FIRST PREDATION RECORD OF *CELESTUS LEGNOTUS* CAMPBELL & CAMARILLO 1994 (SQUAMATA: ANGUIDAE) BY *LAMPROPELTIS POLYZONA* COPE, 1860 (SQUAMATA: COLUBRIDAE) IN PUEBLA, MÉXICO

PRIMER REGISTRO DE DEPREDACIÓN DE *CELESTUS LEGNOTUS* CAMPBELL & CAMARILLO 1994 (SQUAMATA: ANGUIDAE) POR *LAMPROPELTIS POLYZONA* COPE, 1860 (SQUAMATA: COLUBRIDAE) EN PUEBLA, MÉXICO

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Resumen.— Se sabe que los colubridos se alimentan de otros vertebrados como aves, pequeños mamíferos, lagartijas y en algunos casos de huevos e invertebrados. Por el contrario, existe un vacío considerable de información de varios aspectos de la historia natural de las lagartijas anguidas. Con base en una observación fotografiada en la comunidad de Atemeya, municipio de Yaonahuac, Puebla, reportamos el primer registro de *Lampropeltis polyzona* depredando a *Celestus legnotus*, uno de los anguidos menos conocidos de México.

Palabras claves.— Ánguidos, colúbridos, dieta, historia natural.

Abstract.— Colubrids are known to feed on other vertebrates such as birds, small mammals, lizards, and in some cases eggs and invertebrates. Conversely, there is a considerable information gap on various aspects of anguid lizard's natural history. Based on a photographed observation in the community of Atemeya, municipality of Yaonahuac, Puebla, we report the first record of *Lampropeltis polyzona* preying on *Celestus legnotus*, one of the least known anguids of México.

Key words.— Anguids, colubrids, diet, natural history.

The Atlantic Central American Milksnake, also known as Mexican false coral snake, *Lampropeltis polyzona* is a moderate sized terrestrial snake (1750 mm of snout-vent length (SVL)) widely distributed along both the Pacific and Atlantic coasts of Mexico, from southern Sonora and northern Veracruz, to at least northern Guerrero and northern Oaxaca (Ruane et al., 2014; Chambers & Hillis, 2020). The distribution range includes a wide variety of vegetation types, such as subtropical thorn forest, evergreen seasonal forest, cloud forest, pine-oak forest, and tropical deciduous forest (Heimes, 2016; Vázquez-Cruz, 2020; Piñango-Bustamente et al., 2022). It is an active forager with a generalist diet, that includes lizards, reptile eggs, mammals, rarely birds (Williams, 1978; Mitchell, 1980; Cohen, 1988; Mendoza-Quijano & Ruíz-Piña 1995; Rodríguez & Drummond, 2000; Pérez-Higareda et al., 2007; Aguilar-López & Pineda, 2013) and snakes (Vásquez-Cruz, 2020). The *L. polyzona's* diet includes the following species of lizards: *Anolis sagrei, Aspidoscelis costata, Ctenosaura pectinata, Holcosus amphigrammus, Plestiodon sp., Sceloporus variabilis* and *Scincella* sp. (Vásquez-Cruz, 2020).

C. legnotus is a completely terrestrial species, that inhabits cloudy forests but can be found also in pine forests (Campbell & Camarillo, 1994; Canseco-Márquez & Gutiérrez-Mayén, 2004), its reproduction is viviparous with a litter size up to seven hatchlings with an SVL between 29.4 to 34.2 mm (Canseco-Márquez & Gutiérrez-Mayén, 2004). This species was described by Campbell and Camarillo (1994) from Tepango de Rodríguez, Puebla at 1500 meters above sea level, and from the species description, few information is found and no information about its diet exist or the type of species that feeds on it.

