Predation of Kollimalai Bush Frog by a carabid *Epomis* larva

Several arthropod taxa prey on amphibians (Toledo 2007; Bernard & Samoląg 2014). *Epomis* larvae of carabids are known to feed exclusively on frogs (Wizen & Gasith 2011) using curved hook-like mandibles for grasping onto the frog’s skin (Brandmayr et al. 2010). Published observations of *Epomis* larva attacking amphibians are available from India (Barve & Chaboo 2011; Wizen et al. 2017; Kulkarni et al. 2020; Pardeshi et al. 2020) and from other parts of the world: Japan (Crossland et al. 2016) and Middle East (Wizen & Gasith 2011).

Kollimalai Bush Frog *Raorchestes kollimalai* is the sister taxon of *Raorchestes charius*, from which it differs from in call, morphology, and
molecular markers (Gowande et al. 2020). At 0940 h on 12 July 2022, at Chengadu Village, Yercaud Hills (11.78N, 78.22E, 1,348 m), a bush frog was sighted with an Epomis larva clung on its throat. The frog was identified as Kollimalai Bush Frog Raorchestes kollimalai following Gowande et al. (2020) and Amphibians Species of the World 6.1, an online reference. The bush frog was observed for another 90 minutes and we found nothing unusual in its behaviour due to this larva. Then the bush frog disappeared under the bush and was not at all sighted again on the same day. The next day, at around 0800 h it was found dead just 200 m away from where it disappeared, with the larva still on its throat.

The bush frog could have encountered the Epomis larva displaying its characteristic luring behaviour on the ground. Epomis larvae feed exclusively on amphibians in an ectoparasitic manner, and the interaction is usually fatal to the amphibians (Wizen & Gasith 2011).

References


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