Use of Gaur (Bos gaurus) Dung as a Foraging Site by Sarojamma’s Leaping Frog (Indirana sarojamma)

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Optimal foraging theory predicts that animals employ strategies, such as the choice of foraging sites, to maximize foraging success (Pyke 1984). Sit-and-wait predators typically spend most of their foraging bouts waiting for prey at a single site, the selection of which can strongly affect the success of prey capture (e.g., Scharf and Ovadia 2006). Herein I report the possible exploitation of bovine dung as a foraging site by a frog.

At 1300 h on 14 July 2019, I encountered a Sarojamma’s Leaping Frog (Indirana sarojamma) in the Palod Reserve Forest (8.684768°N, 77.141579°E; WGS84) adjoining the Indian Institute of Science Education and Research Thiruvananthapuram Campus, Vithura, Thiruvananthapuram, Kerala, India. The frog was in an ambush position on freshly deposited Gaur (Bos gaurus) dung on the forest floor (Fig. 1). Other than taking photographs, I left the frog undisturbed. I had previously collected a frog from the same locality that was clearly identified as a Sarojamma’s Leaping Frog based on characters noted by Dahanukar et al. (2016) and Garg and Biju (2016).

Anurans are known to use cattle dung as a foraging site to increase the chance of prey (insect) encounters (González-Bernal et al. 2012; Landestoy et al. 2015; Baxter-Gilbert et al. 2020). In the encounter described above, I believe that the use of dung for moisture was unlikely as the frog was within a few meters of a perennial stream during the monsoon season. To the best of my knowledge, this is the first record of a frog using wild bovine dung as a foraging site.

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Fig. 1. A Sarojamma’s Leaping Frog (Indirana sarojamma) on wild Gaur (Bos gaurus) dung (left), and another individual (snout-urostyle length 34 mm) collected from the same locality (right). Photographs by Gopal Murali.
Literature Cited


