



Starting to fill the gap: first record of *Tantilla supracincta* (Peters, 1863) (Serpentes: Colubridae) from Colombia

Juan P. Hurtado-Gómez^{1, 2}, Freddy A. Grisales-Martínez^{1, 3, 4*} and Beatriz Rendón-Valencia^{1, 4}

1 Grupo Herpetológico de Antioquia, Instituto de Biología, Universidad de Antioquia, Calle 67 # 53–108, Bloque 7–121, A.A. 1226, Medellín, Colombia

2 Museu de Zoologia da Universidade de São Paulo, Avenida Nazaré 481, CEP: 04263-000, Ipiranga, São Paulo, SP, Brazil

3 Grupo de Ecología y Conservación de Fauna Silvestre, Departamento de Ciencias Forestales, Universidad Nacional Sede Medellín, Calle 59A # 63–20, Bloque 20, Of. 213. C.P. 050034, Medellín, Colombia

4 Servicios Ambientales y Geográficos S.A., Calle 11B No. 40A-130 Piso 4, Medellín, Colombia

* Corresponding author. E-mail: grisso88@gmail.com

Abstract: We report for the first time the occurrence of *Tantilla supracincta* in Colombia based on a road killed specimen found in the Pacific foothills of the Andes in the department of Antioquia, filling a gap of approximately 870 km in its distribution and extending by 473 m its altitudinal range.

Key words: *Tantilla supracincta*, northwestern Andes, Colombia, distribution extension, Chocó biogeographic region

Tantilla Baird & Girard, 1853 is a cryptozoic colubrid snake genus containing species of small size, cylindrical body, and moderately long tail (Pérez-Santos and Moreno 1988; Wilson 1999; Köhler 2008). It is the third most diverse snake genus after *Atractus* (138 species) and *Oligodon* (74 species), and includes 62 species distributed from the United States to Argentina from sea level to 2,750 m elevation (Peters and Orejas-Miranda 1970; Savage 2002; Wilson and Mata-Silva 2014; Uetz and Hosek 2015).

Currently, five species are known to occur in Colombia: *T. alticola*, *T. melanocephala*, *T. nigra*, *T. reticulata*, and *T. semicincta*. All of them are inhabitants of lowlands, except for *T. alticola* and *T. melanocephala*, which are also found in mid elevations and highlands below 1,000 m (Wilson 1999; Vanegas-Guerrero et al. 2015; Vera-Pérez et al. 2015). Only *T. melanocephala* has a cis- and trans-Andean distribution, whereas the remaining four species are exclusively trans-Andean (Wilson 1999; Vanegas-Guerrero et al. 2015).

To date, *T. supracincta* is known to have a disjunct distribution and has been reported from sea level to 850 m above sea level (a.s.l.) from Central America in the

Atlantic versant of Nicaragua, Costa Rica, and Panama, as well as in South America on the Pacific coast of Ecuador exclusively (Cisneros-Heredia 2003; Köhler 2008; Savage 2002). Wallach et al. (2014) suggested that Esqueda and La Marca (1999) reported *T. supracincta* from Venezuela, but this may have been a misreading because only *T. semicincta* was reported from that country by the later authors.

Herein, we report the first specimen of *T. supracincta* from Colombia. The snake, an adult female, was found road killed during a field trip in December 2014, in La Campiña, Cañasgordas municipality, Antioquia department, Pacific slope of the Cordillera Occidental of Colombia (06°44'49.3" N, 076°01'18.7" W, 1,323 m a.s.l., WGS84) (Figure 1). The snake was deposited at the Museo de Herpetología de la Universidad de Antioquia (MHUA-R 14994). In order to present an updated distribution map for the species (Figure 1), locality data was compiled from the GBIF (2015) and from the literature, under the names *T. supracincta* and *T. annulata* (see Wilson 1987 for nomenclatural details). Detailed locality data and sources are shown in Appendix 1.

As shown in Table 1, the scale counts and measurements of the collected specimen fits well within the variation described for *T. supracincta* by Wilson (1982 [referred as *T. annulata*], 1987) from Central and South American populations, and additional records by Cisneros-Heredia (2003) from Ecuador. Furthermore, Figures 2 and 3 show a coral-like color pattern with offset bands, which is unique of this species within the genus *Tantilla* (Savage 2002; Cisneros-Heredia 2003; Köhler 2008).

