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PREDATION OF THE LIZARD *ANOLIS SAGREI* (SQUAMATA: ANOLIDAE) BY THE SNAKE *MASTIGODRYAS MELANOLOMUS* (SERPENTES: COLUBRIDAE) IN SOUTHEASTERN MEXICO

DEPREDACIÓN DE LA LAGARTIJA *ANOLIS SAGREI* (SQUAMATA: ANOLIDAE) POR LA SERPIENTE *MASTIGODRYAS MELANOLOMUS* (SERPENTES: COLUBRIDAE) EN EL SURESTE DE MÉXICO

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Resumen.– Reportamos el primer evento de depredación del abaniquillo pardo del Caribe *Anolis sagrei*, por la serpiente lagartijera olivacea *Mastigodryas melanolomus* en el sureste de México. Este nuevo registro contribuye a una mejor comprensión de la historia natural y la ecología trófica de dos especies de reptiles en su interacción depredador-presa.

Palabras clave.– Dieta, especies invasoras, presa, ecología trófica.

Abstract.– We report the first predation event of the brown anole *Anolis sagrei* by the salmon-bellied racer *Mastigodryas melanolomus* in southeastern Mexico. This new record contributes to a better understanding of the natural history and trophic ecology of two species of reptiles in their predator-prey interaction.

Keywords.– Diet, invasive species, prey, trophic ecology.

The salmon-bellied racer *Mastigodryas melanolomus* (Cope, 1868) is a neotropical colubrine diurnal that inhabits lowlands and premontane Atlantic and Pacific Mexican slopes, through Central America to Panama (Campbell, 1998). Feed on terrestrial lizards, mainly of the genus *Anolis,* however, frogs, reptile eggs, small mammals and other snakes have been found in stomach contents (Díaz-Gamboa et al., 2020).

Here we document a predation event by a *M. melanolomus* upon a brown anole *Anolis sagrei* (Duméril & Bibron, 1837), a native lizard species from Bahamas, Cuba, and associated islets and cays (Campbell & Echternacht 2003; Powell & Henderson 2012), that has been widely introduced either naturally or through human activities in several countries, including Mexico (Fläschendräger, 2010; Vásquez-Cruz et al., 2021).

On 26 September 2023 at 0840 h., during a wildlife survey at Xcaret Park, Quintana Roo, Mexico (20.5860° N, 87.1171° W, 12 m a.s.l.), we observed an *M. melanolomus* attacking a *A. sagrei*. While walking, we observed an individual of *A. sagrei* on the trunk of a tree; after approaching it moved towards the ground, seconds later an adult *M. melanolomus* bolted out from underneath a nearby rock and grabbed the lizard. The *A. sagrei* was captured by the abdomen and positioned upside down within the snake's jaws all the while thrashing in an attempt to escape (Fig. 1). We did not observe progress towards swallowing the prey, likely due to our movement and presence. Finally, the snake then swiftly moved under the rock, with the lizard still in its mouth.

Anolis sagrei is common in Xcaret Park, and its presence can have a significant negative impact on ecosystem, as it has been reported for other introduced populations (Dufour et al., 2020; Abreu-Acosta et al., 2023). We consider that *M. melanolomus* represents an important natural control on the populations of *A. sagrei* in this site; however, there is a possibility that individuals of *M. melanolomus*, acquire parasites and diseases by feeding on this lizard. To our knowledge, this is the first documented observation of an adult *M. melanolomus* predating a *A. sagrei*.

Figure 1. Predation of *Anolis sagrei* by *Mastigodryas melanolomus.* **/ Figura 1.** Depredación de *Anolis sagrei* por *Mastigodryas melanolomus.*

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