

Biodiversity Record: Blue-necked keelback biting Asian toad

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Subjects: Blue-necked keelback, *Rhabdophis rhodomelas* (Reptilia: Squamata: Colubridae: Natricinae); Asian toad, *Duttaphrynus melanostictus* (Amphibia: Anura: Bufonidae).

Subjects identified by: Ong Rui Xue Rachel and Seah Jun Wei Benjamin.

Location, date and time: Singapore Island, Central Catchment Nature Reserve, MacRitchie forest along Terentang Trail; 5 January 2023; 1101–1116 hrs.

Habitat: Secondary forest. Among leaf litter under a *Terminalia catappa* tree, on a side of the trail.

Observers: Ong Rui Xue Rachel and Seah Jun Wei Benjamin.

Observation: A blue-necked keelback of about 40 cm total length was observed with its jaws clamped over the back of an Asian toad, and biting the trunk of the amphibian which appeared somewhat bloated, drawing blood in the process (Fig. 1). It remained latched onto the toad and appeared to be chewing on it for around 10 minutes despite the toad struggling in its attempts to break free. The snake tried to pull the toad further from the trail but eventually released its grip, possibly due to disturbances from joggers and passersby. The toad was left standing but apparently stunned, and bleeding from its side (Fig. 2). The snake retreated into the forest (Fig. 3). The observers left the scene soon after with no knowledge of the events that followed.



Fig. 1. Dorsal view of the head of the snake with its jaws clamped over the back of the toad. (Photograph by: Ong Rui Xue Rachel)

Remarks: The blue-necked keelback is known to prey on anurans which include frogs, toads and tadpoles (Charlton 2020; Das, 2021), and this record demonstrates that the Asian toad is on the snake's menu.

The blue-necked keelback is a rear-fanged venomous snake (Baker & Lim, 2012 as *Macropisthodon rhodomelas*; Charlton, 2020) with venom that is known to adversely affect humans (see Subaraj, 2008). It is thus assumed that the

venom has the ability to subdue its prey, and the toad in the featured observation was expected to succumb to the snake's bites. However, the toad was alive when the snake and the observers left the scene. The observers believed that the snake abandoned the toad because it was disturbed by human spectators and passersby. They did not know if the toad had eventually succumbed to the bite, or if the snake had returned later to eat it. It is also possible that the toad was abandoned because it may be a little too large for the snake to safely ingest.



Fig. 2. Toad appeared to be stunned and bleeding at its sides from snake bite. Fig. 3. The snake retreating into the forest. (Photographs by: Seah Jun Wei Benjamin).

Literature cited:

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