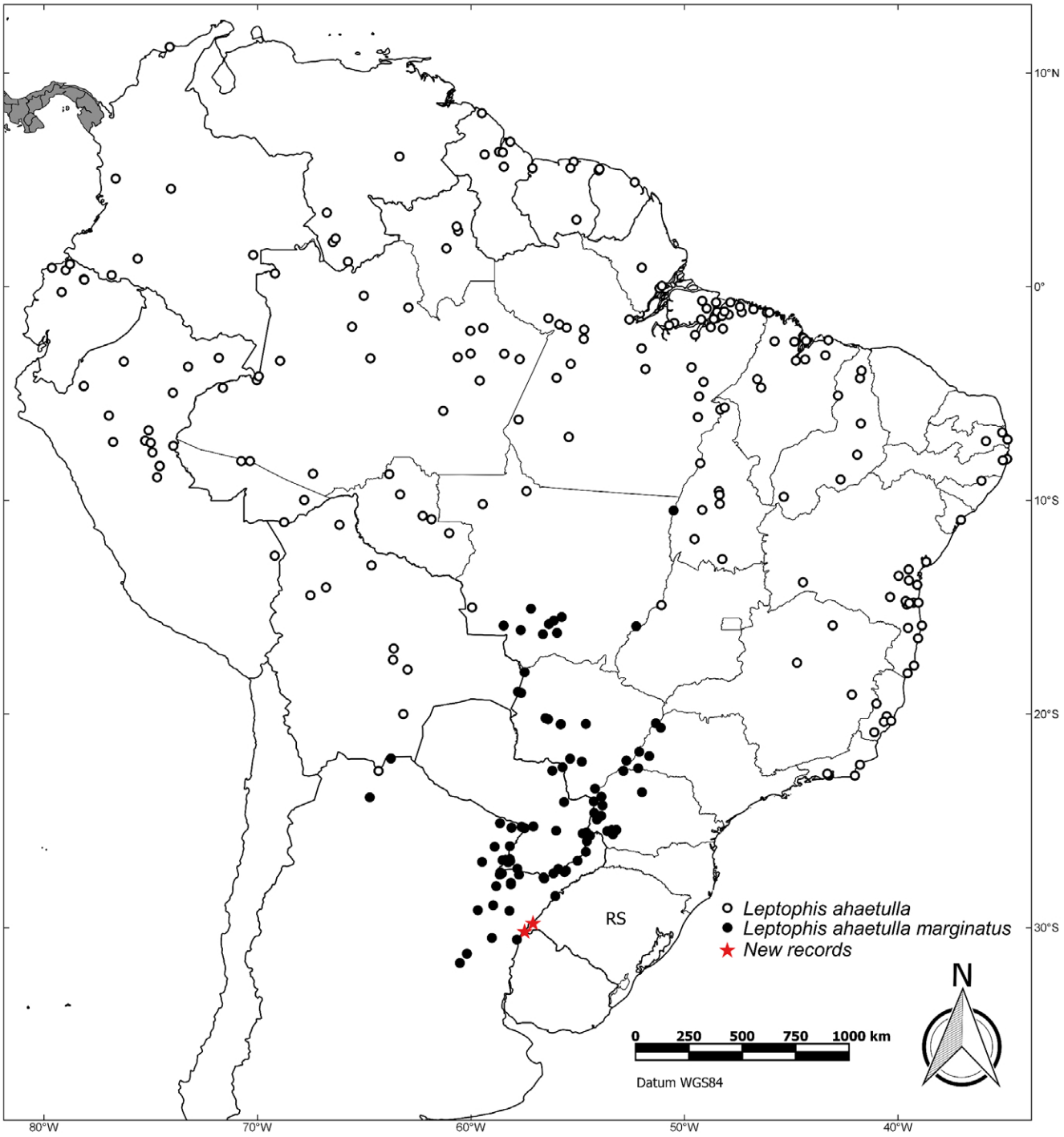


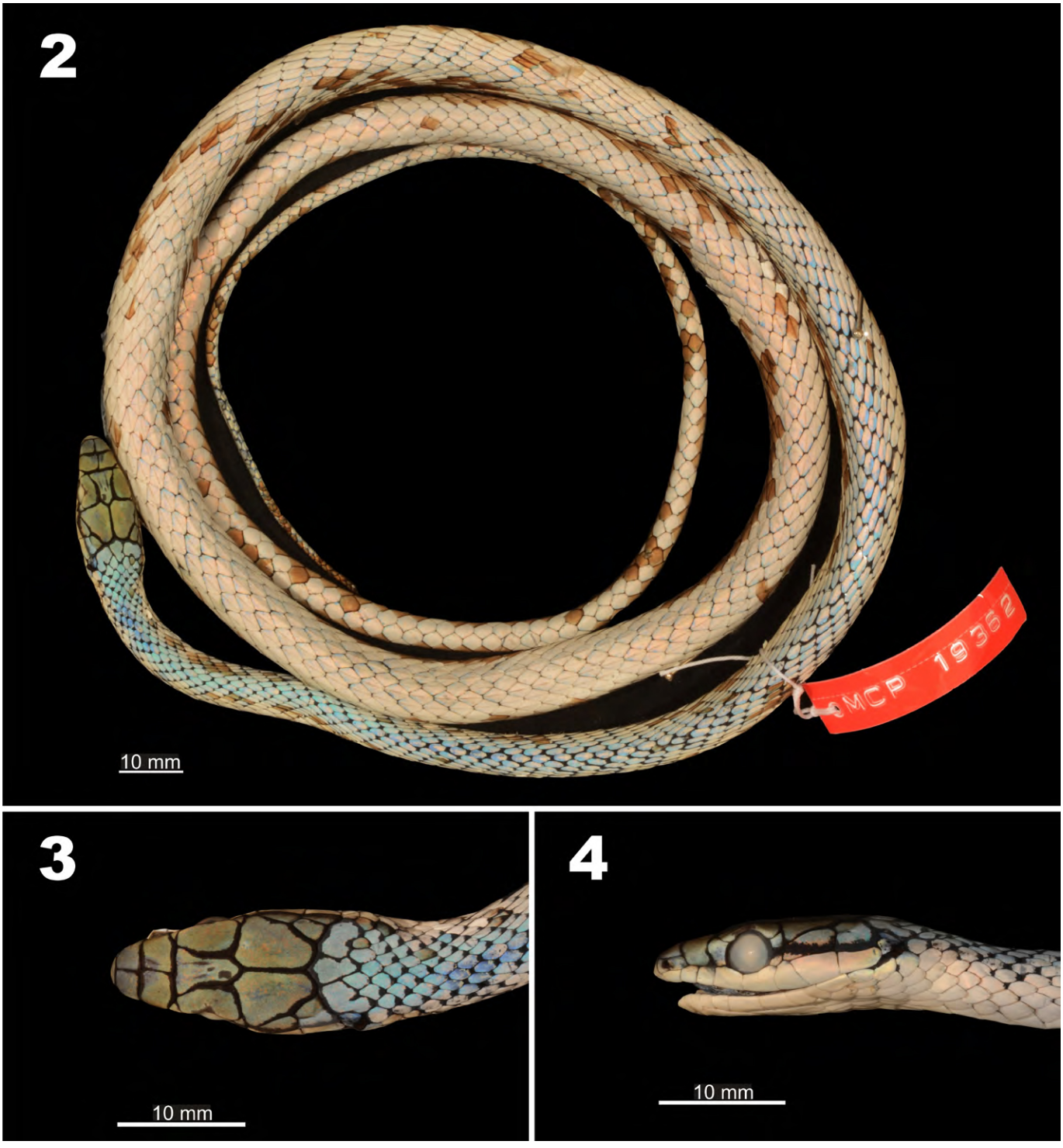
Figure 1. Distribution of *Leptophis ahaetulla* in South America based in Oliver (1948), Albuquerque (2008) and the specimens MCP 19362, ZUFSM 3278 and ZUFSM 3280.

do Quaraí. The vegetation of the Parque Estadual do Espinilho is Steppe Savanna Park (IBGE 2012), with a significant presence of espinillo (*Acacia caven*), nandubay (*Prosopis affinis*), and black mesquite (*Prosopis nigra*) (Galvani and Baptista 2003). The specimen is deposited at the reptile collection of the Museu de Ciências e Tecnologia da Pontifícia Universidade Católica do Rio Grande do Sul, under catalogue number MCP 19362. Two other individuals were caught by Giancarlo Bilo, between 19 December 2014 and 6 February 2015 in the municipality of Uruguaiana, Itapitocai locality, at the Salso farm (29°48′19.28″ S, 057°05′46.88″ W; collect permit #24041-2 granted by Instituto Chico Mendes—ICMBio), and are stored in the Herpetological Collection of the Universidade Federal de Santa Maria (ZUFSM 3278 and ZUFSM 3280, respectively). The Salso farm is an anthropic landscape modified by agricultural activities (rice crops) and the specimens were collected

at surroundings of human dwelling.

The specimen collected in the municipality of Barra do Quaraí is a male with a snout-vent length of 581 mm and a tail length of 348 mm; dorsal scales arranged in 15-15-11 rows (0-13-9 keeled rows); 157 ventrals; and 138 paired subcaudals. The specimen presents divided nasals; 8 right supralabials (4th and 5th in contact with orbit); 9 left supralabials (4th, 5th, and 6th in contact with orbit);10 on each side infralabials (six in contact with anterior chin shields); a single preocular; two postoculars on each side; anterior temporal 1/1; and posterior temporals 2/2.

