

DEPREDACIÓN DE LA SERPIENTE LIRA CENTROAMERICANA *TRIMORPHODON QUADRUPLEX* POR LA ARAÑA HERRANTE *ANCYLOMETES BOGOTENSIS* EN GUANACASTE, COSTA RICA

PREDATION OF THE CENTRAL AMERICAN LYRESNAKE *TRIMORPHODON QUADRUPLEX* BY THE WANDERING SPIDER *ANCYLOMETES BOGOTENSIS* IN GUANACASTE, COSTA RICA

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Abstract.— A novel case of predation of a juvenile Central American lyresnake *Trimorphodon quadruplex* (Colubridae) by the Wandering spider *Ancylometes bogotensis* (Ctenidae) in the Pacific northwestern region of Costa Rica is presented. This species of spider is known to be an active predator of small amphibians and reptiles, in addition to including a wide diversity of invertebrates in their diet, which it immobilizes with its venom.

Keywords.— Feeding behavior, interaction snake-spider, Reptilia, Serpentes.

Resumen.— Se presenta un caso novedoso de depredación de un juvenil de serpiente lira centroamericana *Trimorphodon quadruplex* (Colubridae) por la araña errante *Ancylometes bogotensis* (Ctenidae) en el Pacífico noroeste de Costa Rica. Esta especie de araña es conocida por ser un activo depredador de pequeños anfibios y reptiles, además de incluir en su dieta una amplia diversidad de invertebrados, a los que inmoviliza con su veneno.

Palabras clave.— Comportamiento alimenticio, interacción serpiente-araña, Reptilia, Serpentes

Arthropods preying on vertebrates is a topic that is generally overlooked in ecological studies, as it is not frequently observed in the field, and has been considered uncommon probably due to the cryptic nature of these events, the relatively large small size of arthropods and the difficulty in collecting scattered information in the literature (Valdez, 2020). However, although certain groups of arthropods (mainly spiders) are currently known to hunt and eat vertebrates, little is known about these predatory interactions (Nordberg et al., 2018; Valdez, 2020). In the specific case of snakes, predation by various groups of spiders is an event that has been widely documented, especially in the United States and Australia, and involves species that have highly toxic venom and/or strong spider webs, and which includes mostly members of the Theraphosidae (tarantulas) and Theridiidae (widow spiders) families (Nyffeler & Gibbons, 2021).

In Central and South America, there have also been reports of predation on snakes (including venomous species of the Elapidae and Viperidae families) by spiders of the aforementioned families (e.g., Nyffeler & Gibbons, 2021; Núñez Escalante & Moreno Chinchilla, 2021; Solórzano, 2022), and also by hunting spiders of the Ctenidae family, especially of the species *Ancylometes bogotensis*, known as the Wandering Spider, Giant Fishing Spider or Tropical Wolf Spider. It is a large species that is distributed from Honduras in Central America to Bolivia in South America (Höfer & Brescovit, 2000; World Spider Catalog, 2024). In Costa Rica it is relatively commonly observed in rainy and dry forests on both slopes where it usually moves around the periphery of water sources in search of prey (a large diversity of invertebrates). Nevertheless, this species is well known for its tendency to capture and eat small vertebrates, mainly frogs, fish, and lizards (Dehling, 2007; Nyffeler & Pusey, 2014; Folt &

Lapinski, 2017; Pérez-Galvis et al., 2024), although it also includes snakes in its diet (Nyffeler & Gibbons, 2021; Solórzano, 2022).

The lyresnake (*Trimorphodon quadruplex*, Colubridae) is a species of crepuscular and nocturnal habits that inhabits from southeastern Guatemala to the dry forest of northwestern Costa Rica in Central America, from sea level to 1,000 m a.s.l. (Solórzano, 2022).

At 8:42 h on April 27, 2023, we found in Río Calera de Cuajiniquíl, Guanacaste province, on the northwestern Pacific coast (10.89591° N, 85.64191° W), on the edge of the Protected Wilderness Area of Guanacaste Conservation Area, an adult wandering spider (*Ancylometes bogotensis*) preying upon and starting to eat a juvenile lyresnake (*Trimorphodon quadruplex*) ca. 35 cm long (Fig. 1), in a sector surrounded by rocks on the bank of this river with seasonal flow. At the time of the encounter, the snake was dying allegedly from the effect of the spider's venom. The predator held the snake at the height of the posterior third of the body and was already beginning to eat it. This is the first report of predation of *T. quadruplex* by this species of spider in the Central American region.

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Figura 1. A) Araña Errante (*Ancylometes bogotensis*) inmovilizando a un juvenil de serpiente Lira Centroamericana (*Trimorphodon quadruplex*) con su veneno, B) Araña Errante empezando a comer a la serpiente Lira Centroamericana, en Cuajiniquíl, provincia de Guanacaste. Fotos: Roberto Fernández Ugalde.

Figure 1. A) Wandering Spider (*Ancylometes bogotensis*) immobilizing a juvenile of Central American Lyresnake (*Trimorphodon quadruplex*) with its venom. B) Wandering Spider starting to eat the Central American Lyresnake, in Cuajiniquíl, Guanacaste province. Photos: Roberto Fernández Ugalde.

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