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Biodiversity Record: First record of the assassin bug, Locoptiris pendleburyi, for Singapore

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Subject: Locoptiris pendleburyi (Insecta: Hemiptera: Reduviidae: Holoptilinae).

Subject identified by: Hwang Wei Song.

Location and date: Sentosa Island, abandoned fort at Mount Serapong; 22–23 June 2022.

Habitat: Secondary forest.

Observer: Jayanthi Puniamoorthy.

Observation: A single male specimen was collected in a yellow pan trap (sample ID: YNC-0361) as part of an insect biodiversity survey of Sentosa Island. The specimen (Fig. 1), measuring 2.26 mm from head to abdomen, is deposited in the Zoological Reference Collection of the Lee Kong Chian Natural History Museum at the National University of Singapore, and assigned the accession number ZRC BDP0376080.

Remarks: This appears to be the first record of the assassin bug, *Locoptiris pendleburyi*, in Singapore. Three other species of the subfamily Holoptilinae — *Holoptilus leprosus*, *Ptilocerus* ef. *subreticulatus* and *Ptilocerus unicolor*, are recorded on the Biodiversity of Singapore website (https://singapore.biodiversity.online/taxon/A-Arth-Hexa-Hemi [accessed 5 July 2023]). *Locoptiris pendleburyi* can easily be distinguished from the aforementioned three species by the presence of long, thick and stiff setae on its antennae and legs, 3-segmented antennae, the single large dark spot located centrally on its forewings (Fig. 1A) and the lack of a trichome on abdominal sternum III (Fig. 1C).

Locoptiris pendleburyi was originally described from Kuala Lumpur, Malaysia, by Miller (1940) as *Ptilocerus pendleburyi*. The species was transferred to the genus *Locoptiris* by Rédei & Tsai (2011). Members of the Holoptilinae are known to be specialist ant predators (Weirauch et al., 2010; Bulbert et al., 2014), likely luring the ants with secretions emitted from the abdominal trichome (Weirauch et al., 2010). In the absence of the abdominal trichome, it is not known if *Locoptiris pendleburyi* has an alternative predatory behavior or diet.

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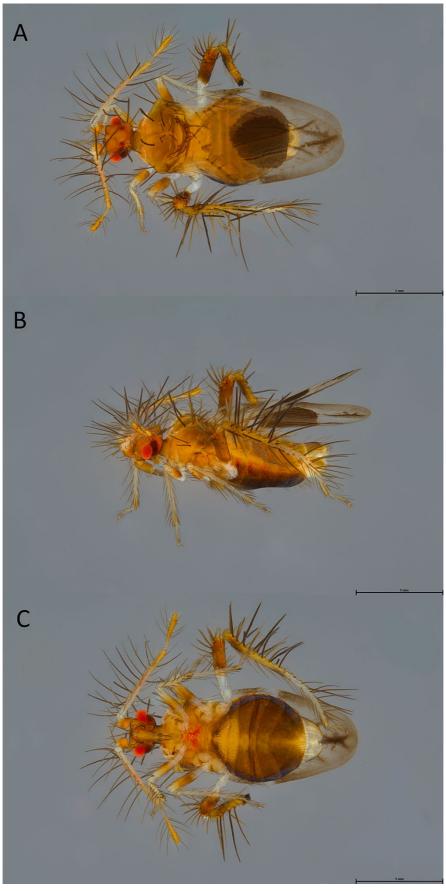


Fig. 1. Dorsal (A), lateral (B) and ventral (C) views of the ethanol-preserved male *Locoptiris pendleburyi* (ZRC_BDP0376080). Scale bars = 1 mm. (Photographed with Leica Focus Stacking Imaging System by: Siti Maimon binte Hussin).