

A Carabid Beetle Larva (*Epomis* sp.) Preying on a Leith's Leaping Frog (*Indirana leithii*)

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Tarious arthropod taxa, including arachnids, aquatic hemipterans, beetles, and ants, are known predators of both juvenile and adult amphibians (e.g., McCormick and Polis 1982; Hinshaw and Sullivan 1990; Haddad and Bastos 1997; Freed and Neitman. 1998; Jung et al. 2000; Zuffi 2001; Toledo 2005; Dehling 2007; Ward-Fear et al. 2009). Carabid beetles frequently feed on live or dead amphibians (Littlejohn and Wainer 1978; Ovaska and Smith 1988; Robertson 1989) and carabid beetle larvae in the genus *Epomis* feed entirely on amphibians and use a unique luring behavior to attract their prey (Barve and Chaboo 2011; Wizen and Gasith 2011; Wizen et al. 2017). These larvae have mandibles with two curved hooks that are adapted for grabbing amphibian skin (Brandmayr et al. 2010). Herein, we report predation by an Epomis larva on a Leith's Leaping Frog (Indirana leithii), an endemic species found in only a few localities in the northern Western Ghats of Maharashtra and Gujarat, India (Parmar 2018).

At 2049 h on 23 September 2020, near a forest guest house at Lingmala, Mahabaleshwar, Satara, Maharashtra, India (17.9233°N, 73.68944°E; WGS 84; elev. 1,263 m asl), we encountered a Leith's Leaping Frog with a small beetle larva attached to its throat (Fig. 1). Based on features described by Brandmayr et al. (2010), we identified the larva

as the first instar of a beetle in the genus *Epomis*. The frog appeared healthy and behaved normally. The frog most likely encountered the *Epomis* larva on the ground and the position of the larva on the frog suggests that the frog was lured by the larva, which subsequently attached itself to the frog's throat (Wizen and Gasith 2011).

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Fig. 1. A Leith's Leaping Frog (Indirana leithii) with the first instar of an Epomis beetle larva (Carabidae) attached to its throat. Photographs by Omkar Yadav.

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