



# First Predation Record of a Yellow Split-toed Frog, *Eleutherodactylus flavescens* (Anura: Eleutherodactylidae), by a Hispaniolan Giant Tarantula, *Phormictopus cancerides* (Araneae: Theraphosidae), in the Dominican Republic

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The Yellow Split-toed Frog (*Eleutherodactylus flavescens*) is a Hispaniolan endemic with an extensive distribution throughout the eastern regions of the island, where it exhibits high population densities, attributed largely to its generalist habits, in humid forests and wetlands with abundant vegetation (Schwartz and Henderson 1991; Henderson and Powell 2009; Powell and Incháustegui 2009, 2011; Sangermano et al. 2015). Despite its wide distribution in the Dominican Republic, this species is classified as Near Threatened on the national and IUCN Red Lists (MIMARENA 2018; IUCN SSC Amphibian Specialist Group 2022), with the principal threats identified as habitat degradation and loss.

At 2058 h on 15 April 2019, we observed predation of a Yellow Split-toed Frog by a Hispaniolan Giant Tarantula

(*Phormictopus cancerides*), locally known as “Cacata,” on rocky ground with abundant leaf litter along the edge of a stream in Maimón, Monseñor Nouel Province, Dominican Republic (Fig. 1). The tarantula was holding the right hindleg of a male *E. flavescens*. Both remained motionless for about 13 minutes, but when disturbed by the observers, the frog attempted to escape but was restrained by the tarantula. Both were left in place. Thirty minutes later, we returned and observed the arachnid feeding on the frog at the base of a tree about 40 cm from the original observation site. The escape attempts of the frog obviously were insufficient against the attack of the tarantula, which can inject a toxic venom through the cheliceral claws, leading to paralysis or subsequent death of its prey (e.g., Escoubas and Rash 2004).



**Figure 1.** A Yellow Split-toed Frog (*Eleutherodactylus flavescens*) captured by a Hispaniolan Giant Tarantula (*Phormictopus cancerides*). Photographs by Cristian F. Marte-Pimentel.

*Phormictopus cancerides* is a nocturnal species that usually hunts using a sit-and-wait foraging strategy to ambush its prey on the forest floor, often at the base of trees or near cavities and occasionally on logs within low vegetation (Philip and Shillington 2010). This strategy, combined with considerable size (~18–20 cm leg span; Rey 2025) and its highly developed sensory capacity, allows it to exploit a diversity of prey, including small vertebrates (e.g., Spotted Agave Geckoles, *Sphaerodactylus ladae* [Scantlebury et al. 2011], and a hummingbird in a nest [Palisot de Beauvois 1805; Bertani and Oliveira Maciel 2021]).

*Eleutherodactylus flavescens*, also a nocturnally active species, primarily inhabits vegetation at mid-height; however, it also perches on rocks, leaf litter, and fallen logs, where it searches for prey or mates (Henderson and Powell 2009; Sangermano et al. 2015). We have observed both species in the same areas during their active periods, suggesting that predation might not be an isolated event but a potentially frequent occurrence. However, to the best of our knowledge, this is the first documented case of a Hispaniolan Giant Tarantula preying on a Yellow Split-toed Frog.

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