

MASTICOPHIS FLAGELLUM (Coachwhip). **DIET.** *Masticophis flagellum* has a broad distribution throughout North America, occurring from California to North Carolina and southward into the Baja Peninsula and much of northern Mexico (Wilson 1973. Catalogue of American Amphibians and Reptiles. 145:1–5; Ernst and Ernst 2003. Snakes of the United States and Canada. ix + 668 pp.). Across this range, *M. flagellum* is considered a generalist predator and consumes a diverse array of invertebrate and vertebrate prey items (Palmer and Braswell 1995. Reptiles of North Carolina. The University of North Carolina Press, Chapel Hill, North Carolina. xiii + 412 pp.; Werler and Dixon 2000. Texas Snakes. Identification, Distribution, and Natural History. University of Texas Press, Austin, Texas. xv + 437 pp.). In a study of the stomach contents of *M. flagellum* from Georgia, USA, the majority of individuals had consumed lizards, but mammals, snakes, insects, birds, and turtles were also found (Hamilton and Pollack 1956. Ecology 37:519–526). A similar study in Louisiana, USA, found unidentified mice in 60% and unidentified birds in 40% of examined *M. flagellum* stomachs (Clark 1949. J. Tennessee Acad. Sci. 24:244–261). Numerous authors have reported invertebrates as prey items for both adult and juvenile *M. flagellum* (Hamilton and Pollack 1956, *op. cit.*; Anderson 1965. The Reptiles of Missouri. University of Missouri Press, Columbia, Missouri. xxiii + 330 pp.; Tennant 1985. A Field Guide to Texas Snakes. Texas Monthly Press, Austin, Texas. 260 pp.). A few studies have reported larval lepidopterans in the diet of *M. flagellum*. Hamilton and Pollack (1956, *op. cit.*) found larval *Xylophanes* (Lepidoptera: Sphingidae) and unidentified larval lepidopterans in examined *M. flagellum* specimens. Mueller and Whiting (1989. Herpetol. Rev. 20:72) found both a larval *Manduca* (Lepidoptera: Sphingidae) and a Rough Greensnake (*Ophedrys aestivus*) in the stomach of an adult *M. flagellum* from Coleman County, Texas, USA, and later determined through the examination of teeth marks that the *Manduca* larvae was originally consumed by the

O. aestivus and later regurgitated. Herein, we report the first account of *M. flagellum* directly consuming a larval *Manduca*.

At 1944 h on 7 June 2019, we collected an adult female *M. flagellum* (Biodiversity Collections, University of Texas at Austin [TNHC] 113464 [DRD 5618]: 875 mm SVL, 315 mm tail length, 186.3 g) on County Road 2083 in Crockett County, Texas, USA (30.47673°N, 101.42270°W; WGS 84). The snake was euthanized and during preservation we removed an adult banded-wing grasshopper (Orthoptera: Acrididae; 45 mm total length) and a larval Tomato Hornworm (Lepidoptera: Sphingidae: *Manduca quinquemaculata*; 103 mm total length) from its stomach (Fig. 1). Both prey items were relatively undigested, indicating that they were recently consumed. This observation adds to the large list of prey consumed by *M. flagellum*.

This specimen was collected under a Texas Parks and Wildlife Scientific Permit for Research (SPR-1018-294) issued to DRD and under an approved University of Texas Rio Grande Valley IACUC protocol (#18-28).

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FIG. 1. Adult female Coachwhip (*Masticophis flagellum*; TNHC 113464 [DRD 5618]) from Crockett County, Texas, USA with recently consumed banded-wing grasshopper (Orthoptera: Acrididae) and larval Tomato Hornworm (Lepidoptera: Sphingidae: *Manduca quinquemaculata*). Black bar = 5 cm.

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