

FIRST RECORD OF *ATRACTUS MANIZALESENSIS* PRADO, 1940 (SQUAMATA: COLUBRIDAE: DIPSADINAE) FROM THE DEPARTMENT OF ANTIOQUIA, COLOMBIA

PRIMER REGISTRO DE *ATRACTUS MANIZALESENSIS* PRADO, 1940 (SQUAMATA: COLUBRIDAE: DIPSADINAE) EN EL DEPARTAMENTO DE ANTIOQUIA, COLOMBIA

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Atractus Wagler, 1828 is the most speciose genus of snakes in the world, with 143 valid species, from which 18 have been described in the course of the present decade (Uetz et al., 2019). With the exception of a single species present in Gorgona Island (*A. medusa*), this genus is confined almost entirely to

the South American mainland, extending northward only to Central Panama (Myers & Schargel, 2006; Passos et al., 2009b; Wallach et al., 2014). However, the greatest diversity of the genus occurs in the Andes, particularly in Colombia, the country with the highest diversity of *Atractus*, with 64 species recorded (40

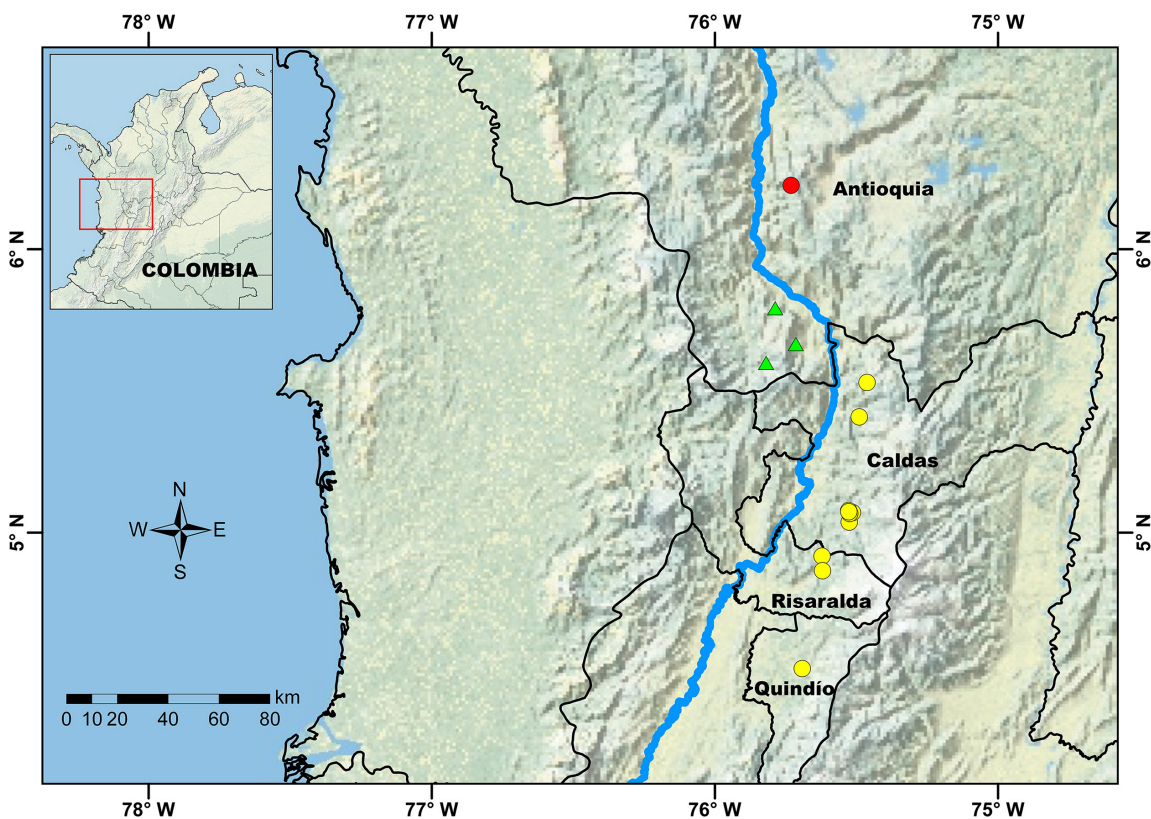


Figura 1. Distribución geográfica de *Atractus manizalesensis* (puntos) y localidades de *A. nicefori* (triángulos). Los puntos amarillos representan las localidades previamente reportadas por Passos et al. (2009a) y Rojas-Morales et al. (2017), y el punto rojo indica la nueva localidad reportada en esta nota. La línea azul representa el río Cauca.

Figure 1. Geographic distribution of *Atractus manizalesensis* (dots) and localities of *A. nicefori* (triangles). Yellow dots represent localities previously reported by Passos et al. (2009a) and Rojas-Morales et al. (2017), and the red dot indicates the new locality reported in this note. The blue line represents the Cauca river.

endemic) (Passos & Arredondo, 2009; Passos et al., 2009a, b; Passos & Lynch, 2010; Uetz et al. 2019).

One of the endemic Colombian species of *Atractus* is *A. manizalesensis*, known only from sub-Andean forests and urban and peri-urban areas of the Western flank of the Cordillera Central of Colombia, between 1500–2160 m from the municipality of Armenia, department of Quindío to Pácora, department of Caldas (Passos et al., 2009a; Rojas-Morales et al., 2017). In total, the distribution of this species only covers around 115 km in a straight line between the northern and southernmost localities. This note presents the first record of *A. manizalesensis* in the department of Antioquia, Colombia (Fig. 1).

