REPTILES & AMPHIBIANS

First Record of the Whipala Sipo (*Chironius whipala*) in Peru

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Neotropical sipos (also known as whipsnakes) in the genus *Chironius* Fitzinger 1826, which are characterized by having 10 or 12 midbody dorsal scale rows, occur from Honduras in Central America to Uruguay and Argentina in South America, and on Trinidad in the Atlantic Ocean (Dixon et al. 1993; Torres-Carvajal et al. 2019). The genus currently comprises 27 terrestrial or semi-arboreal species (Uetz et al. 2025), with six new species described in the last decade (Fernandes and Hamdan 2014; Hamdan and Fernandes 2015; Entiauspe-Neto et al. 2020; Jadin et al. 2024; Quinteros-Muñoz et al. 2024; Sudré et al. 2024). According to Dixon et al. (1993), six species of *Chironius* occur in Peru: *C. exoletus* (Linnaeus 1758), *C. fuscus* (Linnaeus 1758), *C. leucometapus* Dixon, Wiest, and Cei 1993, *C. monticola* Roze 1952, *C. multiventris* Schmidt and Walker 1943, and *C. scurrula* (Wagler 1824). A revision of *Chironius* specimens housed in the herpetological collection of the Centro de Ornitología y Biodiversidad (CORBIDI) in Lima, Perú, led to the recognition of the recently described Whipala Sipo (*Chironius whipala*), presently known only from Bolivia. We herein report the first record of *C. whipala* in Perú.

On 7 May 2014, Karla García collected an adult male *C. whipala* (CORBIDI 14688) (Figs. 1–3) during an environmental impact study (Programa de Monitoreo Biológico COGA) for the gas pipeline of Camisea in Capire, Camanti District, Quispincanchi Province, Cusco Department, Perú (-13.42285, -70.90338; elev. 1,240 m asl). This specimen represents the first record of *C. whipala* in Peru, extending the known range by about 750 km NW from the type locality at Chaquisacha, Carrasco National Park, Cochabamba Department, Bolivia (Fig. 4).

The specimen was identified according to the following diagnostic characters of *C. whipala* (Quinteros-Muñoz et al. 2024) (CORBIDI 14688 characters in parentheses): (1) dorsal scale formula 10-10-8 in males (10-10-8); (2) apical pits absent; (3) paravertebral keels present; (4) ventrals 149–151 in males (151); (5) subcaudals 117–122 in males (114); (6) cloacal plate single; (7) loreal slightly longer than high; (8) adults emerald green, unmarked; (9) black postocular stripe absent; (10) snout yellow; (11) ventrals and subcaudals yellowish or greenish, immaculate; (12) hemipenis short (~2X as long as wide), cylindrical, unilobed, with an undivided sulcus spermaticus and base covered with tiny spines (Fig. 3).

Figure 1. An adult male Whipala Sipo (*Chironius whipala*) (CORBIDI 14688) (SVL 918 mm) collected in Capire, Camanti District, Quispincanchi Province, Cusco Department, Peru. Photographs by PJV.

