

Recent records of the jewel beetle, *Chrysochroa purpureiventris*, in Singapore

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Subjects: Jewel beetle, *Chrysochroa purpureiventris* (Insecta: Coleoptera: Buprestidae).

Subjects identified by: Cheong Loong Fah and Sean Yap.

Location, date and time: Two records from the Bukit Timah area on Singapore Island -

- 1) Bukit Timah Nature Reserve, at the summit of Bukit Timah Hill; 24 May 2014.
- 2) Dairy Farm Nature Park, Wallace Trail; 2 July 2020; 0930 hrs.

Habitat:

- 1) Secondary forest bordering on fragmented primary forest
- 2) Secondary forest.

Observers:

- 1) Law Ing Sind and Law Ingg Thong.
- 2) Drima Chakraborty and Jerome Lee.

Observations: There are two separate observations –

- 1) An example measuring approximately 4 cm total length was found moving among grass near the telecoms station (Fig. 1). It became motionless when it was picked up, presumably in an attempt at thanatosis (playing dead). This individual had a bronze hue even when viewed under natural light. It was placed onto a nearby tree trunk after photography.



Fig 1. Dorsal view of example with bronze hue at Bukit Timah Hill. Photograph by Law Ingg Thong

2) An individual around 5 cm total length was found motionless on a wooden railing post along the trail (Fig. 3). Its left hind leg was broken off at the femur (Fig. 2). This specimen lacked the noticeable bronze hue from the previous observation, but appeared metallic green all over (Fig. 2&4). Similar to the first observation, it did not move even after being picked up, photographed, and released into nearby vegetation.



Fig. 2. Individual at Dairy Farm Nature Park. Note the broken left hind leg. Photograph by Drima Chakraborty



Fig. 3. The jewel beetle in-situ on the wooden post at Dairy Farm Nature Park. Photograph by Jerome Lee



Fig. 4. Fronto-dorsal view of the metallic green insect. Photograph by Jerome Lee

Remarks: The morphology of both subjects agree with the account of *Chrysochroa purpureiventris* Deyrolle (1864) in Holyński (2009). From the apparent dearth of records for such a striking insect in Singapore (see Chua, 2011), the species seems to be locally rare and probably confined to forest habitats. Thanatosis, as noted in the featured observations, is known to be a commonly adopted predator defence strategy in this species (Hawkewood et al., 2018).

References:

Chua MAH (2011) Jewel beetles Family Buprestidae. 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. 353.

Deyrolle H (1864) Description des Buprestides de la Malaisie recueillis par M. Wallace. Annales de la Société Entomologique de Belgique, 8 (1864): 1-312.

Holyński RB (2009) Taxonomic Structure of the Subtribe Chrysochroina CAST. with Review of the Genus *Chrysochroa* DEJ. Gondwana. 422 pp., 173 colour photos, 124 maps.

Hawkeswood TJ, Sommung B & Sommung A (2018) First record of the jewel beetle, *Chrysochroa purpureiventris* Deyrolle, 1864 (Insecta: Coleoptera: Buprestidae) from Ubon Ratchathani Province, Thailand. Calodema, 612: 1-3.