The female specimens (ZUFSM 3280 and ZUFSM 3278) collected in the municipality of Uruguaiana possess, respectively, the following states of characters: snout-vent length of 680 mm and 580 mm; tail length of 348 mm and 50 mm (the ZUFSM 3278 has an incomplete tail); dorsal scales arranged in 15-15-11 rows (0-13-9 keeled rows), 157 and 159 ventrals; the ZUFSM 3280 has 138 paired subcaudals. The specimens presents separated nasals, 8/8 supralabials (4th and 5th in contact with orbit); 10/10 infralabials (six in contact with chin shields), a single preocular; two postoculars on each



Figures 2–4. *Leptophis ahaetulla* (MCP 19362). **2**: General dorsal view. **3**: Head dorsal view. **4**: Head lateral view.

side; anterior temporal 1/1; and posterior temporals 2/2.

In all specimens the dorsal coloration is green metallic on the head and anterior region of the body, gradually changing to bronze toward tail (Figure 2). Cephalic shields margined with black (Figure 3), and a black postocular line that extends from upper edges of supralabials to temporals (Figure 4). The venter is lightly colored. The meristic characters and dorsal coloration pattern described by Giraudo (2001), Carreira et al. (2005), and Albuquerque (2008) for the taxon listed as *L. a. marginatus* matches that of specimens herein described for the first time to Rio Grande do Sul.

The record of *L. ahaetulla* in Rio Grande do Sul increases the fauna of reptile reported from the State, as well as the species distribution southward in Brazil. Based on the distribution of collecting localities, *Leptophis ahaetulla* from Rio Grande do Sul state occurs in the western region of the Uruguayan Savanna, which was originally characterized as 'grasslands with espinillo' by Hasenack et al. (2010).

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