

First report of predation on the common house gecko *Hemidactylus frenatus* (Duméril & Bibron, 1836) by a wolf spider (Araneae: Lycosidae) in Sri Lanka

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Due to the wide distribution (often through anthropogenic activities) and small size of the common house gecko, *Hemidactylus frenatus* Duméril & Bibron, 1836, predation of this species by spiders in various countries around the world has been observed with some frequency over the last decade (e.g., Bangladesh – Purkayastha and Sourav, 2011; Bangladesh – Neogi and Islam, 2017; Costa Rica – Perez, 2017; Australia – Turner, 2018; in captivity – Valenzuela-Rojas et al., 2019; Mexico – de Luna et al., 2020; Colombia – Valenzuela-Rojas et al., 2020; Singapore – Nyffeler et al., 2021). Wolf spiders, family Lycosidae Sundevall, 1833, are ground hunters that do not construct webs and are mainly insectivorous, but these large spiders do sporadically prey on small lizards (e.g., Foelix, 2011; Tripathy and Priyadarshini, 2022).

On 23 July 2020 at 20:13 h near a mangrove forest in Puttalam Lagoon, Sri Lanka (8.1814°N, 79.8246°E; Fig. 1A) we were on a casual night stroll walking towards the boatyard (Fig. 1B) when our headlamp caught the flashing eyes of a spider. We observed a large lycosid female that appeared to be feeding on a gecko (Fig. 2A). The gecko was identified as *H. frenatus* based on the characters presented by Somaweera and Somaweera (2009). It was completely motionless and likely dead. After 7 min of observation, the spider was still holding onto the gecko when we discontinued our observations and left the area (Fig. 2B). Due to the need for taxonomic revisions of Sri Lankan wolf spiders, we are unable to provide an unambiguous generic assignment for the predator, with specialists considering the genera *Hogna* Simon, 1885 and *Lycosa* Latreille, 1804 the most likely options.

To the best of our knowledge, ours is the first observation of predation by a wolf spider on a common house gecko in Sri Lanka. In Sri Lanka these common geckos have so far only been reported as prey of an araneid spider (*Nephilengys malabarensis* Walckenaer, 1841) and by a huntsman spider (genus *Heteropoda*) (Priyadarshana and Wijewardana, 2016; Zdunek and Bandara, 2022). Observations such as these, even as single events, broaden the scope of information about the threat from invertebrates to house geckos (Bauer, 1990).

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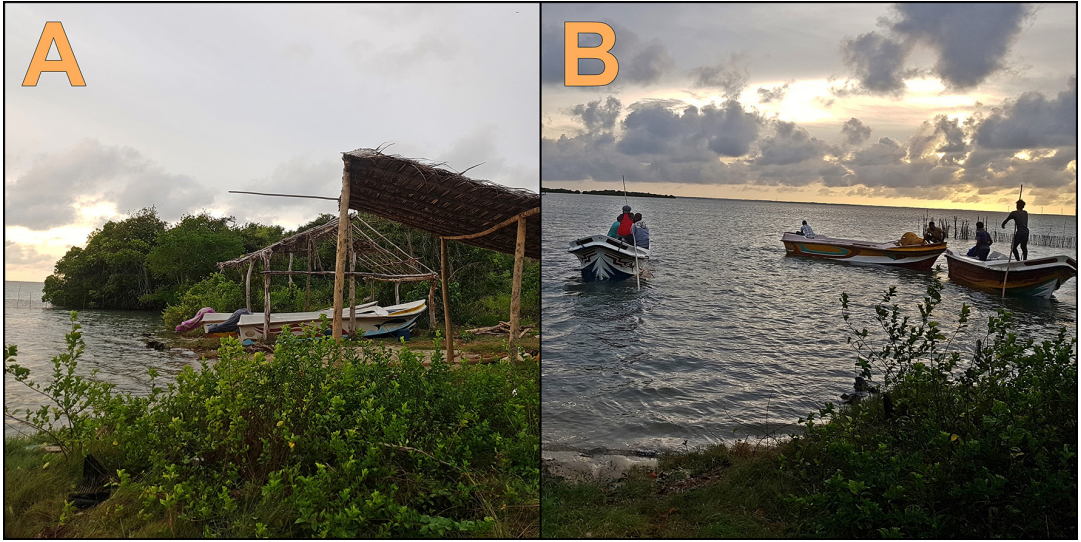


Figure 1. (A) View of the mangrove forest Puttalam Lagoon, Sri Lanka where our observation took place near the boatyard (B).

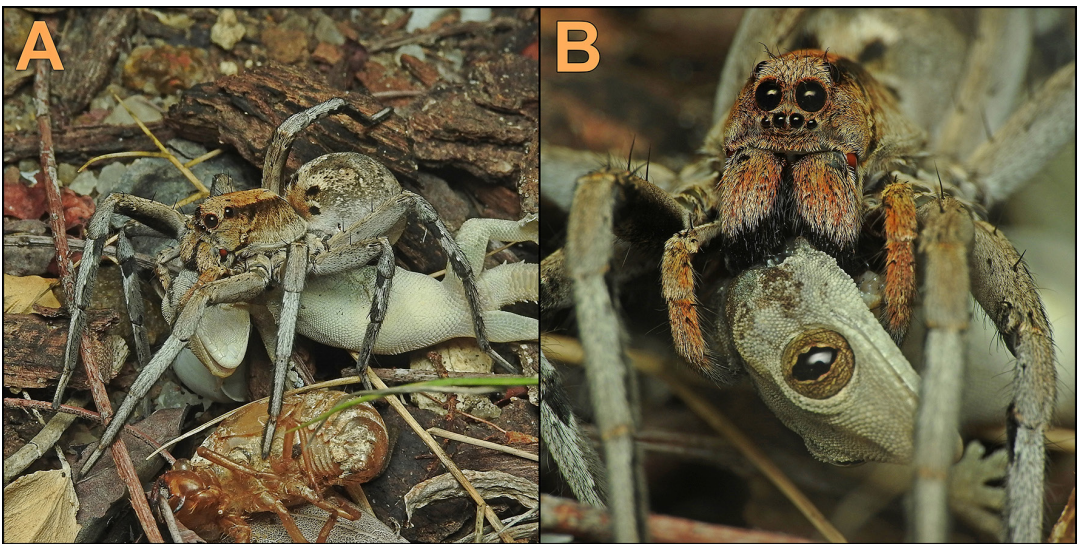


Figure 2. (A) A wolf spider female feeding on a common house gecko *Hemidactylus frenatus*. The gecko was caught in the neck area, with the body lying under the spider. (B) Frontal view of the spider holding onto the prey with her chelicerae.

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