Reptiles & Amphibians ISSN 2332-4961
https://doi.org/10.17161/randa.v32i1.23140

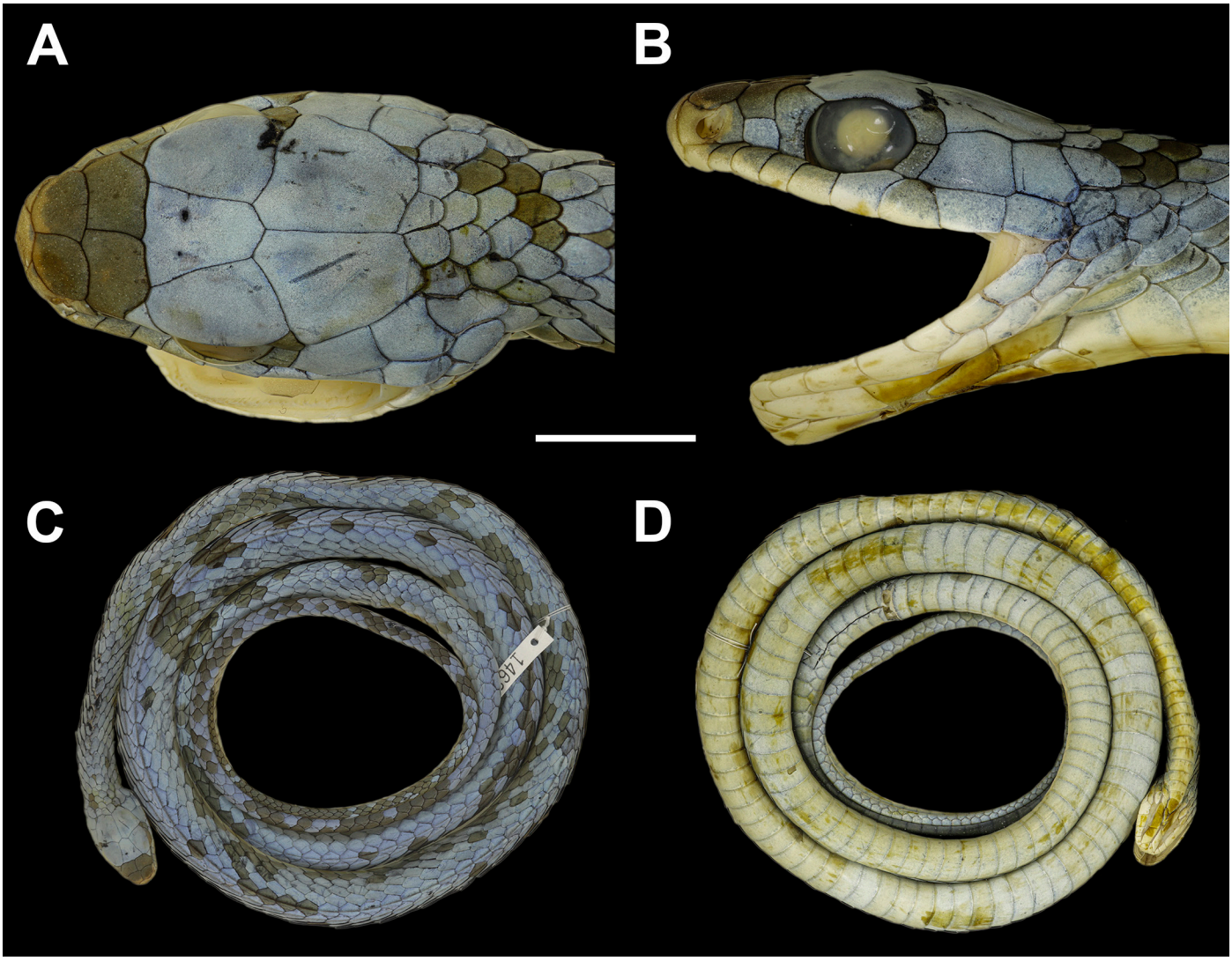

Figure 2. An adult male Whipala Sipo (*Chironius whipala*) (CORBIDI 14688) (SVL = 918 mm) collected in Capire, Camanti District, Quispincanchi Province, Cusco Department, Peru. Dorsal (A) and lateral (B) views of head; dorsal (C) and ventral (D) views of body. Scale bar (head only) = 10 mm. Photographs by LAGA.

