

Myrmecophagy by a jumping spider (Araneae: Salticidae: *Hyllus semicupreus*), feeding on a red weaver ant queen (Hymenoptera: Formicidae: *Oecophylla smaragdina*)

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The arboreal red weaver ant (*Oecophylla smaragdina* Fabricius 1775) lives primarily in the canopies of mango plants (*Mangifera indica*) and is widely distributed in the Northern districts of Odisha, India (Bharti et al. 2016; Jena et al. 2020). The red weaver ant is highly aggressive in nature, preying on a wide range of species to include insects, spiders, earthworms, centipedes, and millipedes (Peng & Christian 2005; Gathalkar & Barsagade 2016; Jena et al. 2020). In spite of its predation on a large number of insect species in its territory, it can be hunted by some jumping spider species. Alate males and females, and females without the protection of a nest and colony (Figures 1-2) are particularly vulnerable to predators.



Figures 1-2. 1, Queen *Oecophylla smaragdina* with first group of eggs, Kollamkudimugal, Mundampalam, Kochi, Kerala, India (29 May, 2021). The first batch of eggs are deposited within 5-10 days after the alate queen sheds her wings (Lokkers 1990; Crozier et al. 2010). The solitary queen has strong mandibles, but no colony for defence. 2, Male *O. smaragdina* from Kuching, Sarawak, Malaysia (2 June, 2017). Photo credits: 1, © Sunny Josef, used under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license; 2, © Nikolai Vladimirov, used under a [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license.

On 8 August, 2019 at 11:45 AM, we were conducting a survey and taking photographs of host plants and broods of the red weaver ant in Bada Bisol (21°32'27.02"N, 86°33'4.27"E), Mayurbhanj district of Odisha, India. Suddenly we encountered a female jumping spider, *Hyllus semicupreus* (Simon 1885), feeding on a queen red weaver ant, on the upper surface of an East India Rosebay leaf (*Tabernaemontana divaricate*). At the time this spider was trying to hold tightly on to the side of the thorax of the queen ant, and to pull it away. We took several photographs before this spider, with her prey, vanished from that leaf surface (Figures 3-4).



Figures 3-4. Adult female *Hyllus semicupreus* holding a captured queen red weaver ant, *Oecophylla smaragdina* on a leaf of an East India Rosebay, *Tabernaemontana divaricate*. Photographs by Rakesh Kumar Mohalik.

Many *myrmecophagous* (prey on ants) salticids are known, including those that will prey on isolated *Oecophylla smaragdina* workers (Li 1996; Cushing 1997; Jackson & van Olphen 1992; Jackson et al. 1998). Some chrysilline salticids, including *Cosmophasis bitaeniata* (Keyserling 1882) that live in association with *O. smaragdina* colonies, appear to prey selectively on ant larvae taken from workers (Allen & Elgar 2001; Grob 2015; John 2020). However we have not found any reports of predation on the solitary queens of *O. smaragdina*, so this may represent a new record.

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