

Biodiversity Record: A white club flitter, *Hyarotis microsticta*, at Sungei Buloh

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Subject: White club flitter, *Hyarotis microsticta* (Insecta: Lepidoptera: HesperIIDae).

Subject identified by: Ong JunXiang Lumin, Tay Jing Xuan and Seow Tek Lin.

Location, date and time: Singapore Island, Sungei Buloh Wetland Reserve; 3 February 2024; around 1437 hrs.

Habitat: Fringe of secondary coastal forest with leaf litter and freshwater puddles on the substrate, flanked by mangrove.

Observers: Ong JunXiang Lumin and Tay Jing Xuan.

Observation: An individual of about 25 mm body length (Figs. 1 & 2) was spotted along the forest fringe, resting on a simpoh air (*Dillenia suffruticosa*) leaf, at the observers' shoulder level. After a few shots were taken of it, the butterfly flew to approximately two meters above ground and rested on another leaf. Upon disturbance, it took flight once more, staying close to the canopy level, and flying out of the observers' sight into the forest.

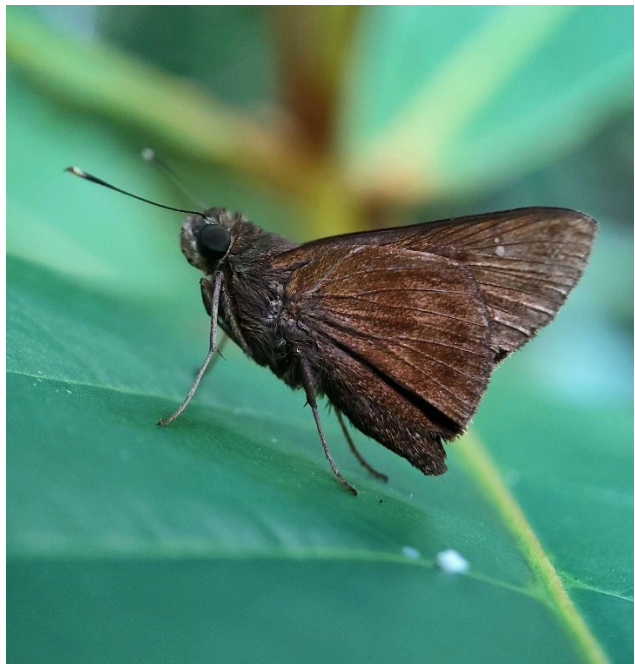
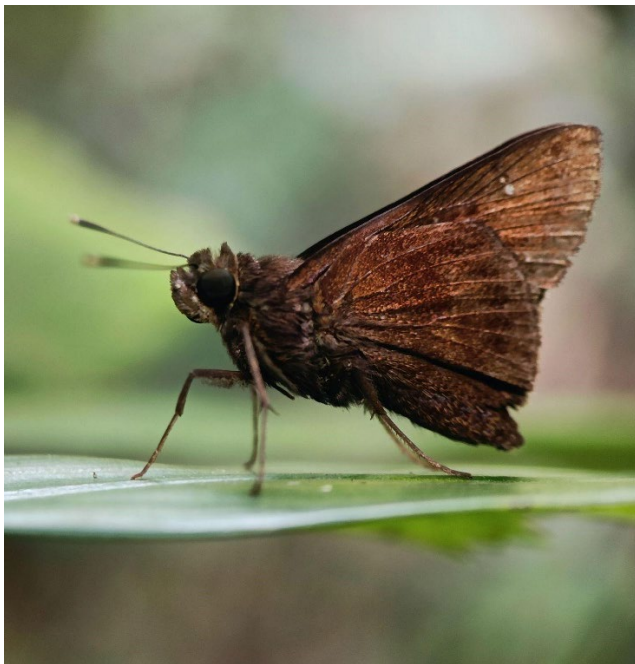


Fig. 1. Anterolateral view of the *Hyarotis microsticta*. (Photograph by: Ong JunXiang Lumin) Fig. 2. Posterolateral view of the same individual with clearer view of white-tipped antennae and apical spots (Photograph by: Tay Jing Xuan).

Remarks: The butterfly genus *Hyarotis* is native to the Indomalayan region, and can be separated from similar-looking genera by the diagnostic white patch located just before the apiculus (the hook at the tip of the antenna) (see Fig. 2). Two species have been recorded in Singapore, with the common tree flitter, *Hyarotis adrastus praba*, being easily distinguished from the featured species by the white discal patches on the underside of the wings. The far rarer *Hyarotis microsticta* has small subapical spots that are usually not touching (Corbet et al., 2021; see Figs. 1 & 2).

In the third edition of the Singapore Red Data Book, *Hyarotis microsticta* is listed as 'Critically Endangered' and a vagrant in Singapore. The species was first recorded in Singapore on 30 September 2007 at the Sungei Buloh Wetland Reserve (Chan, 2015). About eight years later, one was spotted on 21 September 2015 at Chek Jawa on Pulau Ubin, but labelled

as a vagrant (Nature Society Singapore, 2015). In 2022, *Hyarotis microsticta* was, apart from Sungei Buloh and Pulau Ubin, also recorded, for the fifth time in Singapore, from the Upper Seletar Reservoir Park (OwYong et al., 2022).

Although regarded as a vagrant, it is possible, with the greater frequency of recent sightings, that *Hyarotis microsticta* is breeding in Singapore. Its host plant could be present in Singapore, but the identity of the host plant, as well as its life history are not yet known. The species has been recorded in forest with freshwater and also in close proximity to mangrove (OwYong et al., 2022), and it is possible that the butterfly's host plant is present in those habitats. We also speculate that the previous rarity of *Hyarotis microsticta* could be attributed to examples having been misidentified as members of the genus *Caltores* or *Baoris* due to their visual similarities (see iNaturalist, 2022).

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