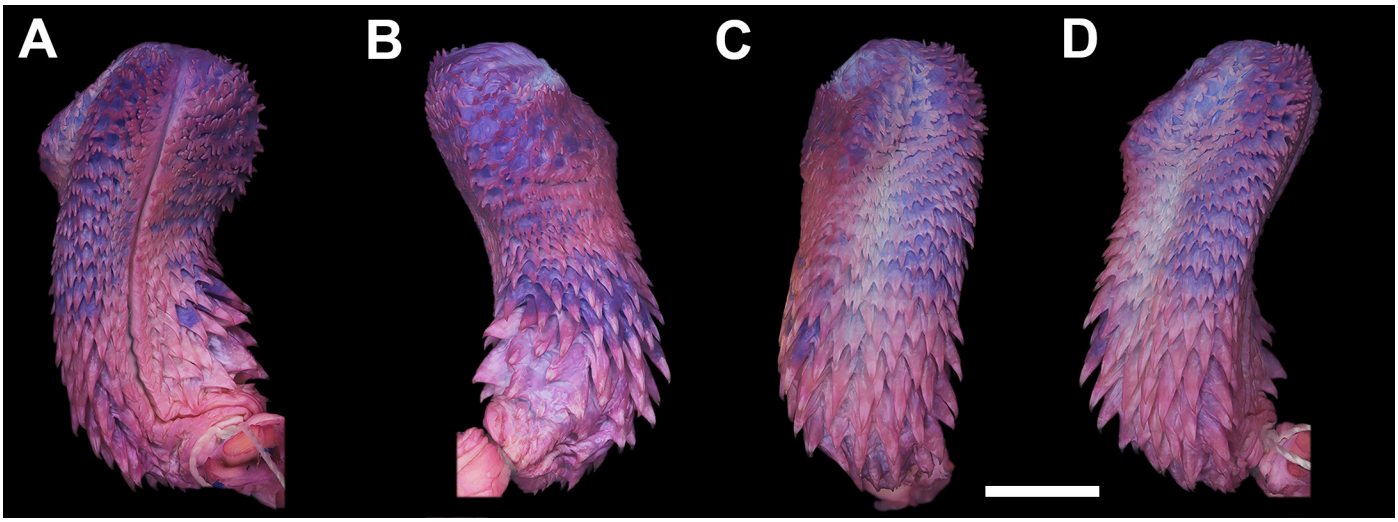

Figure 3. Right hemipenis of an adult male Whipala Sipo (*Chironius whipala*) (CORBIDI 14688): sulcate (A), left side (B), asulcate (C), and right side (D) views. Scale bar = 5 mm. Photographs by LAGA.

According to Quinteros-Muñoz et al. (2024), *C. whipala* is endemic to the Bolivian-Peruvian Yungas Ecoregion. However, this new record indicates that *C. whipala* is distributed much farther north, at least as far as the Department of Cusco (Fig. 4). Like other species of limbless squamates (e.g., *Amphisbaena slateri* Boulenger 1907, *Crotalus durissus* Linnaeus 1758, *Bothrocophias andianus* (Amaral 1923), *Bothrops oligolepis* (Werner 1901), *B. monsignifer* Timms et al. 2019), the range of *C. whipala* extends from Bolivia to southern Peru through the Peruvian Yungas Ecoregion (sensu Olson et al. 2001) (Harvey et al. 2005; Costa et al. 2018; Timms et al. 2019).

In a review of the literature, we found that some species of *Chironius* have been erroneously reported for Perú or their presence is at least doubtful. Carrillo and Icochea (1995) recorded *C. flavolineatus* in the upper rainforest of Huánuco Department and *C. grandisquamis* in the Amazon rainforest of Loreto Department. However, the authors did not cite voucher specimens for these records. Both species subsequently were recorded for Peru by Lehr (2002), following Carrillo and Icochea (1995) and identifying a specimen at the Universidad Nacional Mayor de San Marcos as *C. flavolineatus* (UNMSM 2889). However, Lehr (2002) did not provide new evidence to support the record of *C. grandisquamis*. Moreover, Uetz et al. (2025) reported both species in Peru, along with *C. carinatus*; they included the records of *C. flavolineatus* and *C. grandisquamis* in Peru based on Lehr (2002) and a personal communication by T. Doan, who mentioned a record of *C. flavolineatus* in Peru without specifying a locality or providing a specimen voucher. Hamdan and Fernandes (2015) examined photographs of the supposed specimen of *C. flavolineatus* (UNMSM 2889) from Peru identified by Lehr (2002), and concluded that the specimen was not *C. flavolineatus* based on the absence of a vertebral stripe and other diagnostic characters of the taxon. The distribution of *C. flavolineatus* includes the geographical region of Gran Chaco in Bolivia, Paraguay, and Brazil, and the Atlantic forest biomes of Brazil (Wallach et al. 2014; Hamdan and Fernandes 2015), whereas the distribution of *C. grandisquamis* is restricted to the Chocó Forest on the Pacific Coast of northwestern Ecuador to Central America (Dixon et al. 1993; Wallach et al. 2014).

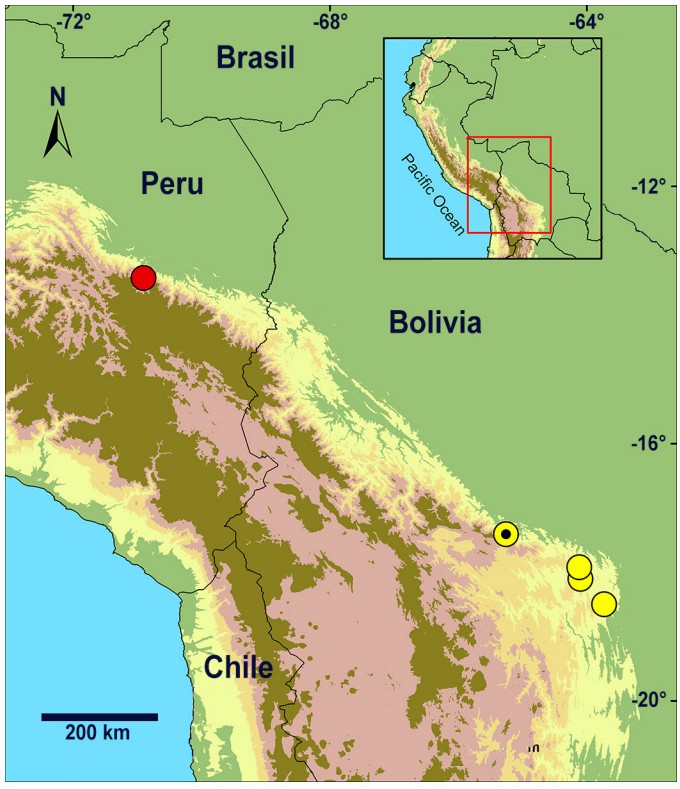

Figure 4. The geographic distribution of the Whipala Sipo (*Chironius whipala*). Yellow dots mark previous records and that with a central black dot denotes the type locality (Quinteros-Muñoz et al. 2024); the red dot indicates the new locality record.

