

BASILISCUS VITTATUS (LACERTILIA: CORYTOPHANIDAE)

Medardo Arreortúa^{1*}, Angel I. Contreras-Calvario^{1,3} & Edna González-Bernal²

¹Instituto Politécnico Nacional, Centro Internacionalmente de Investigación para el Desarrollo Integral Regional, Unidad Oaxaca, Laboratorio de Ecología de Anfibios, Hornos 1003, Col. Noche Buena, 71230, Santa Cruz Xoxocotlán, Oaxaca, México.

²CONACYT- Instituto Politécnico Nacional, CIIDIR-Oaxaca, Laboratorio de Ecología de Anfibios. Hornos 1003, Col. Noche Buena, 71230, Santa Cruz Xoxocotlán, Oaxaca, México.

³Herpetario de Veracruz. PIMVS. Veracruz, México.

*Correspondence: medardo.am@hotmail.com

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Mexico: Oaxaca: Santiago Comaltepec: locality of La Esperanza (17.6575° N, 96.3953° W; WGS 84, 482 m a.s.l.). 02 May 2022. At 13:44 h, an adult male of *Basiliscus vittatus* was observed (CNAR-RF 918) (Fig. 1A) resting approximately 6 meters up a tree enveloped by Araceae and Bromeliaceae. The environmental parameters at the time of encounter were as follows: 31.4° C environmental

temperature, 73.1% relative humidity, and 28.35 hPa barometric pressure. A second individual, a juvenile of *B. vittatus* (17.6587° N, 96.3955° W; WGS 84, 482 m a.s.l.), was recorded on 09 February 2023 at 01:07 hours (CNAR-RF 919) (Fig. 1B). It had a SVL of 5.9 cm, tail length of 13.62 cm, mass of 7.4 g and body temperature of 21.8°C. Environmental parameters for this observation were: 21.9

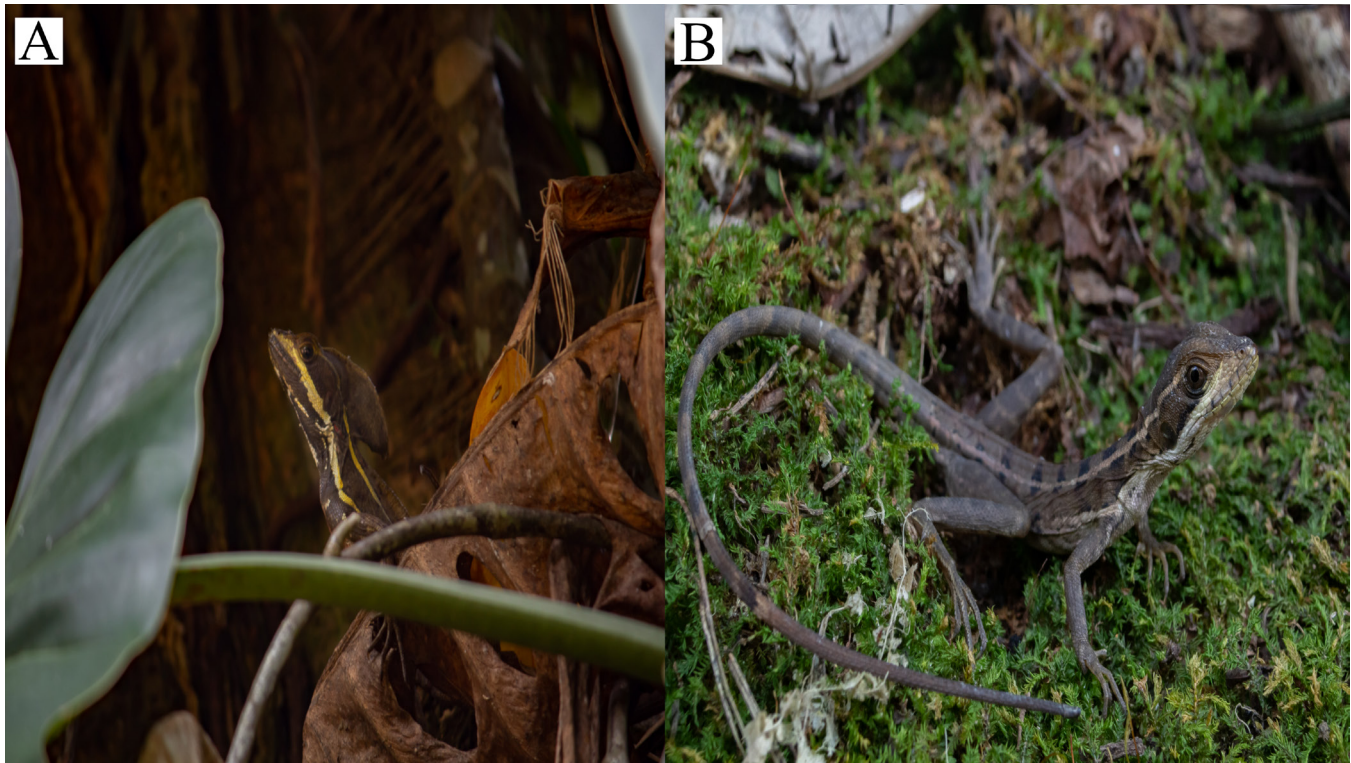


Figura 1. Individuos registrados en el municipio de Santiago Comaltepec. Río Bobo en los límites de La Esperanza, Oaxaca. A) Individuo adulto (CNAR-RF 918) de *Basiliscus vittatus*. B) Individuo juvenil (CNAR-RF 919) de *Basiliscus vittatus*. Fotos: Medardo Arreortúa.

