

Biodiversity Record: A plataspid stinkbug showing cephalic sexual dimorphism

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Subjects: Stink bug, unidentified genus and species (Insecta: Hemiptera: Plataspidae).

Subjects identified by: Yap Ee Hean.

Location and dates: Singapore Island, Windsor Nature Park; 29 October 2021 & 23 November 2023.

Habitat: Parkland at the edge of secondary forest, on the stem of the climber *Kunstleria ridleyi*.

Observers: Doreen Foo (29 October 2021) and Yap Ee Hean (23 November 2023).

Observations: A sexually dimorphic plataspid stink bug was observed on the native climber *Kunstleria ridleyi* (Fig. 4) on two separate occasions. During the first sighting on 29 October 2021, a few adult individuals and some nymphs were spotted on the stem of the climber (Fig. 1A). During the second sighting on 23 November 2023, multiple individuals were spotted, but no nymphs were seen (Figs. 1B & C, 2). Voucher specimens were deposited in the Zoological Reference Collection, of the Lee Kong Chian Natural History Museum, at the National University of Singapore.



Fig. 1. In-situ dorsal views of the stink bugs. A. An adult (above) and a nymph on 29 October 2021 (Photograph by Doreen Foo). B & C. Two individual adults on 23 November 2023 (Photographs by Yap Ee Hean).

Remarks: The Plataspidae are an Old World family of sap-sucking stinkbugs (although 3 species were introduced into the New World) in the Pentatomoidea. With their enlarged scutellum, they bear a superficial resemblance to tiny beetles. Several plataspid genera exhibit sexual dimorphism in the head. Some, such as the African genus *Ceratocoris* (see Jessop, 1983) and the Asian genus *Cronion* (see Rédei, 2017) are incredibly flashy. Others, such as the Malaysian genus *Hemitrochostoma* (see Rédei & Jindra, 2015) and Indian genus *Claviplatys* (see Rédei & Jindra, 2018) are less showy but still strikingly marked.

The plataspid featured herein exhibits a rather subtle sexual dimorphism (Fig. 2). The mandibular plates of the males are slightly dilated compared with those of the females (Fig. 3). The form of the bug is reminiscent of members of the genus *Coptosoma*. *Tiarocoris* is a related genus that is differentiated from *Coptosoma* by the exhibition of sexual dimorphism in the head. However, the description of *Tiarocoris* mentions the mandibular plates as ‘produced in two large diverging processes’ (Distant, 1902). The bug of interest here clearly does not have such a feature. Interestingly, a sighting of a strikingly similar looking bug was recorded in Penang, Malaysia, published in iNaturalist (Alexius, 2021), that would fit the description of *Tiarocoris*.



Fig. 2. Dorsal (top), lateral (middle) and ventral (bottom) views of preserved examples of the sexually dimorphic plataspids. A. An adult female (ZRC_BDP0372517). B. An adult male specimen (ZRC_BDP0372518) (Photographs by: Yap Ee Hean).



Fig. 3. Dorsal views of the heads of adult stinkbug specimens showing sexual dimorphism. A. Head of a female (ZRC_BDP0372517). B. Head of a male (ZRC_BDP0372518) (Photographs by: Yap Ee Hean).



Fig. 4. An example of the host plant *Kunstleria ridleyi*, with close-up views of the foliage (Photographs by: Yap Ee Hean).

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