

Biodiversity Record: A male example of the flower mantis, *Creobroter sumatranus*

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Subject: Flower mantis, *Creobroter sumatranus* (Insecta: Mantodea: Hymenopodidae).

Subject identified by: Foo Maosheng.

Location, date and time: Singapore Island, Thomson Nature Park, along Old Upper Thomson Road; 29 January 2021; 2020 hrs.

Habitat: Sub-urban parkland at the edge of secondary forest.

Observers: Mohamed Jusri Bangi and Gerald Ng Say Kuan.

Observation: An adult male of about 30 mm was spotted on a Manila lea (*Leea guineensis*). The insect was first observed upside down on the underside of a leaf (Fig. 1). It then moved upwards (Fig. 2) and started to clean its mandibles with its front legs, as well as its antenna with its mandibles (Fig. 3). The mantis did not appear to be disturbed or frightened, for it stayed put and groomed itself. In addition, it frequently looked at the observers, and on one occasion, looked directly at a flashlight that was illuminating it at close quarters.



Fig. 1. The male flower mantis was first spotted in an upside-down position on the underside of a leaf. (Photograph by: Mohamed Jusri Bangi).

Remarks: The featured subject is a flower mantis, which seems to be less commonly seen than its relative, *Theopropus elegans*, which has been recorded in a number of locations in Singapore (Leong & Teo, 2008). The fact that this example is male lends some significance to the sighting. Mantises of the family Hymenopodidae are known to be sexually dimorphic, with males being distinctly smaller than females. As such, males, which tend to be more agile and mobile, are seen less often than females, which tend to have limited movement due to their larger size (Svenson et al., 2016).

The authors identified the subject as a male after having examined two preserved specimens of *Creobroter sumatranus* (ZRC_ENT00009570, male, and ZRC_ENT00009568, female) at the Zoological Reference Collection, in the Lee Kong Chian Natural History Museum, National University of Singapore. They were collected in Singapore by the late Professor Dennis Hugh Murphy. These specimens show that the male has small eye spots on the forewings (see Fig. 2), while the same markings are distinctly larger on the female.

Literature cited:

Leong TM & Teo SC (2008) Records of the praying mantis, *Theopropus elegans* (Westwood) (Mantodea: Hymenopodidae: Hymenopodinae) in Singapore, with notes on oviposition and hatching. Nature in Singapore, 1: 211–214.

Svenson GJ, Sydney KB, Henrique MR, James CO & Frank W (2016) Selection for predation, not female fecundity, explains sexual size dimorphism in the orchid mantises. Scientific Reports, 6: 37753.



Fig. 2. In situ lateral (left) and dorsal (right) views of the flower mantis. In the picture on the right, note the pair of small black-and-yellow spots on the middle part of the forewing that identify the subject as a male. (Photographs by: Mohamed Jusri Bangi).



Fig. 3. In situ close ups of the frontal view of the head of the flower mantis (left) and fronto-ventral view of the mantis grooming its antennae (right). (Photographs by: Gerald S. K. Ng).