The records of *C. carinatus* from Peru in Uetz et al. (2025) were based on records in Catenazzi et al. (2013), which included a specimen (UNMSM [formerly MUSM] 24073) and a mention in Duellman and Salas (1991), although the latter cited no voucher specimen. Additionally, the distributional data provided by Wallach et al. (2014) and Nogueira et al. (2019) included no evidence to support their records. Dixon and Soini (1977, 1986) listed *C. carinatus* from the Iquitos Region in northeastern Peru, but Dixon et al. (1993) reevaluated the voucher specimens identified as *C. carinatus* by Dixon and Soini (1977, 1986) and determined that these were *C. exoletus*. In addition, PJV examined the specimen referred to *C. carinatus* by Catenazzi et al. (2013) and found that it was *C. exoletus*. Consequently, we agree with Dixon et al. (1993), who limited the distribution of *C. carinatus* to northeastern Brazil, the Guianas, and Colombia.

After eliminating misidentifications and relying solely on records supported by voucher specimens, we consider only seven species of *Chironius* to be present in Peru, those listed in Dixon et al. (1993) and the new record reported herein: *C. exoletus*, *C. fuscus*, *C. leucometapus*, *C. monticola*, *C. multiventris, C. scurrula*, and *C. whipala*.

Acknowledgements

We thank William W. Lamar for reviewing an early version of this manuscript and the Hollomon Price Foundation for funding our research on Peruvian herpetofauna.

Literature Cited

Carrillo, N. and J. Icochea. 1995. Lista taxonomica preliminar de los reptiles vivientes del Peru. *Publicaciones del Museo de Historia Natural Uiversidad Nacional Mayor de San Marcos* 49: 1–27.

Catenazzi, A., E. Lehr, and R. von May. 2013. The amphibians and reptiles of Manu National Park and its buffer zone, Amazon basin and eastern slopes of the Andes, Peru. *Biota Neotropica* 13: 269–283. https://doi.org/10.1590/S1676-06032013000400024.

Costa, H.C., L.J. Welton, and J. Hallermann. 2018. An updated diagnosis of the

rare *Amphisbaena slateri* Boulenger, 1907, based on additional specimens (Squamata, Amphisbaenia, Amphisbaenidae). *Evolutionary Systematics* 2: 125–135. https://doi.org/10.3897/evolsyst.2.28059.

Dixon, J.R. and P. Soini. 1977. The reptiles of the upper Amazon Basin, Iquitos region, Peru II. Crocodilians, Turtles and Snakes. *Milwaukee Public Museum* 12: 1–91.

Dixon, J.R. and P. Soini. 1986. *The Reptiles of the Upper Amazon Basin, Iquitos Region, Peru. I–VII.* Milwaukee Public Museum, Milwaukee, Wisconsin, USA.

Dixon, J., J. Wiest, and J. Cei. 1993. *Revision of the Neotropical Snakes Genus* Chironius *Fitzinger (Serpentes, Colubridae)*. Monografie XIII, Museo Regionale di Scienze Naturali, Torino, Italy. https://doi.org/10.1002/mmnz.19960720112.

Duellman, W.E. and A.W. Salas. 1991. Annotated checklist of the amphibians and reptiles of Cuzco Amazonico, Peru. *Occasional Papers of the Museum of Natural History The University of Kansas* 143: 1–13.

Entiauspe-Neto, O.M., M.L. Lyra, C. Koch, F.M. Quintela, A.D. Abegg, and D. Loebmann. 2020. Taxonomic revision of *Chironius bicarinatus* (Wied 1820) (Serpentes: Colubridae), with description of a new species. *Herpetological Monographs* 34: 98–115. https://doi.org/10.1655/HERPMONOGRAPHS-D-19-00013.1.

Fernandes, D.S. and B. Hamdan. 2014. A new species of *Chironius* Fitzinger, 1826 from the state of Bahia, northeastern Brazil (Serpentes: Colubridae). *Zootaxa* 3881: 563–575. https://doi.org/10.11646/zootaxa.3881.6.5.