A single individual of *Atractus manizalesensis* was captured on 22 August 2016 by LEV-P at vereda Monteadentro, municipality of Heliconia (6°13'30.2"N, 75°43'50.2"W, 1771 m). The individual was found at night while it was descending on a big rock, beside a small ravine located inside a patch of secondary forest.

The specimen (Fig. 2) was deposited in the herpetological collection of the Museo de Historia Natural, Universidad del Cauca (MHNUC-HE-Se-0694) in Popayán, Colombia, and it was verified by Gustavo González Durán, herpetologist from the Wildlife Conservation Society of Colombia. It is an adult female of snout-vent length (SVL) = 432 mm, caudal length (CL) = 45 mm, with long loreal (*sensu* Passos et al, 2007), two postoculars and 1+2 temporals. The specimen is identified as *Atractus manizalesensis* according to the diagnostic characters for females selected by Passos et al. (2009a), although it has a greater number of subcaudals (Table 1). In addition, the coloration of



Figura 2. Vista dorsal (izquierda) y ventral (derecha) de *Atractus manizalesensis* (MHNUC-HE-Se-0694) de la vereda Monteadentro, municipio de Heliconia, departamento de Antioquia, Colombia. Barra de escala = 100 mm.

Figure 2. Dorsal (left) and ventral (right) views of *Atractus manizalesensis* (MHNUC-HE-Se-0694) from vereda Monteadentro, municipality of Heliconia, department of Antioquia, Colombia. Scale bar = 100 mm.



Figura 3. Individuo de *Atractus manizalesensis* (MHNUC-HE-Se-0694) tras su captura en la vereda Monteadentro, municipio de Heliconia, departamento de Antioquia, Colombia.

Figure 3. Individual of *Atractus manizalesensis* (MHNUC-HE-Se-0694) upon its capture in vereda Monteadentro, municipality of Heliconia, department of Antioquia, Colombia.

specimen MHNUC-HE-Se-0694 is the same as that provided in the original description by Prado (1940), as complemented by Rojas-Morales et al. (2017): brown dorsal ground color with dark brown spots on each side of the body, yellowish labial and gular regions, and cream venter with profuse gray or black stippling that cover almost all scales to the tail (Figs. 2, 3).

