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## Biodiversity Record: New record of the pyram snail, Chrysallida eppersoni, in Singapore

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Subjects: Epperson's pyram snail, Chrysallida eppersoni (Mollusca: Gastropoda: Pyramidellidae).

Subjects identified by: Chan Sow-Yan and Lau Wing Lup.

Location, date and time: Singapore Island, Sungei Tampines; 29 January 2021; 1711 hrs.

Habitat: Estuarine. Back mangroves. On sandy mud under trees during low tide (Fig. 1).

Observers: Chan Sow-Yan and Lau Wing Lup.

**Observation:** At least six live specimens (Figs. 2, 3) of up to around 1 cm in shell height were found on wet muddy sand near the edge of brackish water pools. One was seen on the shell of a grazing lined nerite snail (*Nerita balteata*). The pyram snail's yellowish body is patterned by large blackish patches and dots that can be seen through its translucent shell (Fig. 3b). Its foot is light grey and the eyes are situated closely together on its head (Fig. 3b).

**Remarks:** Members of the Pyramidellidae are largely marine ectoparasites of polychaete worms or molluscs (Dinapoli et al., 2011). *Chrysallida eppersoni* inhabits brackish waters but its diet is unknown. This species is known to be endemic to Thailand (Brandt, 1968; Sripongpun, 2003; Tesana et al., 2009), thus the featured individuals may be the first extralimital record. They also represent the first record of *Chrysallida eppersoni* in Singapore (see Tan & Woo, 2010; Tan et al., 2012; Sanpanich & Tan, 2016). However, the authors are unable to ascertain if this species is an overlooked cryptic native or a recent introduction.



Fig. 1. Back mangrove habitat where Chrysallida eppersoni was found. (Photograph by: Lau Wing Lup).

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Fig. 2. Specimens of *Chrysallida eppersoni* at various growth stages. Note the colour differences in the shell periderm. Space between black bars = 1 mm. (Photograph by: Lau Wing Lup).



Fig. 3. Live *Chrysallida eppersoni*. a, aperture view showing faint spiral lines and a thin operculum; b, dorsal view of individual grazing on wet muddy sand, with the mottled soft tissue pattern of the snail visible through the translucent shell, and eye spots (indicated by arrow). (Photographs by: Lau Wing Lup).

## Literature cited:

Brandt R (1968) Description of new non-marine mollusks from Asia. Archiv für Molluskenkunde, 98: 213–289.

Dinapoli A, Zinssmeister C & Klussmann-Kolb A (2011) New insights into the phylogeny of the Pyramidellidae (Gastropoda). Journal of Molluscan Studies, 77: 1–7.

Sanpanich K & Tan SK (2016) Shell-bearing gastropod molluscs of the Singapore Strait. Raffles Bulletin of Zoology, Supplement 34: 528–538.

Sripongpun G (2003) Benthic macroinvertebrates as a biological index of water quality in the Lower Thachin River. Silpakorn University International Journal, 3: 168–193.

Tan SK, Chan SY & Clements GR (2012) A Guide to Snails and Other Non-marine Molluscs of Singapore. Singapore Science Centre, Singapore, 176 pp.

Tan SK & Woo HPM (2010) A Preliminary Checklist of the Molluscs of Singapore. Raffles Museum of Biodiversity Research, National University of Singapore, Singapore, 78 pp.

Tesana S, Srisawangwong T, Sithithaworn P, Laha T & Andrews R (2009) Prevalence and intensity of infection with third stage larvae of *Angiostrongylus cantonensis* in mollusks from northeast Thailand. The American Journal of Tropical Medicine and Hygiene, 80: 983–987.