

# FIRST RECORD OF THE RING-NECKED COFFEE SNAKE *NINIA DIADEMATA* BAIRD & GIRARD, 1853 (SQUAMATA: DIPSADIDAE) FOR QUINTANA ROO, MEXICO

## PRIMER REGISTRO DE LA CULEBRA DE CAFETAL DE COLLAR *NINIA DIADEMATA* BAIRD & GIRARD, 1853 (SQUAMATA: DIPSADIDAE) PARA QUINTANA ROO, MÉXICO

Pedro E. Nahuat-Cervera<sup>1,2\*</sup> & J. Ismael Arellano-Ciau<sup>3</sup>

<sup>1</sup>Campus de Ciencias Biológicas y Agropecuarias, Universidad Autónoma de Yucatán. Km 15.5 carretera Mérida-Xmatkuil, Mérida, C. P. 97135, Yucatán, México.

<sup>2</sup>Ekuneil Península de Yucatán. C. 52 x 89 y 93 centro, Mérida, C.P. 97000, Yucatán, México.

<sup>3</sup>Ichi Tours. Calle 38 x 35 y 37, centro, C.P. 97780, Valladolid, Yucatán, México.

\*Correspondence: [pedro.nahuat4@gmail.com](mailto:pedro.nahuat4@gmail.com)

Received: 2024-01-26. Accepted: 2024-04-13. Published: 2024-06-03.

Editor: César Antonio Ríos-Muñoz, México

*Ninia diademata* is a species belonging to the family Dipsadidae, which has previously been differentiated from Colubridae through phylogenetic analyses (Grazziotin et al., 2012). It is reported as a small-sized snake with total length (TL) up to 42 cm. Its dorsal coloration is opaque black with a cream, yellow,

or orange collar that originates from the posterior margin of the parietal scales and is usually interrupted mid-dorsally and is continuous with the light coloration of the chin and labial scales. The scale rows 1 to 3 have a yellow spot in the middle, while the venter is pale gray with irregular spots. The eyes are moderately

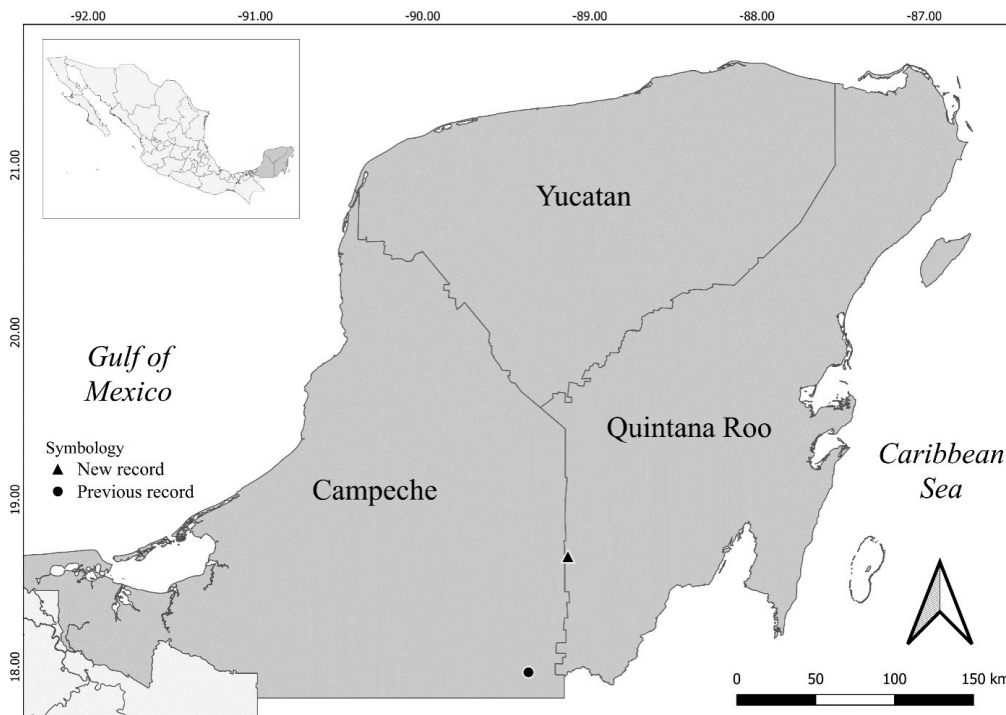


Figura 2. Nuevo registro (triángulo) y registro previo (círculo) de *Ninia diademata* en la porción mexicana de la Península de Yucatán.

Figure 2. New record (triangle) and previous record (circle) of *Ninia diademata* in the Mexican portion of the Yucatan Peninsula.



**Figura 2.** Fotografía in situ de *Ninia diademata*. / **Figure 2.** In situ photograph of *Ninia diademata*.

small with rounded pupils, and the scales of the dorsum are strongly keeled (Lee, 1996; Heimes, 2016).

This species inhabit evergreen seasonal forest, tropical lowlands, mountain rain forest, cloud forest and marginally pine-oak forest. It is nocturnal, active during the night in search of its food, which typically consists of slugs and snails. During the day, it seeks refuge under the leaf litter on the forest floor or in rotten logs (Heimes, 2016; Ángel-Hernández et al., 2022).