This record begins to fill the vast distributional gap of approximately 870 km along all the Colombian Pacific

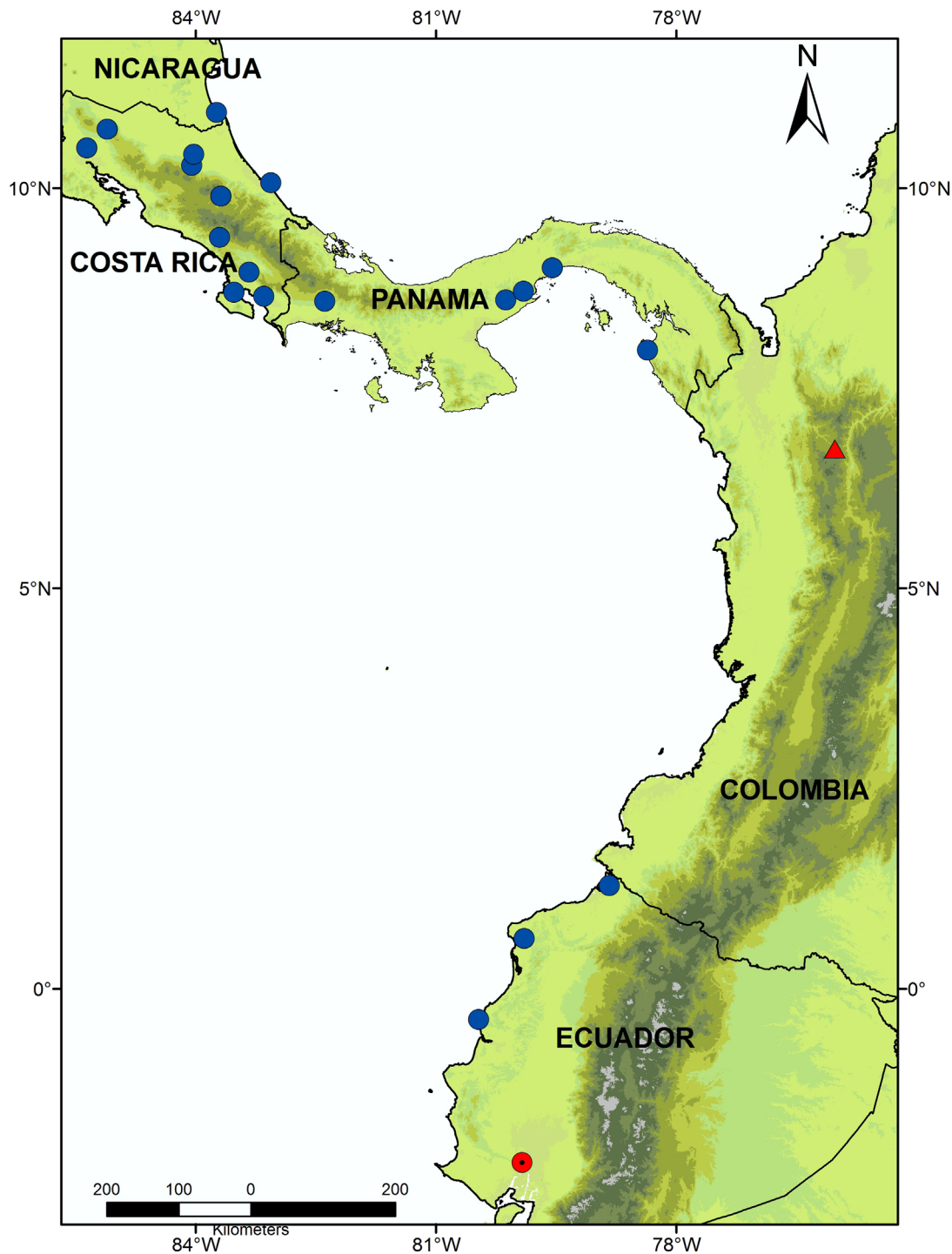


Figure 1. Geographic distribution of *Tantilla supracincta* in Central and South America. Red triangle indicates the new record, red circle indicates the type locality; blue circles, are data from literature and GBIF. See Appendix 1.

versant, where *T. supracincta* should be distributed. This distributional pattern is shown by many other snake species ranging from nuclear and isthmian Central America, through the pacific versants of Colombia, Ecuador, and occasionally, northern Peru. Furthermore, our record expands the altitudinal known distribution for the species by 473 m a.s.l. These findings suggests that there is a need to conduct a greater sampling effort in the Pacific Andean foothills and lowlands of Colombia in order to get a better understanding of the snake

Table 1. Measurements, scalation, and color pattern data of specimens of *Tantilla supracincta*. MHUA-R 14994 from La Campiña (Cañasgordas municipality Antioquia department, Colombia) and summary of the variation from the literature (Wilson 1982, 1987; Cisneros-Heredia 2003).

