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Biodiversity Record: Yellow orchid mantis, Helvia cardinalis, in Singapore

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Subjects: Yellow orchid mantis, Helvia cardinalis (Insecta: Mantodea: Hymenopodidae).

Subjects identified by: Jiayuan Lin and Foo Maosheng

Location, date and time: Two separate locations and dates on Singapore Island –

- 1. Nanyang Technological University campus at Jalan Bahar; 23 March 2023; around 2200 hrs.
- 2. Ulu Sembawang; 26 November 2023; around 1046 hrs.

Habitat: The Jalan Bahar site is an open-air link bridge area on the 10th floor of a hostel at the Nanyang Technological University. The building is on a slope adjacent to secondary forest. The Ulu Sembawang site is an open vacant field with short grass and dominated by exotic vegetation adjacent to secondary forest.

Observers: Constance Liew Yun Xian and Zick Soh Shun-Hua.

Observations: A female example of about 4 cm body length (Fig. 1 & 2) was found on the floor of a link bridge of a hostel building at the campus of the Nanyang Technological University on 28 March 2023. The subject was responsive to Constance Liew Yun Xian approaching to photograph it. The observer left and returned about half an hour later to find the subject perched on a railing. The observer could not find the mantis again when she left and returned after another half hour.

A male example of about 2.5 cm body length (Figs. 3–6) was found by Zick Soh Shun-Hua resting on the surface of a leaf of *Bidens pilosa* at Ulu Sembawang on 26 November 2023. The subject was inactive and apparently aware of the observer as the latter approached and obtained close-up images.





Female *Helvia cardinalis* from campus of Nanyang Technological University on 23 March 2023. Fig. 1. Lateral view. Fig. 2. Dorso-lateral view (Photographs by: Constance Liew Yun Xian).

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Male *Helvia cardinalis* from Ulu Sembawang on 26 November 2023. Fig. 3. Dorso-lateral view. Fig. 4. Latero-ventral view. Fig. 5. Frontal view. Fig. 6. Dorso-lateral view (Photographs by: Zick Soh Shun-Hua).

Remarks: Helvia cardinalis was first recorded from Singapore as its junior synonym Parymenopus davisoni, which was described based on a female specimen by Wood-Mason in 1890 (see Schwarz, 2015). The sightings presented here suggest that Helvia cardinalis is widely distributed across Singapore, and possibly overlooked due to its small size, cryptic colouration and arboreal behaviour.

Literature cited:

Schwarz CJ (2015) *Parymenopus davisoni* Wood-Mason synonym of *Helvia cardinalis* Stål (Insecta: Mantodea: Hymenopodidae). Stuttgarter Beiträge zur Naturkunde A, Neue Serie 8: 49–52.

Wood-Mason J (1890) Description of a new genus and species (*Parymenopus davisoni*) of Mantodea from the Oriental Region. Annals and Magazine of Natural History, 5: 437–439.