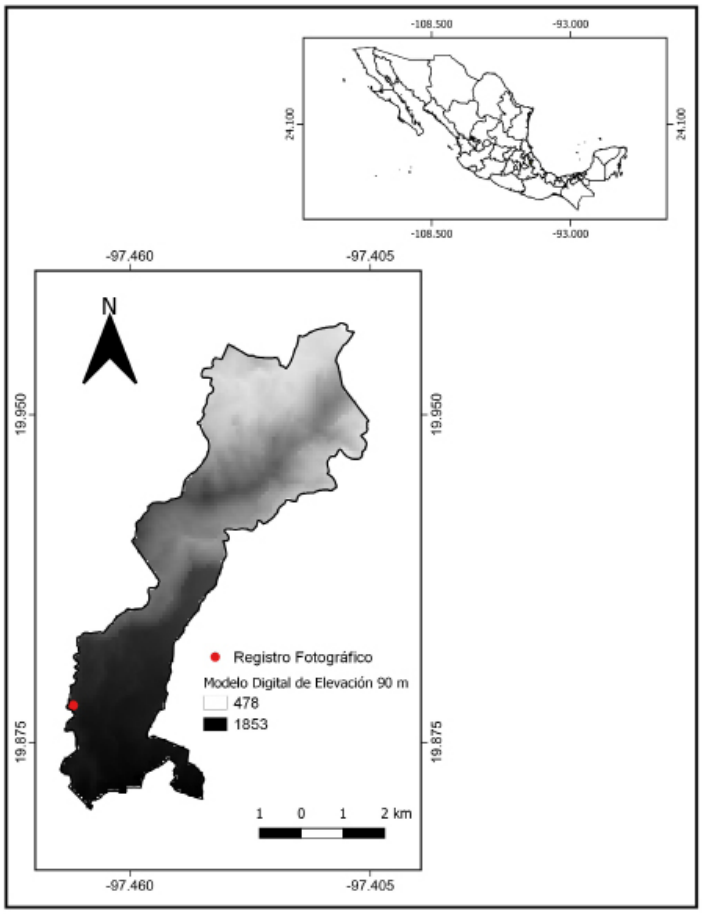

Figura 1. Mapa de la ubicación del registro fotográfico (punto rojo) de *Lampropeltis polyzona* alimentándose de *Celestus legnotus* en la comunidad de Atemeya, municipio de Yaonahuac, Puebla. Fuente: Conjunto de datos vectorial de la División Política Estatal, 1:250,000 (INEGI, 2018). Modelo Digital de Elevación a 90 metros (Jarvis et al. 2008).

Figure 1. Map of the ubication of the photographic record (red dot) of *Lampropeltis polyzona* feeding on *Celestus legnotus* in the community of Atemeya, municipality of Yaonahuac, Puebla. Source: Vector data set of the Political State Division 1:250,000 (INEGI, 2018). Digital Elevation Model to 90 meters (Jarvis et al. 2008).

Figura 2. Sitio de registro de *Lampropeltis polyzona* depredando a *Celestus legnotus*. Izquierda) asociación de bosque de pino-encino y parcelas de cultivo. Derecha) vegetación ruderal. Foto Ana Laura Fernández-Rojas.

Figure 2. Site of the record of *Lampropeltis polyzona* preying on *Celestus legnotus*. Left) an association of pine-oak forest and crop plots. Right) ruderal vegetation. Photo Ana Laura Fernández-Rojas.

Figura 3. Izquierda) *Lampropeltis polyzona* atacando y sosteniendo un individuo de *Celestus legnotus*. Derecha) Nótese que la serpiente se estaba comiendo a la lagartija por la cabeza. Foto Ana Laura Fernández-Rojas.

Figure 3. Left) *Lampropeltis polyzona* attacking and holding an individual of *Celestus legnotus*. Right) Notice the snake was eating the lizard by the head. Photo Ana Laura Fernández-Rojas.

On September 19th, 2021, at 11:40 h, in the community of Atemeya, in the municipality of Yaonahuac, Puebla (19.88349° N, -97.47294° W; WGS84) 1683 meters above sea level and in a warm humid climate (Fig. 1), we observed an adult of *Lampropeltis polyzona* (SVL= 550 mm) attacking an individual of *Celestus legnotus* (SVL= 80 mm). The site where we photographed the observation has a ruderal vegetation with an association of pine-oak forests and crop plots (Fig. 2).

For a period of 25 minutes, we observed the snake coiled tightly around the lizard's body holding its head with its jaw, while the lizard tried to free itself shaking from side to side. After a few minutes, *C. legnotus* seemed exhausted and moved slowly (Fig. 3a). At the end, *C. legnotus* was swallowed by *L. polyzona* (Fig. 3b). This observation is the first graphic report predation of *C. legnotus* by *L. polyzona* and the first occurrence of predation recorded by this species on an anguid lizard. The identification of the lizard was verified by Uri O. García-Vázquez.

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