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Biodiversity Record: New Singapore record of the planthopper, Paraepora cultellata

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Subject: Planthopper, *Paraepora cultellata* (Insecta: Hemiptera: Fulgoromorpha: Tropiduchidae).

Subject identified by: Chan Sow-Yan and Lau Wing Lup.

Location, date and time: Singapore Island, Hougang Avenue 10; 16 October 2022; around 2315 hrs.

Habitat: Urban. On the sixth floor of a residential apartment in a concrete high-rise building.

Observer: Lau Wing Lup

Observation: An adult female planthopper of about 9 mm body length (from apex of vertex to tip of forewings), was found on the observer's bed (Figs. 1–3). When the insect was about to fly or jump, it swayed its body sideways as if gauging the distance and strength it requires to reach the other point.

Morphological features of the planthopper are noted as follows — Eyes narrower than tricarinate pronotum, and apically rounded. Mesonotum tricarinate with median carina straight and reaching to mesoscutellum. Lateral carinae curving anteriorly towards median carina of thorax (Figs. 1 & 3). Compound eyes oval and brown. Antenna blackish, thread-like, short, with stumpy ring-like yellowish-green scape (Fig. 3). Top of the head (vertex) flat and projected slightly forward between compound eyes. Vertex twice as broad than long in midline; with anterior margin archly convex, lateral margins ridged and subparallel, posterior margin concave with two subtle median carinae not reaching anterior margin. Frons (upper part of face) longer than broad, widest at apical fourth, with distinct median carina and lateral margins slightly ridged. Frontoclypeal suture distinctly arched (Fig. 3). Forewings sub-hyaline with anterior (costal) margin slightly arched, and posterior (outer) margin straight and rounded apically. Corium (forewing base) smooth. Costal cells of forewing's anterior margin generally broader than those of posterior margin, with sparse oblique veinlets (Fig. 1). The tips of spines on hind tibiae and tarsi blackish (Fig. 2).

Remarks: The featured insect fits the descriptions of the genus *Paraepora*, which is apparently known only from Yunnan in China. Based on size, it is likely to be *Paraepora cultellata*, as the female of this species has the largest body length among the three known congeners (Chang & Chen, 2014). As the specimen was not collected and its reproductive organ not examined, its specific identity should be regarded as tentative. This may be the first time the genus *Paraepora* is recorded outside China. The genus is not among the five species in the family Tropiduchidae that have been recorded in Singapore (Wang & Tran, 2011). However, it could have been overlooked. There is also a possibility that it is not native and could have been imported with agricultural or horticultural products. According to Chang & Chen (2014), host plants of the genus are not known.

Literature cited:

Chang Z & Chen X (2014) A new genus of the tribe Eporini (Hemiptera: Fulgoromorpha: Tropiduchidae) with description of three new species from Yunnan, China. Florida Entomologist, 97: 1602–1612.

Wang LK & Tran AD (2011) Planthoppers. In: Ng PKL, Corlett RT & Tan HTW (eds.) Singapore Biodiversity. An Encyclopedia of the Natural Environment and Sustainable Development. Editions Didier Millet and the Raffles Museum of Biodiversity Research, National University of Singapore, p. 418.







Fig. 1. Dorsal view of *Paraepora cultellata*.

Fig. 2. Lateral view of the same insect.

Fig. 3. Dorso-frontal view of the head.

(Photographs by: Lau Wing Lup).