

Biodiversity Record: Occurrence of the top shell, *Conotalopia musiva*, in Singapore

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Subjects: Mosaic top shell, *Conotalopia musiva* (Mollusca: Gastropoda: Trochidae).

Subjects identified by: Chan Sow-Yan, Lau Wing Lup and Tan Siong Kiat.

Location, date and time: Johore Strait, Changi Beach Park; 12 February 2021 at around 0800 hrs and 1 September 2023 at around 0730 hrs.

Habitat: Estuarine shore in the intertidal zone that was exposed during morning low tide. On shells of live placuna clams among seagrasses.

Observers: Lau Wing Lup and Chan Sow-Yan.

Observations: An adult shell, about 4.5 mm in height (Fig. 1), was encountered on 12 February 2021. A juvenile shell (Fig. 2), about 2.5 mm in diameter, was found on 1 September 2023. Both shells were inhabited by hermit crabs.

The spire height, shape, pattern, sculpture and colour of the two specimens are noted to be variable. Brownish spiral tessellations are present on the juvenile shell (Fig. 2). The larger shell has up to six whorls that are bicarinate, and a tricarinate last whorl. The protoconch appears devoid of striations, but the teleoconch is sculptured with numerous closely placed axial riblets that extend into the large and open umbilicus (Figs. 1c & 2e). The aperture (Figs. 1a & 2a) is circular with a thin and acute peristome. The arcuate columella is barely reflected and ends at the keel of the umbilicus.

Remarks: *Conotalopia musiva* has been recorded from Singapore (e.g., Chuang, 1973 as *Minolia holdsworthana*; Tan & Woo, 2010 as *Pseudominolia musiva*), but this is probably the first illustrations of specimens from there. This species was originally described as *Margarita musiva* from Hong Kong Harbour, among shell-gravel substrate at a depth of 18.3 m (Gould, 1861). It has also been recorded from Japan, Penang in Malaysia, Sri Lanka, Pakistan, the Gulf of Oman and the Persian Gulf (Arakawa, 1968; Kazmi et al., 2018; Vian et al., 2022; Yasin et al., 2023).

Conotalopia musiva is known to inhabit subtidal mud (Kazmi et al., 2018) and seagrass beds (Vian et al., 2022; Yasin et al., 2023). The operculum was reported to be horny, and shows granulate lines of growth (Gould, 1861). The snails are also known to pass greenish grey faecal rods with two prominent longitudinal ridges (Arakawa, 1968). A shell height of 10 mm was listed for the species in Kazmi et al. (2018).

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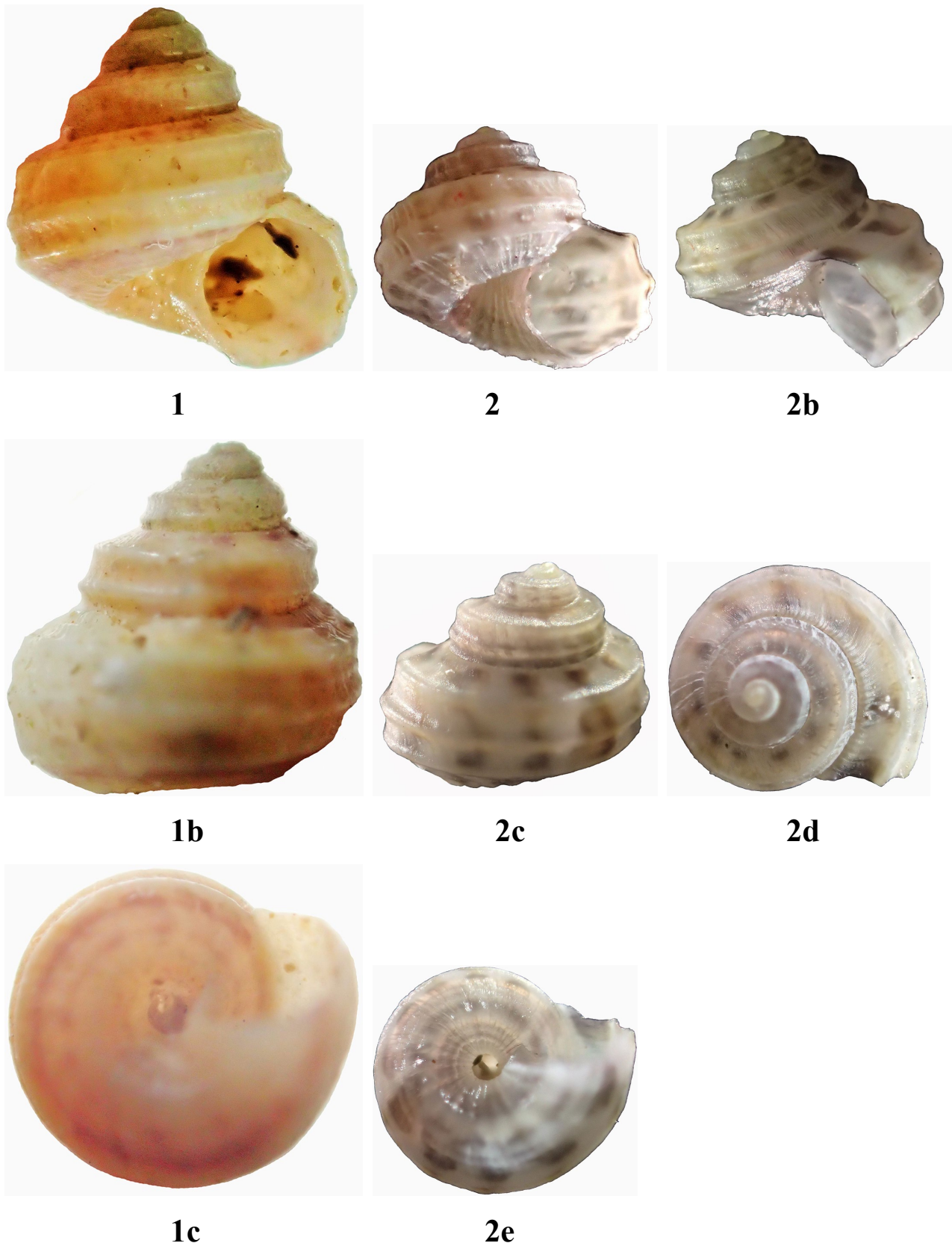


Fig. 1. *Conotalopia musiva* shell (adult of 4.5 mm height) from February 2021: apertural (1a), abapertural (1b) and umbilical (1c) views. Fig. 2. *Conotalopia musiva* shell (juvenile of 2.5 mm diameter) from September 2023: apertural (2a), dorso-lateral (2b), abapertural (2c), apical (2d) and umbilical (2e) views (Photographs by: Lau Wing Lup).