

Biodiversity Record: First Singapore record of the hoverfly, *Phytomia argyrocephalus*

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Subjects: Silver-faced hoverfly, *Phytomia argyrocephalus* (Insecta: Diptera: Syrphidae: Eristalinae).

Subjects identified by: Zestin W. W. Soh.

Location, date and time: Singapore Island, East Coast Park, Area A; 27 November 2021; 1100 hrs.

Habitat: Semi-urban park with patches of coastal beach forest.

Observers: Zestin W. W. Soh and T. W. Z. Chia.

Observation: A male and a female example, each about 1 cm in total length, were found visiting the inflorescence of Indian camphorweed (*Pluchea indica*), a native flowering shrub (Figs. 1, 2). The compound eyes of the male are holoptic (eyes meeting at the top of the head), while those of the female are dichoptic (eyes not meeting).



Fig. 1. Female (left) and male (right) *Phytomia argyrocephalus* on the inflorescence of Indian camphorweed at East Coast Park. (Photograph by: Zestin W. W. Soh).

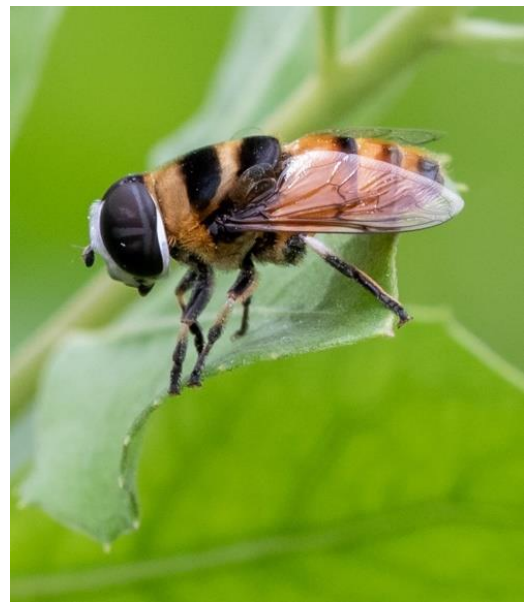


Fig. 2. Lateral habitus of the male *Phytomia argyrocephalus*. (Photograph by: Zestin W. W. Soh).

Remarks: Hoverflies (Diptera: Syrphidae) are diverse and attractive insects that provide a range of ecological services, including pollination, nutrient cycling and biological control of plant pests (Deans et al., 2007; Dunn et al., 2020). Knowledge of Singapore's hoverfly fauna is limited due to a lack of published studies, but there are ongoing efforts to document the species and resolve their taxonomy (Soh et al., 2020; The Biodiversity of Singapore, 2022).

Phytomia argyrocephalus is herein reported for the first time in Singapore. There appears to be no Singapore material of this species represented in the insect collections of the Lee Kong Chian Natural History Museum and the Insect Diversity Laboratory at the National University of Singapore (pers. obs., 18 January 2022). There are also currently no Singapore records of this species on iNaturalist. However, there are specimens of another species of *Phytomia*, preliminarily identified as *Phytomia aesyminus* (Walker, 1849), from Bukit Timah and Coney Island in both the Lee Kong Chian Natural History Museum and the Insect Diversity Laboratory.

Species identification was based on the original description by Macquart (1842) and photographs of the lectotype held at the Muséum National d'Histoire Naturelle in Paris, France. The type locality was stated by Macquart (1842) as “Des Indes orientales” (the East Indies). This distinctive species seems to be widely distributed over South and Southeast Asia, with 15 verified records from India, Thailand and Indonesia on iNaturalist (see https://www.inaturalist.org/observations?place_id=any&subview=map&taxon_id=1203168). Singapore is located in the middle of the known range of *Phytomia argyrocephalus*, and therefore this species is likely to be native there, but it appears locally rare.

The English name ‘silver-faced hoverfly’ herein proposed is based on the species epithet *argyrocephalus* (‘silver head’), which likely refers to the silvery hairs on the face of this fly. The genus *Phytomia* comprises about 25 species of hoverflies, which occur mostly in the Afrotropical region (De Meyer et al., 2020). Their larvae are generally aquatic and saprophagous, while the adults are floral visitors.

Note: The author thanks Terence Chia (National Parks Board) for showing him the coastal native plant plot at East Coast Park Area A, the location of this record—which has become a haven for various insect pollinators. He is grateful to Martin Hauser for correspondence that helped to confirm the species’ identification. Thanks to Ang Yu Chen (Lee Kong Chian Natural History Museum) and John Ascher (Insect Diversity Laboratory at the National University of Singapore) for facilitating visits to their respective collections, and to the Muséum National d'Histoire Naturelle in Paris, France, for making photographs of the type specimens available at: [https://science.mnhn.fr/institution/mnhn/list?genus=Phytomia&specificEpithet=argyrocephalus&scientificNameAuthorship=\(macquart,%201842\)&collectionCode=ed](https://science.mnhn.fr/institution/mnhn/list?genus=Phytomia&specificEpithet=argyrocephalus&scientificNameAuthorship=(macquart,%201842)&collectionCode=ed).

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