	MHUA-R 14994	Literature summary
Snout-vent length (mm)	342	150–562
Tail length (mm)	101	33–125
Ventrals	147	138–155
Subcaudals	59	52–65
Number of crossbands on body	15	11–16
Number of crossbands on tail	7	3–8



Figure 2. General aspect of the *Tantilla supracincta* (MHUA-R 14994) specimen reported herein, in dorsal (right) and ventral (left) views. Scale bar= 50 mm. Photo by FAG.



Figure 3. Head views of *Tantilla supracincta* (MHUA-R 14994) in dorsal (left), ventral (middle) and lateral (right) views. Scale bar = 5 mm. Photo by FAG.

diversity in the Colombian Chocó biogeographic region and its relationships with other Central and South American biotas.

ACKNOWLEDGEMENTS

We thank the Museo de Herpetología de la Universidad de Antioquia (MHUA) for providing us workspace to undertake this research and Javier Sunyer for his valuable contributions to the final version of the manuscript.

LITERATURE CITED

- Almendáriz, A. L., and J. Carr. 2012. Lista actualizada de los Anfibios y Reptiles registrados en los Remanentes de Bosque de la Cordillera de la Costa y áreas adyacentes del Suroeste del Ecuador. *Revista Politécnica* 30: 194–194.
- Cisneros-Heredia, D. F. 2003. Reptilia, Serpentes, Colubridae, *Tantilla supracincta*: Filling gap, first provincial record, geographic distribution map, and natural history. *Check List* 1: 23–26. doi: [10.15560/1.1.23](https://doi.org/10.15560/1.1.23)
- Esqueda, L. F., and E. La Marca. 1999. New reptilian species records from the Cordillera de Merida, Andes of Venezuela. *Herpetologi-*

- cal Review* 30: 238–240.
- GBIF. 2015. The Global Biodiversity Information Facility. GBIF. Accessed at <http://www.gbif.org/>, 5 March 2015.
- Köhler, G. 2008. *Reptiles of Central America*. Offenbach: Herpeton. 400 pp.
- Pérez-Santos, C., and A. G. Moreno. 1988. *Ofidios de Colombia*. Monografie. Torino: Museo Regionale di Scienze Naturali. 497 pp.
- Peters, J. A., and B. R. Orejas-Miranda. 1970. Catalogue of the Neotropical Squamata: Part I. Snakes. *National Museum of the United States Bulletin* 297: 1–347. <http://www.biodiversitylibrary.org/part/39191>
- Savage, J. M. 2002. *The amphibians and reptiles of Costa Rica: a herpetofauna between two continents, between two seas*. Chicago: University of Chicago press. 934 pp.
- Uetz, P., and J. Hosek. 2015. The reptile database. Accessed at www.reptile-database.org, 25 February 2015.
- Vanegas-Guerrero, J., A. Batista, I. Medina, and F. Vargas-Salinas. 2015. *Tantilla alticola* (Boulenger, 1903) (Squamata: Colubridae): filling a geographical distribution gap in western Colombia. *Check List* 11(1): 1555. doi: [10.15560/11.1.1555](https://doi.org/10.15560/11.1.1555)
- Vera Pérez, L. E., J. A. Zúñiga-Baos, and G. G. Montingelli. 2015. First record of *Tantilla alticola* (Boulenger, 1903) (Serpentes: Colubridae) in Cauca state, Colombia, filling distribution gap and notes on natural history. *Check List* 11(2): 1578. doi: [10.15560/11.2.1578](https://doi.org/10.15560/11.2.1578)
- Wallach, V., K. Williams, and J. Boundy. 2014. *Snakes of the world: a catalogue of living and extinct species*. Boca Raton, Florida: Taylor & Francis Group. 1227 pp.
- Wilson, L. D. 1982. A review of the colubrid snakes of the genus *Tantilla* of Central America. *Milwaukee Public Museum Contributions in Biology and Geology* (52): 1–77.
- Wilson, L. D. 1987. A résumé of the colubrid snakes of the genus *Tantilla* of South America. *Milwaukee Public Museum Contributions in Biology and Geology* (68): 1–35.
- Wilson, L. D. 1999. Checklist and key to the species of the *Tantilla* (Serpentes: Colubridae), with some commentary on distribution. *Smithsonian Herpetological Information Service* (122):1–34. <https://repository.si.edu/handle/10088/848>
- Wilson, L. D., and V. Mata-Silva. 2014. Snakes of the genus *Tantilla* (Squamata: Colubridae) in Mexico: taxonomy, distribution, and conservation. *Mesoamerican Herpetology* 1: 4–95. http://www.mesoamericanherpetology.com/uploads/3/5/0/0/3500871/wilson_and_mata-silva_paper.pdf