Hamdan, B. and D.S. Fernandes. 2015. Taxonomic revision of *Chironius flavolineatus* (Jan, 1863) with description of a new species (Serpentes: Colubridae). *Zootaxa* 4012: 97–119. http://dx.doi.org/10.11646/zootaxa.4012.1.5.

Harvey, M.B., J. Aparicio, and L. Gonzales. 2005. Revision of the venomous snakes of Bolivia. II: The pitvipers (Serpentes: Viperidae). *Annals of Carnegie Museum* 74: 1–37. https://doi.org/10.2992/0097-4463(2005)74[1:ROTVSO]2.0.CO;2.

Jadin, R.C., M.J. Jowers, C. Blair, R.K Ludwig, X. Salgado-Irazabal, and J.C. Murphy. 2024. Rectifying a century of misidentifications: a taxonomic re-evaluation of sipo snakes (Colubridae: *Chironius*) on Trinidad. *Systematics and Biodiversity* 22: 2338064. https://doi.org/10.1080/14772000.2024.2338064.

Lehr, E. 2002. *Amphibien und Reptilien in Peru: Die Herpetofauna Entlang des 10. Breitengrades von Peru: Arterfassung, Taxonomie, Ökologische Bemerkungen und Biogeographische Beziehungen*. Natur und Tier-Velag GmbH, Münster, Germany.

Nogueira, C.C., A.J.S. Argôlo, V. Arzamendia, J.A. Azevedo, F.E. Barbo, R.S. Bérnils, B.E. Bolochio, M. Borges-Martins, M. Brasil-Godinho, and H. Braz. 2019. Atlas of Brazilian snakes: verified point-locality maps to mitigate the Wallacean shortfall in a megadiverse snake fauna. *South American Journal of Herpetology* 14: 1–274. https://doi.org/10.2994/SAJH-D-19-00120.1.

Olson, D.M., E. Dinerstein, E.D. Wikramanayake, N.D. Burgess, G.V.N. Powell, E.C. Underwood, J.A. D'Amico, I. Itoua, H.E. Strand, J.C. Morrison, C.J. Loucks, T.F. Allnutt, T.H. Ricketts, Y. Kura, J.F. Lamoreux, W.W. Wettengel, P. Hedao, and K.R. Kassem. 2001. Terrestrial ecoregions of the world: A new map of life on earth. *BioScience* 51: 933–938. https://doi.org/10.1641/0006-3568(2001)051[0933:TEOTWA]2.0.CO;2.

Quinteros-Muñoz, O., P. Gómez-Murillo, T. Camacho-Badani, R. Aguayo, R. Carpio-Real, E. Pérez, B. Marca, L. Gonzales, and O. Torres-Carvajal. 2024. A new species of Sipo Snake, *Chironius* (Serpentes: Colubridae), from the Yungas of Bolivia. *Amphibian & Reptile Conservation* 18: 58–67.

Sudré, V., A. Andrade-Junior, M. Folly, J.A.R. Azevedo, R.W. Ávila, F.F. Curcio, P.M.S. Nunes, and P. Passos. 2024. Revision of the *Chironius bicarinatus* complex (Serpentes: Colubridae): Redefined species boundaries and description of a new species. *Vertebrate Zoology* 74: 85–120. https://doi.org/10.3897/vz.74.e106238.

Timms, J., J.C. Chaparro, P.J. Venegas, D. Salazar-Valenzuela, G. Scrocchi, J. Cuevas, G. Leynaud, and P.A. Carrasco. 2019. A new species of pitviper of the genus *Bothrops* (Serpentes: Viperidae: Crotalinae) from the Central Andes of South America. *Zootaxa* 4656: 99–120. https://doi.org/10.11646/zootaxa.4656.1.4.

Torres-Carvajal. O., L.Y. Echevarria, S.E. Lobos, P.J. Venegas, and P.J.R. Kok. 2019. Phylogeny, diversity and biogeography of Neotropical sipo snakes (Serpentes: Colubrinae: *Chironius*). *Molecular Phylogenetics and Evolution* 130: 315–329. https://doi.org/10.1016/j.ympev.2018.10.022.

Uetz, P., P. Freed, R. Aguilar, F. Reyes, J. Kudera, and J. Hošek (eds.). 2025. *The Reptile Database*. <http://www.reptile-database.org>.

Wallach, V., K.L. Williams, and J. Boundy. 2014. *Snakes of the World: A Catalogue of Living and Extinct Species.* CRC Press, Boca Raton, Florida, USA. https://doi.org/10.1201/b16901.