In relation to its congeners distributed from the Eastern slopes of the Cordillera Occidental, the Cordillera Central and the upper and middle Magdalena drainage of Colombia, *Atractus manizalesensis* is easily differentiated from *A. andinus*, *A. apophis*, *A. atratus*, *A. attenuatus*, *A. chthonius*, *A. lehmanni*, *A. loveridgei*, *A. melanogaster*, *A. nasutus*, *A. obesus*, *A. obtusirostris*, *A. sanguineus* and *A. werneri* by having dorsal scales in 15 rows (vs. dorsal scales in 17 rows) (Boettger, 1898; Passos et al., 2009a; Passos & Lynch, 2010). From geographically related species with 15 dorsal scale rows *A. manizalesensis* differs from *A. biseriatus* and *A. paisa* mainly by having a dorsal color pattern beige to pale brown ground color with paired black dots or irregular transversal blotches (vs. dark brown ground color with cream-white transversal blotches and black ground color uniformly scattered with small cream-yellow dots, respectively), and from *A. ocolotemporalis* by having fewer number of subcaudals (14–22) and CL/SVL ratio (8–10.5) in females (vs. 27 and 11.4, respectively) and two postoculars (vs. postoculars absent) (Amaral, 1932; Passos et al., 2009a).

Tabla 1. Comparación de varios caracteres de diagnóstico de *Atractus manizalesensis* resumidos por Passos et al. (2009a), y valores del espécimen MHNUC-HE-Se-0694. La barra oblicua separa el recuento de los lados derecho/izquierdo.

Table 1. Comparison of several diagnostic characters from *Atractus manizalesensis* summarized by Passos et al. (2009a), and values from specimen MHNUC-HE-Se-0694. Oblique bar separates count of the right/left sides.

Sex	Passos et al. (2009a)		MHNUC-HE-Se-0694
	Males (n=8)	Females (n=16)	Female
Dorsal scale rows		15	15
Ventrals	139-145	143-154	146
Subcaudals	17-23	14-22	25
Supralabials	7-8		7
Infralabials	7-8		7/8
Maxillary teeth	9-11		9
CL/SVL ratio	10.5-15.9	8-10.5	10.4

Atractus manizalesensis is more similar to *A. nicefori*, as the diagnostic characters of both species completely overlap for the case of females, while males only differ in the number of subcaudal scales (Passos et al., 2009a). Thus, the specimen MHNUC-HE-Se-0694 could be identified as *A. nicefori* because the number of subcaudals is within the range of that species (19–26 in females). However, *A. nicefori* has a gray belly profusely spotted with pinkish-yellow (Amaral, 1930), while the belly of *A. manizalesensis* is creamish white to yellow background with profuse dark spots (Prado, 1940; Rojas-Morales et al., 2017). In addition, the distribution of both species is isolated by the inter-Andean depression between the Cordillera Occidental and Cordillera Central drained by Cauca river (Fig. 1). All locality records for geographically close congeners (Marx, 1960; Myers & Schargel, 2006; Passos et al., 2009a; Vanegas-Guerrero et al., 2014) show that the Valley and middle Cauca river drainage could be a potential geographic barrier for those species too: *A. andinus*, *A. loveridgei*, *A. obesus* and *A. oculotemporalis* are restricted to Cordillera Occidental; in contrast with *A. attenuatus*, *A. biseriatus*, *A. nasutus*, *A. paisa*, *A. sanguineus* and *A. titanicus*, which are distributed in the Cordillera Central.

Finally, the record of *Atractus manizalesensis* presented herein extends the known range of the subcaudal scales for females of this species, and represents the first record in the department of Antioquia extending its geographical distribution northwards in around 82 km in a straight line from the municipality of Pácora,

department of Caldas. This finding also implies a positive impact for the conservation of *A. manizalesensis*, specially by the less impact of human activities observed at the new locality and surrounding area, since the species is apparently vulnerable among the previously known localities due to the habitat destruction, roadkill and direct killing by humans (Rojas-Morales, 2012; Rojas-Morales et al., 2017).

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