

## First record of *Thiania* cf. *subopressa* Strand 1907 (Araneae: Salticidae: Euophryini) from India with some natural history notes on the species

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The genus *Thiania* C. L. Koch 1846 is a primarily oriental genus of relatively large salticids, possessing a broad, depressed prosoma and a slender opisthosoma, with an overall flattened body bearing lustrous markings made up of iridescent, scale-like hairs. These spiders are also sometimes referred to as *fighting spiders* because of the combative nature of the males, in which the first pair of legs is often greatly elongated (Zabka 1985; Murphy & Murphy, 2000; Li et. al. 2002; Suguro 2012).

Although the genus *Thiania* now includes 23 species, only a single species has hitherto been recorded in India, *T. bhamoensis* Thorell 1887 (WSC 2020). Here we report the occurrence of *Thiania* cf. *subopressa*, only the second species in the genus to be photographed in this country (Figures 1-2).

This species was first observed by Mr. Atanu Chakraborti, Asst. Conservator of Forests, Tripura, in his home garden located in the capital city of Agartala, in Northeast India, where it was observed nesting in between the leaves of *Gardenia jasminoides* J. Ellis, an evergreen shrub with elongated, lance shaped leaves, bearing fragrant white flowers. This nest was located at a height of ~2 m above ground level, and consisted of two leaves held together with rivet-like structures of thick webbing on the inside of either ends, with the middle portion remaining unattached. Two such retreats were detected, with spiderlings observed in one of them. In this retreat a dried leaf made up the upper portion of the nest. Adult spiders appeared to have little interest in their surroundings most of the time, but would swiftly rush forth from the openings of their silk-fastened leaf retreats to ambush prey, in the form of mosquitoes and fruit flies.

Identification was based on the description of the female *T. subopressa* Strand 1907 provided by Žabka (1985), based on an orange carapace with a dark marginal band, a dark brown eye field, and eyes surrounded by black. *T. subopressa* has been reported previously from China, Japan, Vietnam, and as an introduction (by 1950) to the island of Oahu, Hawaii (HBS 2000; Dan 2010; WSC 2020). The female that was photographed (Figure 1) differs in possessing a bright orange opisthosoma, as opposed to the light grey, greyish olive, or curiously, grayish brown colour reported by other authors (Wesołowska 1981; Žabka 1985; Suguro 2012). This difference may be due to the fact that published descriptions were based on preserved specimens, or it might represent geographic variation. It is also possible that the present species represents a new and undescribed species, but this determination will require additional study, and perhaps a revision of the genus.



**Figure 1.** Adult female *Thiania cf. subopressa* in Agartala, Tripura, India. Note the black eye region. Legs I are also completely black except for the coxae and the tarsi. Behind the eye region the carapace is wide and flat. Photographs by Atanu Chakraborti.



**Figure 2.** *Thiania* cf. *subopressa* in Agartala, Tripura, India. **1**, Female in nest between two leaves, held together with silk rivets (upper left). **2**, View of entrance to nest that contained spiderlings, with dry upper leaf. **3-4**, Spiderlings near the nest. Photographs by Atanu Chakraborti.

For comparison, photographs of several *Thiania* species from southeastern Asia are shown in Figure 3. Some of the oriental spiders that have been tentatively identified as *T. subopressa* have translucent red-brown legs I (Figure 3:5-6).



**Figure 3 (continued on next page).** Representative *Thiania* species from southeastern Asia. **1**, Female *T. bhamoensis*, 10 JUN 2019, Penang, Malaysia. **2**, Male *T. bhamoensis*, 7 MAY 2018, Penang, Malaysia. Photographs posted at iNaturalist © Richard Ong, used under a Creative Commons Attribution-NonCommercial 4.0 International License ([CC-BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/)).



**Figure 3 (continued from previous page).** Representative *Thiania* species from southeastern Asia. **3**, Female *T. bhamoensis*, 23 AUG 2016, feeding on a female *Myrmarachne* sp., Labrador Villa Road, Singapore, © budak. **4**, *T. cf. bhamoensis*, 11 JUN 2017, Penang, Malaysia, © Robin Bad. **5**, Female *T. cf. subopressa*, Tawau Hill, Singapore, © Nicky Bay, used with permission. **6**, *T. cf. subopressa* feeding on ant, 1 AUG 2018, Hong Kong, © wklegend. **7**, Female *T. latefasciata*, 6 OCT 2016, Botanic Gardens, Singapore, © budak. **8**, Female *T. latefasciata*, 18 MAY 2019, Botanic Gardens, Singapore, © budak. Photographs 3-4, 6-8 posted at iNaturalist, used under a Creative Commons Attribution-NonCommercial 4.0 International License ([CC-BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/)).

Ahmed et. al. (2019), noted the importance of urban and suburban green spaces, particularly gardens planted with flowering plants, and maintained as pollinator or wildlife habitats, in the conservation of biodiversity, a verity previously echoed by Aronson et al. (2017), who stressed the value of such habitats in invertebrate conservation, owing to the wide variety of microhabitats afforded by them. As observed by Lowe et al. (2017) urban gardens can support a surprisingly high diversity of spiders, the value of such habitats in harbouring previously unreported species ascertained by previous reports of *Afraflacilla* Berland & Millot 1941, *Brettus cingulatus* Thorell 1895, and *Neobrettus* Wanless 1984 (Ahmed et. al. 2017, 2018, 2019), and now the presence of *Thiania* cf. *subopressa*, as yet another new record for India.

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