Its species occurs in the Mexican states of Chiapas, Hidalgo, Oaxaca, Puebla, Queretaro, San Luis Potosí, Tabasco, and Veracruz, to Guatemala, Belize, and Honduras, in Central America (Lee, 1996; Heimes, 2016; Ángel-Hernández et al., 2022). Lee (1996) documented the presence of this species in Petén Department, Guatemala, and in the Mexican portion of the Yucatan peninsula, *N. diademata* has been recorded only in one

locality in southern Campeche, within the Calakmul Biosphere Reserve (Colston et al., 2015; Barão-Nóbrega et al., 2022).

On November 7th, 2023, at 19:49 h, while conducting a herping tour looking for frogs, we encounter an adult *N. diademata* (TL ca. 30 cm) actively moving on the ground near to a small lake in tropical semi-evergreen forest, at 6.8 km southern Nuevo Becar, municipality of Othón P. Blanco, Quintana Roo, Mexico (18.662326, -89.131400, WGS 84, 139 m a.s.l.) (Fig. 1). The snake was photographed in situ (Fig. 2) and subsequently captured for species identification and validation purposes (Fig. 3A, B). After documentation, it was released back into the same area where it was initially found. The species of this snake was confirmed by Dr. J. Rogelio Cedeño-Vázquez, and one of the photographs (Fig. 3A) was deposited in the digital collection of the Centro de Investigaciones Biológicas of the Universidad Autónoma del Estado de Hidalgo, with voucher number CH-CIB-152.



**Figura 3.** Fotografía dorsal (A) y ventral (B) de *Ninia diademata*. / **Figure 3.** Dorsal (A) and ventral (B) photograph of *Ninia diademata*.

This record is 80.6 km northeast the closest record in the locality of Dos Naciones, Calakmul Biosphere Reserve, municipality of Calakmul, Campeche, Mexico (Colston et al., 2015; Barão-Nóbrega et al., 2022). This observation represents the second known locality in the Mexican portion of the Yucatán Peninsula, and the first record of *N. diademata* in the state of Quintana Roo, Mexico, increasing to 54 the richness of snake species for this state (González-Sánchez et al., 2017; Díaz-Gamboa et al., 2020).

**Acknowledgements.**- We sincerely thank Cristian for his assistance during the fieldwork, Jose Rogelio Cedeño Vázquez for confirming the species, Roberto Carlos Barrientos Medina for his help in the elaboration of the map, and Irene Goyenechea Mayer Goyenechea for receiving and including the photographs in the Digital Collection at the Centro de Investigaciones Biológicas of the Universidad Autónoma del Estado de Hidalgo.

## CITED LITERATURE

- Ángel-Hernández, E., M.A. Güizado-Rodríguez & G.A. Woolrich-Piña. 2022. Notas sobre ecología térmica y tamaño corporal de *Ninia diademata* Baird & Girard 1853 en Huitzilán de Serdán, Puebla, México. *Revista Latinoamericana de Herpetología* 5:33-36.
- Barão-Nóbrega, J.A.L., P.E. Nahuat-Cervera, I. Avella, G. Capehart, B. García, J. Oakley, A. Theodorou & K. Slater. 2022. Herpetological diversity in Calakmul, Campeche, Mexico: species list with new distribution notes. *Revista Mexicana de Biodiversidad* 93:e933927.
- Colston, T.J., J.A.L. Barão-Nóbrega, R. Manders, A. Lett, J. Willmott, G. Cameron, S. Hunter, A. Radage, E. Littlefair, R.J. Williams, C.A. López & K. Slater. 2015. Amphibians and reptiles of the Calakmul Biosphere Reserve, México, with new records. *Check List* 11:1759.
- Díaz Gamboa, L.F., D. May Herrera, A. Gallardo Torres, R. Cedeño-Vázquez, V. González-Sánchez, X. Chiappa Carrara & C. Yáñez Arenas. 2020. Catálogo de anfibios y reptiles de la Península de Yucatán. Secretaría de Investigación, Innovación y Educación Superior, Universidad Nacional Autónoma de México. Yucatán, México.
- González-Sánchez, V.H., J.D. Johnson, E. García-Padilla, V. Mata-Silva, D.L. DeSantis & L.D. Wilson. 2017. The herpetofauna of the Mexican Yucatan Peninsula: composition, distribution, and conservation status. *Mesoamerican Herpetology* 4:263-380.
- Grazziotin, F.G., H. Zaher, R.W. Murphy, G. Scrocchi, M.A. Benavides, Y. Zhang & S.L. Bonatto. 2012. Molecular phylogeny of the New World Dipsadidae (Serpentes: Colubroidea): a reappraisal. *Cladistics* 28:437-459.
- Heimes, P. 2016. *Herpetofauna Mexicana, Vol. I, Snakes of Mexico*. Edition Chimaira, Frankfurt am Main, Germany.
- Lee, J.C. 1996. *The amphibians and reptiles of the Yucatán Peninsula*. Cornell University Press. Ithaca, New York, USA.

