



What's on the Toad? Persistent Landing of a Housefly (*Musca domestica*) on a Juvenile Asian Black-Spined Toad (*Duttaphrynus melanostictus*)

Matthew Mo and Elouise Mo

Sydney, New South Wales, Australia (matthew.sk.mo@gmail.com; <https://orcid.org/0000-0003-2099-6020>)

The Asian Black-spined Toad or Asian Common Toad (*Duttaphrynus melanostictus*) is an ecologically versatile amphibian with a broad distribution that extends from the Indian Subcontinent and southern China in the north to large parts of Southeast Asia (Charles and Das 2008; Ngo and Ngo 2013; Rout et al. 2016). It is common in most lowland areas, including urban areas, agricultural lands, and disturbed forests (IUCN SSC Amphibian Specialist Group 2023).

At about 0900 h on 8 March 2025, we observed a prolonged interaction between a juvenile Asian Black-spined Toad and a Housefly (*Musca domestica*), one of the world's most widely distributed insects (Bertone et al. 2016), in an urban green space in Tân Phong, District 7, Hồ Chí Minh City, Vietnam (10.726666, 106.716906). These toads typically are nocturnally active but this juvenile was unconcealed and stationary throughout the observation, presumably main-

taining a low profile to avoid detection by a predator. We noticed it because of the Housefly persistently landing on it. Over the subsequent 8 min, the Housefly alternated between being perched on the toad (at least 15 times) and meandering around it (Fig. 1). When on the toad, the Housefly was visibly placing its mouthparts on the toad's skin. These interactions were continuing when we ceased observations.

Houseflies have mouthparts specialized for consuming either liquid matter, sucking material via capillary action, or regurgitating saliva onto solid foods to soften them prior to ingestion (Geden et al. 2021). They are known to exploit a wide variety of food, including sweat, feces, and various human foods (Iqbal et al. 2014). Chemoreceptors on the tarsi enable Houseflies to identify foods by walking over them (Deonier and Richardson 1935). The repetitiveness of the Housefly landing on the toad suggests that its approaches were intentional and that something on the toad's skin could have been perceived as food. The toad's skin did not appear to be moist, so any effort to explain what drew the Housefly to the toad would be speculative.

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Figure 1. A Housefly (*Musca domestica*) interacting with a juvenile Asian Black-spined Toad (*Duttaphrynus melanostictus*). Photographs by Matthew Mo.

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