Authors' contribution statement: BRV and FAGM collected the data, JPHG, FAGM and BRV, wrote the text.

Received: 9 April 2015

Accepted: 4 July 2015

Academic editor: Natan Medeiros Maciel

Appendix 1. Localities and coordinates for *Tantilla supracincta* obtained from GBIF and literature records.

Museum records obtained from GBIF (2015)

Institutional abbreviations are as follows: LACM (Natural History Museum of Los Angeles County, University of California, U.S.A.); MCZR (Museum of Comparative Zoology, Harvard University, U.S.A.); UMMZ (Museum of Zoology, University of Michigan, U.S.A.); KU (Museum of Natural History, University of Kansas, U.S.A.); YPM-HERR (Museum of Natural History of Yale Peabody, Yale University U.S.A.); FLMNH (Museum of Natural History of Florida, University of Florida, U.S.A.); USNM (National Museum of Natural History, Smithsonian Institution, U.S.A.); MVZ (Museum of Vertebrate Zoology, University of California, U.S.A.); ZMB (Zoologisches Museum, Universität Humboldt, Germany); MPM (Milwaukee Public Museum, Milwaukee, U.S.A.); ANSP (Academy of Natural Sciences of Philadelphia, Drexel University, U.S.A.); AMNH-R (American Museum of Natural History, New York, U.S.A.).

COSTA RICA: **Alajuela** (10.733; -085.100): LACM154397. UMMZ 131475. UMMZ172934; **Cartago:** Turrialba (09.900; -083.683): KU25705. KU30938. KU30939. KU35547. KU34831. MCZR 55045; **Guanacaste:** Finca de Porvenir de Tilaran (10.5012; -085.358): LACM 154395; Silencio (10.501; -085.358): LACM154398; **Heredia:** Rara Avis Rainforest Reserve (10.282; -084.045): YPM-HERR16857; La Selva (10.423; -084.022): Savage 2002; **Limon:** (10.064; -083.062): FLMNH10533; **Puntarenas:** 14 km ESE Palmar Norte Quebrada Coobo (08.950; -083.333): LACM154396; Golfito (08.650; -083.150): KU34832; Rincon de Osa (08.700; -083.520): USNM219605.6339. USNM219604.6339; **San José:** San Isidro del General (09.383; -083.700): MVZ36454. **ECUADOR:** **Esmeraldas:** San Lorenzo (01.288; -078.837): USNM198714.6318; Cordillera de la Costa (00.6283; -079.899): Almendáriz and Carr (2012); **Guayas:** Guayaquil (-02.17099; -079.92236): ZMB4791 (holotype) **NICARAGUA:** **Rio San Juan:** San Juan del Norte (10.944; -083.739): MPM420; **PANAMA:** **Cocle:** El Valle de Anton (08.601; -080.130): KU112495; **Darien:** NE slope Cerro Sapo (07.975; -078.362): KU112493; **Panama** (09.003; -079.550): ANSP21810. AMNH-R119886; Cerro La Campana (08.71; -079.900): KU112494. MPM451; **Chiriqui** (08.584; -082.390): MPM451. FLMNH65012.

Literature records

Almendáriz & Carr (2012): **ECUADOR:** **Esmeraldas:** Cordillera de la Costa (00.6283; -079.899). Cisneros-Heredia (2003): **ECUADOR:** **Manabí:** Cabo Pasado (-00.383; -080.467).