

Biodiversity Record: First record of the damselfly, *Agriocnemis pygmaea*, on Sentosa

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Subjects: Wandering wisp, *Agriocnemis pygmaea* (Insecta: Odonata: Zygoptera: Coenagrionidae).

Subjects identified by: Jayanthi Puniamoorthy.

Location and date: Sentosa Island, Tanjong Beach Road at 1°14'40.4"N 103°49'31.3"E; 17–18 March 2022.

Habitat: Urban parkland beside a plant nursery.

Observer: Jayanthi Puniamoorthy.

Observations: Two adult males were found in a white pan trap (sample ID: YNC-0160) collected as part of an insect biodiversity survey of Sentosa Island. Both specimens are deposited in the Zoological Reference Collection of the Lee Kong Chian Natural History Museum at the National University of Singapore, and assigned the accession numbers ZRC_BDP_0357611 (Fig. 1) and ZRC_BDP_0357656.

Remarks: The damselfly, *Agriocnemis pygmaea*, described by Rambur (1842, as *Agrion pygmaeum*), was rediscovered in Singapore in 2012 on Pulau Semakau, in a Malaise trap sample by the first author (Ngiam & Cheong, 2016). The previous verified record in the country was in 1858 (Tang et al., 2010; NParks, 2017). This species has since been recorded in several parts of Singapore Island (Ngiam & Ng, 2022), and could be more common than currently thought. The featured specimens represent the first record on Sentosa Island.



Fig. 1. Lateral view of adult male *Agriocnemis pygmaea* (ZRC_BDP_0357611) preserved in ethanol. Imaged with Dun Inc. Passport II Imaging System (Canon Mk II, MPE 65mm lens). (Photograph by: Siti Maimon Binte Hussin).

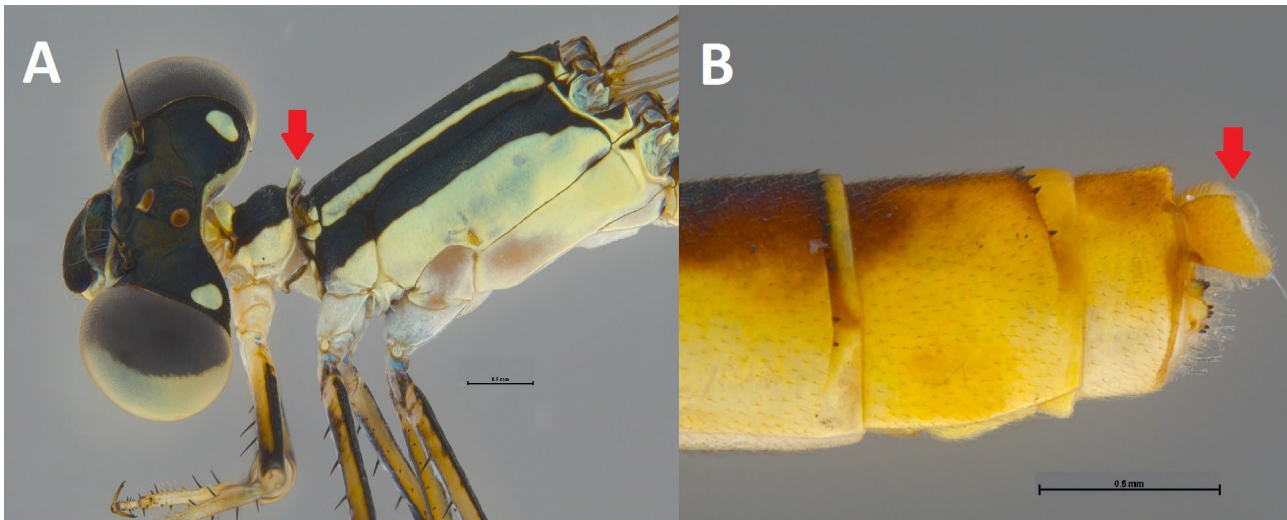


Fig. 2. Adult male *Agriocnemis pygmaea* (ZRC_BDP_0357611). A: Erect lobe (indicated by arrow) on prothorax resembling a spine. B: Lateral view of anal appendages (indicated by arrow). Imaged with Leica Focus Stacking Imaging System. (Photographs by: Siti Maimon Binte Hussin).

Although *Agriocnemis pygmaea* is widespread from South Asia to Australasia, it can be easily overlooked owing to its small size and similar appearance to *Agriocnemis femina*. Males of *Agriocnemis pygmaea* can be distinguished from males of *Agriocnemis femina* by the presence of an erect lobe on the prothorax (Fig. 2A) and the larger upper anal appendage that curves down towards the lower anal appendage (Fig. 2B).

Agriocnemis pygmaea inhabits the edges of freshwater marshes and ponds; and like its congeners, is a weak flier that may be passively dispersed by the wind (Ngiam & Ng, 2022). On Sentosa Island, a man-made pond located approximately 85 m away from the collection site of the specimens herein featured could be a potential habitat.

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Literature cited:

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