Figure 1. Registered individuals in Santiago Comaltepec municipality. Río Bobo in the limits of La Esperanza, Oaxaca. Photographs: Medardo Arreortúa. A) Adult individual (CNAR-RF 918) of *Basiliscus vittatus*. B) Juvenile individual (CNAR-RF 919) of *Basiliscus vittatus*. Photos: Medardo Arreortúa.

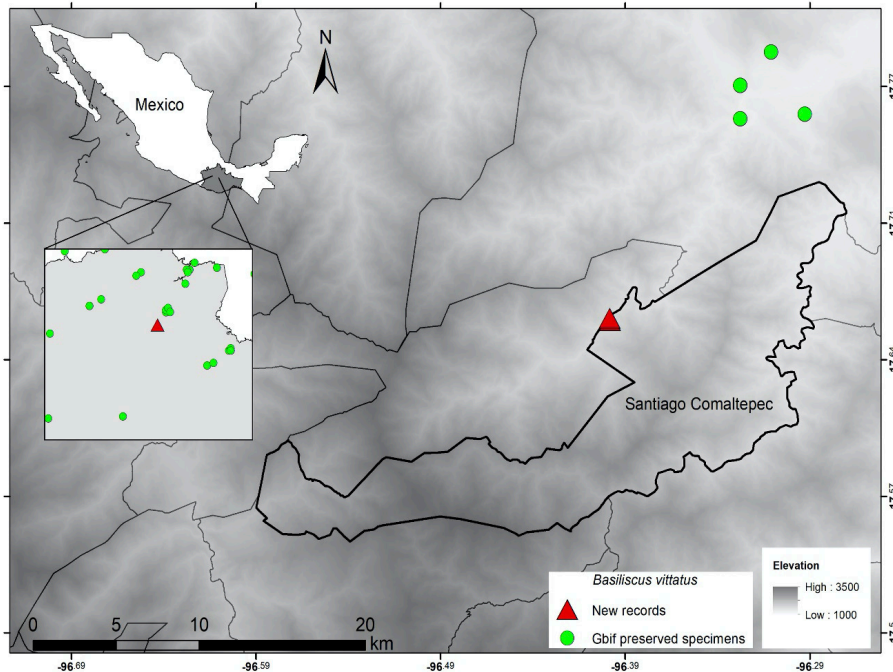


Figura 1. Mapa de distribución. Nuevos registros de *Basiliscus vittatus* (triángulos rojos), y registros publicados más cercanos (GBIF, 2023) (círculos verdes).

Figure 1. Distribution map. New records of *Basiliscus vittatus* (red triangles) and closest published records (GBIF, 2023) (green circles).

°C substrate temperature, 22.6 °C environmental temperature, and 89% relative humidity. This individual was found resting on a rock 1 m from the ground, along the banks of a river in the lower part of the community of La Esperanza, Oaxaca. Based on a broad query of available records from biological collections (GBIF, 2023), the records herein represent the first documented *B. vittatus* from the municipality of Santiago Comaltepec (Fig. 2) and help to fill the gaps in its distribution. The nearest known record was vouchered ca. 13.4 km north away in a straight line and corresponds to an organism collected in the municipality of Valle Nacional (University of Michigan Museum of Zoology [UMMZ] 114963; GBIF, 2023). *Basiliscus vittatus* is a species of lizard with a wide distribution in central Mexico on the Pacific versant from Nayarit to Chiapas and on the Atlantic versant from Veracruz to Yucatan, as well as in Central America, from Guatemala to Costa Rica at elevations from 108 to 1,200 m a.s.l. (Calderón-Mandujano et al., 2008; Castañeda-Hernández et al., 2011; Loc-Barragán et al., 2022). Distributional records for this species are abundant. In Oaxaca, 399 records of *B. vittatus* are known (GBIF, 2023), of which only 62% (249) correspond to specimens cataloged and deposited in a scientific collection. Voucher photographs of these specimens were deposited in the Colección Nacional de Anfibios y Reptiles (CNAR), UNAM.

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CITED LITERATURE

- Calderón-Mandujano, R., H. Bahena-Basave & S. Calmé. 2008. Anfibios y Reptiles de la Reserva de la Biósfera de Sian Ka'an y Zonas aledañas. Segunda Edición. ECOSUR/ CONABIO/ Sociedad Herpetológica Mexicana/ Reserva de la Biósfera de Sian ka'an. México 111 p.
- Castañeda-Hernández, C., T. Ramírez-Valverde, Y. Meza-Parral, A. Sarmiento-Rojas & A. Martínez-Campos. 2011. Ampliación de la distribución geográfica de *Basiliscus vittatus* en el estado de Puebla. *Revista Mexicana de Biodiversidad* 3:1046-1048.
- GBIF. 2023. Global Biodiversity Information Facility occurrence download <https://doi.org/10.15468/dl.4nb6sp> [Accessed March 2023].
- Loc-Barragán, J.A., J.N. Fuentes-Castrejón, L.A. Solís-Pecero, L.D. Santana-Moreno, R. Loaiza-Ramírez & G.A. Woolrich-Piña. 2022. First record of *Basiliscus vittatus* (Lacertilia: Corytophanidae) in Nayarit, México. *Amphibian and Reptile Conservation* 3:6-33.

