

## Biodiversity Record: New Singapore record of the estuarine snail, *Cerithiopsis tenthrenois*

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**Subjects:** Honeycomb cerithiopsid snail, *Cerithiopsis tenthrenois* (Mollusca: Gastropoda: Cerithiopsidae).

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

**Location, date and time:** Singapore Island, Punggol Beach Park; 9 February 2024 at around 1720 hrs, and 15 December 2024 at around 1547 hrs.

**Habitat:** Estuarine. Intertidal shore at low tide (Fig. 1).

**Observers:** Lau Wing Lup and Chan Sow-Yan.

**Observations:** Live snails were found on two occasions.

On 9 February 2024, three examples devoid of protoconches were found separately under rocks (Fig. 2).

On 15 December 2024, a group of eight specimens of varying growth stages and with their protoconchs largely intact were spotted grazing on a sponge (Fig. 3).

The shell of *Cerithiopsis tenthrenois* appears swollen, pupoid and fusiform in shape. The protoconch is thin, narrow, stylet-shaped, and consists of 4.5 completely smooth and shiny, light brown whorls which are susceptible to breakage in adult specimens. The teleoconch consists of six whorls, with each whorl constituting three spiral cords that intersect with axial folds to form a dense series of pearl-like knobs. The spaces between the knobs are alveolate, resembling a honeycomb. The body whorl has an additional two spirals. The aperture is ovate, with a well-defined and very short but deeply incised siphonal canal. Adult shells attain a height of about 2.5 mm without the protoconch (Fig. 4) and 3 mm with the protoconch intact (Fig. 5). The head-foot region is white with a blackish mottled pattern. The black eye spots are located at the base of the tentacles (Fig. 6).



Fig. 1. Estuarine shore habitat of *Cerithiopsis tenthrenois* at Punggol. Fig. 2. A sole *Cerithiopsis tenthrenois* (indicated by arrow) on a sponge, in-situ, on 9 February 2024. Fig. 3. A group of *Cerithiopsis tenthrenois* on a sponge on the underside of a rock, in-situ, on 15 December 2024 (Photographs by: Lau Wing Lup).

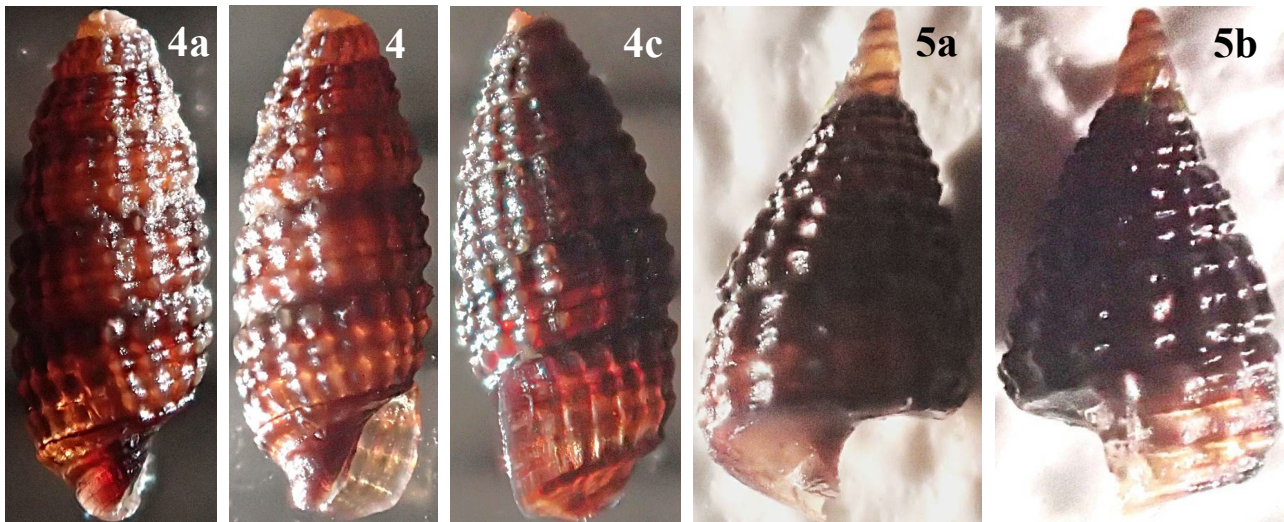


Fig. 4. *Cerithiopsis tenthrenois* shells of about 2.5 mm found on 9 February 2024 without its protoconch. Lateral left (a), aperture (b) and lateral right (c) views. Fig. 5. *Cerithiopsis tenthrenois* of about 3 mm from 15 December 2024 with protoconch largely intact. Lateral left (a) and lateral right (b) views (Photographs by: Lau Wing Lup).

**Remarks:** Members of the family Cerithiopsidae are spongivorous snails that live in all oceans from the littoral to the upper bathyal zone (Hoffman et al., 2024). *Cerithiopsis tenthrenois* was described from the Indian Ocean at Bombay (present day Mumbai) by Melvill (1896, as *Bittium tenthrenois*). It has been recorded as an alien species in the Mediterranean Sea (Crocetta et al., 2017, 2020; Ammar, 2018; Zenetos et al., 2024). The species is herein documented as a new Singapore record (see Tan & Woo, 2010; Sanpanich & Tan, 2016; Tan & Low, 2022).



Fig. 6. Aperture view of one of the live *Cerithiopsis tenthrenois* with intact protoconch, showing the white soft tissue with blackish mottling, and black eye spot at the base of one of its tentacles (Photograph by: Lau Wing Lup).

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