



Attempted Congeneric Predation in *Hemidactylus* Geckos from Brahmanbaria District, Bangladesh

Sajib Biswas¹, Md. Zubaidur Rahman Mahady², and Shayer Mahmood Ibney Alam¹

¹Department of Zoology, Jagannath University, Dhaka 1100, Bangladesh
(sajib07jnu@gmail.com; shayermia@hotmail.com [corresponding author], ORCID: SB, 0000-0003-3899-4672)

²Snake Rescue Team, Bangladesh (mdmahady221212@gmail.com)

The genus *Hemidactylus* Oken 1817 is one of the most species-rich genera of the family Gekkonidae (Carranza and Arnold 2006), with more than 190 currently recognized species (Uetz et al. 2023). Ten species of gekkonids, eight of which are in the genus *Hemidactylus*, occur in Bangladesh (IUCN Bangladesh, 2015; Bhuiyan et al. 2020; Ahmad et al. 2022). *Hemidactylus* geckos are predominantly nocturnal and good climbers due to their expanded toes with a double series of lamellae (Kabir et al. 2009). The primary diet of geckos is insects, but larger species prey on other geckos, smaller snakes, and a large variety of animals (Daniel 2002). Species such as *H. brooki* and *H. bowringii* are nocturnal, insectivorous, and found within human habitation (Hasan et al. 2014; IUCN Bangladesh 2015). Herein we document a new congeneric predation attempt in which a *Hemidactylus* cf. *brooki* preyed on a *Hemidactylus bowringii*.

The attempted predation occurred between 2315 h and 2400 h on 27 April 2020 at Brahmanbaria, Chittagong Division, Bangladesh (23.986389 N, 91.104917 E), when we observed an adult *H. cf. brooki* trying to prey on a similar-sized adult *H. bowringii* that was moulting on the floor under a bed. The *H. cf. brooki* bit the *H. bowringii* on the left side of its neck, shook its prey four times, and then started

consuming it from the tail (Fig. 1). The only anti-predatory behavior displayed by *H. bowringii* was holding tightly to the substrate. After 45 minutes, the *H. cf. brooki* appeared to have released the *H. bowringii*, presumably because it was too large to ingest. The *H. bowringii* escaped, albeit losing its tail in the process. Neither gecko vocalized during the event.

Many geckos consume smaller conspecifics (Bauer 2013); although possibly attributable to food shortages, conspecific predation has been most frequently documented in artificial conditions but may also occur under natural conditions in various species (Fox 1975; Polis 1981; Elgar and Crespi 1992). *Hemidactylus flaviviridis* is known to prey on congeneric *H. frenatus* (Parves and Alam 2015), and *H. frenatus* has been documented eating other small lizards, including conspecific juveniles (Global Invasive Species Database 2010). *Hemidactylus leschenaultii* has been observed consuming rats, geckos, skinks, and a colubrid snake (Sumithran 1982; Dattarti 1984; Kannan and Krishnaraj 1988; Somaweera 2005), and *H. hunae* has been documented preying on baby *Bandicoota bengalensis* (Mammalia: Rodentia; Karunarathna and Amarasinge 2011). Our observation of congeneric predation reinforces previous descriptions of geckos in the genus *Hemidactylus* opportunistically preying on smaller



Figure 1. An adult *Hemidactylus* cf. *brooki* at Brahmanbaria, Chittagong Division, Bangladesh, attempting to prey on an adult *H. bowringii* of similar size that was moulting. Photographs by Md. Zubaidur Rahman Mahad.

congenerics and suggests that prey may be more accessible when moulting.

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