

NOTA CIENTÍFICA

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NEW PREY ITEM IN THE DIET OF *MASTICOPHIS SCHOTTI* BAIRD & GIRARD, 1853 FROM SAN LUIS POTOSÍ, MEXICO

UN NUEVO TIPO DE PRESA EN LA DIETA DE *MASTICOPHIS SCHOTTI* BAIRD & GIRARD, 1853 DE SAN LUIS POTOSÍ, MÉXICO

RUBÉN ALONSO CARBAJAL-MÁRQUEZ^{1,4*}, GUSTAVO ERNESTO QUINTERO-DÍAZ^{2,4}, GUILLERMO MARTÍNEZ-DE LA VEGA^{3,4} AND AURELIO GONZÁLEZ⁴

¹El Colegio de la Frontera Sur, Departamento de Sistemática y Ecología Acuática, Unidad Chetumal, Avenida Centenario Km 5.5, C.P. 77014 Chetumal, Quintana Roo, México.

² Universidad Autónoma de Aguascalientes, Centro de Ciencias Básicas, Departamento de Biología. C. P. 20131, Aguascalientes, Aguascalientes, México.

³ Instituto de Investigación de Zonas Desérticas de la Universidad Autónoma de San Luis Potosí, Altair No. 200, Fracc. Del Llano, C.P. 78377, San Luis Potosí, SLP, México.

⁴ Conservación de la Biodiversidad del Centro de México, A.C. Andador Torre de Marfil No. 100, C.P. 20229, Aguascalientes, Aguascalientes, México.

*Correspondence: redmano31@hotmail.com

Resumen.— Reportamos la lagartija *Sceloporus torquatus* como una presa natural de *Masticophis schotti* en San Luis Potosí, México. Aunque se conoce que *M. schotti* se alimenta de las lagartijas del género *Sceloporus*, este es el primer registro de *S. torquatus* en la dieta de esta culebra.

Palabras clave.— Colubridae, Phrynosomatidae, San Luis Potosí, *Sceloporus*, México.

Abstract.— We report *Sceloporus torquatus* as natural prey of *Masticophis schotti* in San Luis Potosí, México. Although *M. schotti* is known to eat lizards of the genus *Sceloporus*, this is the first record of *S. torquatus* in the diet of this snake.

Keywords.— Colubridae, Phrynosomatidae, San Luis Potosí, *Sceloporus*, Mexico.

Schott's whipsnake (*Masticophis schotti* Baird & Girard, 1835) ranges from central Texas in the USA south through the Gulf coastal plains to central Veracruz, Mexico, and on the Mexican Plateau from Hidalgo to Michoacán, with a vertical distribution from near sea level to around 2,500 m. Two subspecies are currently recognized (Camper & Dixon, 1994; Camper, 1996): *Masticophis s. schotti* Baird & Girard, 1835 occurs from Texas to extreme northwestern Tamaulipas, central Nuevo León and eastern Coahuila, Mexico, whereas *Masticophis s. ruthveni* (Ortenburger, 1923) ranges from the southern tip of Texas to through Tamaulipas, northern and central Veracruz, San Luis Potosí, Hidalgo, Querétaro, Guanajuato, to northern Michoacán, Mexico (Werler & Dixon, 2000; Ernst & Ernst, 2003; Lemos-Espinal & Dixon, 2013; Heimes, 2016). *Masticophis schotti* is a long, slender, fast and agile snake that reaches 1900 mm in total length (Ernst & Ernst, 2003; Lemos-Espinal & Dixon, 2013; Heimes 2016). The species is listed in the Red List of IUCN as a taxon of least concern (LC), and in the medium vulnerability category (13) in the Environmental Vulnerability Score (Hammerson et al.,

2007; Wilson et al., 2013), but was not considered in any peril category by the Mexican law in the NOM-059-SEMARNAT-2010 (Diario Oficial de la Federación 2010).

Masticophis schotti is an active diurnal species that forages with its head and forebody raised above the ground (Ernst & Ernst, 2003). Examination of 316 museum specimens of *M. schotti* revealed that only 5%, had stomach contents, representing eight prey species (Camper & Dixon, 2000). Lizards (18, 78.3%) were the most frequent prey category, followed by mammals (5, 21.7%), which were only consumed by larger specimens. *Masticophis schotti* ingested 85.7% of its prey head-first, indicating that they may manipulate prey prior to ingesting it. Lemos-Espinal & Dixon (2013) mentions that the diet of *M. schotti* consists of lizards of the families Anguidae, Crotaphytidae, Dactyloidae, Phrynosomatidae, Scincidae, and Teiidae, based on Camper and Dixon (2002; with a mistake in the year of publication), and differs from the information provided by Camper and Dixon (2000) where only report Phrynosomatidae (*Sceloporus*),



Figura 1. Individuo de *Masticophis schotti ruthveni* sosteniendo un macho de *Sceloporus torquatus* antes de consumirlo en la ex-Hacienda La Parada, San Luis Potosí, México. Foto: Aurelio González.

Figure 1. A *Masticophis schotti ruthveni* holding a male *Sceloporus torquatus* before consuming it, at ex-Hacienda La Parada, San Luis Potosí, Mexico. Photo: Aurelio González.

Dactyloidae (*Anolis*), Scincidae (*Plestiodon* and *Scincella*), Teiidae (*Aspidocelis*), and unidentified lizards.

On 05 July 2015 at 1030 h, we observed and photographed a *Masticophis schotti ruthveni* while capturing and consuming a male *Sceloporus torquatus* (Torquate lizard) in xerophytic scrub vegetation in ex-Hacienda La Parada, on Km. 35 San Luis Potosí – Zacatecas Highway, Ahualulco, San Luis Potosí, Mexico (22.330786° N, 101.206714° W; WGS 84 datum; elev. 1874 m; Fig. 1). We did not take additional data on the snake or the prey, to avoid disturbing the predatory event. The snake captured the lizard, and upon noticing our presence, the snake raised the first third of its body while moving to a secluded place to consume its prey, which was swallowed head-first. Figure 1 shows the snake holding the lizard by the neck, consistent with the aforementioned observation that *M. schotti* manipulates its prey before ingesting it (Camper & Dixon, 2000). This note represents the first record of *Sceloporus torquatus* in the diet of *M. s. ruthveni*, and also demonstrates the need for a systematic

study to elucidate the ecology of the southern populations of this species.

Acknowledgements.— We thank to Jeff D. Camper for review a previous draft of the manuscript.

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