

## Biodiversity Record: New record of the praying mantis, *Caliris elegans*, in Singapore

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**Subjects:** Praying mantis, *Caliris elegans* (Insecta: Mantodea: Haaniidae: Caliridinae).

**Subjects identified by:** Yeap Bin Hui Benedict.

**Location, date and time:** Singapore Island, Mandai trail, along the periphery of Bird Paradise; 29 December 2021 around 2130 hrs and 12 April 2024 around 2200 hrs.

**Habitat:** Secondary forest.

**Observers:** Yeap Bin Hui Benedict, Kuo Han Chong, Lee Yu Xuan and Ong JunXiang Lumin.

**Observations:** On 29 December 2021, at around 2130 hrs, an adult male of about 3 cm in head and body length (Figs. 1, 3 & 4) was spotted by torchlight, above the observers' heads, under a leaf. The mantis proceeded to descend to the observers' body level by flight, roughly 5 minutes later.

On 12 April 2024, at around 2200 hrs, about ten metres away from the location of the previous sighting, an adult female of about 3.5 cm head and body length (Figs. 2, 5–9) was found at the observers' knee level, on a leaf among small low vegetation where the insect seemed well-camouflaged.



Fig. 1. Male *Caliris elegans* on 29 December 2021. Fig. 2. Dorso-lateral view of female *Caliris elegans* on 12 April 2024 (Photographs by: Benedict Yeap).



Fig. 3. Lateral view of male. Fig. 4. Frontal view of head of male. Note the row of outspread postero-ventral tibial spines (Photographs by: Yeap Bin Hui Benedict).

**Remarks:** The two featured individuals appear to represent the first record of *Caliris elegans* in Singapore (unpublished information). This should not be surprising as this species is distributed in the Malay Peninsula, Sumatra and Borneo (Schwarz & Konopik, 2014).

Adult *Caliris elegans* can be identified by the following morphological features —

1. Peach and orange colouration on the anterior half of the labrum and on the first four segments of the maxillary palps (Figs. 3, 4, 7 & 8).
2. A row of outspread postero-ventral tibial spines (Figs. 4 & 8), and a row of four large postero-ventral femoral spines that are slightly displaced laterally (Figs. 1–8; see Brannoch et al, 2017).
3. Three relatively darker green patches towards the tip of the forewings (Figs. 2, 5 & 6).
4. Hind wings that are pink in females (Fig. 9) and translucent in males. Note that hindwings are exposed only during threat display or flight (see Wong et al, 2022).



Fig. 5. Dorsal view of female. Note the darker green patches on the rear part of the forewing. Fig. 6. Lateral view of female (Photographs by: Yeap Bin Hui Benedict).

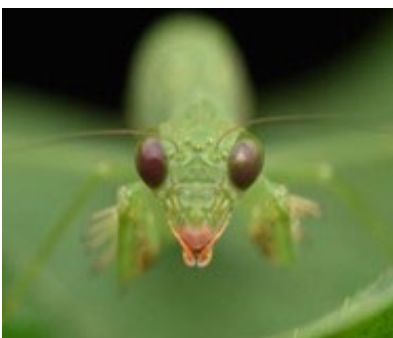


Fig. 7. Frontal view of female's head. Fig. 8. Lateral view of female's prothoracic leg. Fig. 9. Lateral view of female exposing her pink hindwings (Photographs by: Yeap Bin Hui Benedict).

**Literature cited:**

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- Wong H, Japir R, Chung AYC & Bragg PE (2022) An annotated checklist of praying mantises (Insecta: Mantodea) of the Forest Research Centre, Sepilok. *Sepilok Bulletin*, 31: 1–30.