

Biodiversity Record: Leaf insects, *Cryptophyllium chrisangi*, at Pasir Ris

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Subjects: Chris Ang's leaf insect, *Cryptophyllium chrisangi* (Insecta: Phasmatodea: Phylliidae).

Subjects identified by: Bryan Seah.

Location, date and time: Singapore Island, Pasir Ris Park; 29 March 2024; around 0146 hrs to after 0445 hrs.

Habitat: Small patch of mangrove forest surrounded by urban parkland.

Observers: Bryan Seah and Sherlyn Chow.

Observation: At 0130hrs, a mating pair of leaf insects were observed about 2.5 m off the ground on a sea hibiscus. There was another male beside the mating pair, and another above them, partially hidden by foliage (Figs. 1 & 2). For around 15 minutes, the male next to the mating pair persistently tried, but failed, to get closer to the female. In the next hour, he got to a slightly lower position, but was still unable to gain access to the female. The observers left and returned at 0445 hrs. The female had then moved to a higher spot, but the males were nowhere to be found.



Fig. 1 Three male and one female leaf insects on sea hibiscus at 0130 hrs. Male number 2 is mating with the significantly larger female. Male number 1 tries unsuccessfully to access the female, while male number 3 is partially hidden behind foliage on the top right (Photograph by: Sherlyn Chow).

The observers spotted a total of 23 leaf insects. They noted five mature males, five nymphs and 13 young adults or (mostly) mature females. Three mature males were with one adult female on a sea hibiscus as described above (Figs. 1 & 2). Nearby, on a mangrove (bakau) tree, six females were seen together with one male. The last male was also on the same tree with another female, less than 50 cm away. Among all the leaf insects seen, only one female and one male (on the sea hibiscus) were observed mating.

Remarks: This record is noteworthy due to the presence of many individual leaf insects seen within a small area. It seems to suggest a breeding congregation, even though only two individuals were actually seen mating, and one male competing to mate.

Of the three species of leaf insects recorded from Singapore, *Phyllium* (*Phyllium*) *chrisangi* was recently described by Seow-Choen (2017) based on specimens collected from mangroves on the northern coast of Singapore Island. The sea hibiscus (*Talipariti tiliaceum*) is one of its food plants. Females grow to 10 cm while males reach 7.4 cm in length. The species was transferred to the recently erected genus *Cryptophyllium*, and has since been recorded outside Singapore in Peninsular Malaysia, southern Thailand, Pulau Weh off northern Sumatra and Kuching in Sarawak, Borneo (Cumming, et al., 2021).

Literature cited.

Cumming RT, Bank S, Bresseel J, Constant J, Le Tirant S, Dong Z, Sonet G & Bradler S (2021) *Cryptophyllium*, the hidden leaf insects – descriptions of a new leaf insect genus and thirteen species from the celebicum species group (Phasmatodea, Phylliidae). *Zookeys*, 1018: 1–179.

Seow-Choen F (2017) A Taxonomic Guide to the Stick Insects of Singapore. Natural History Publications (Borneo), Kota Kinabalu, Malaysia, x+165 pp.



Fig. 2. The same four leaf insects viewed from a slightly different angle, at 0146 hrs (Photograph by: Bryan Seah).