

## Biodiversity Record: New record of the pyram snail, *Babella crassicostata*, in Singapore

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**Subjects:** Thickened pyram snail, *Babella crassicostata* (Mollusca: Gastropoda: Pyramidellidae).

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

**Locations, dates and times:** Two locations at the Johor Strait —

- 1) Changi Beach Park; 9 March 2020 at around 1718 hrs, and 18 June 2022 at around 0827 hrs.
- 2) Punggol Beach Park; 17 July 2025 at around 0907 hrs.

**Habitat:** Estuarine intertidal shore. During low tides.

**Observer:** Lau Wing Lup.

**Observations:** 1) At Changi Beach Park on 9 March 2020, one example of about 2.5 mm shell length was found on a biofouled porcelain shard (Fig. 1), washed ashore among rocks. On another visit on 18 June 2022, three specimens were found in close proximity on an exterior valve of a pen shell (*Pinna bicolor*) among other encrustations (Figs. 2, 7 & 8). The largest specimen is about 2.5 mm in shell length.



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Fig. 1. Porcelain shard where a *Babella crassicostata* shell was found among encrustations. Fig. 2. Three *Babella crassicostata* shells (circled red) were found on the exterior of a dislodged pen shell (*Pinna bicolor*) (Photographs by: Lau Wing Lup).

At Punggol Beach Park on 17 July 2025, a solitary and slightly eroded shell of about 2.5 mm with a broken lip was seen under rock on sponge (Figs. 3–6).



Fig. 3. Solitary *Babella crassicostata* shell on sponge under a rock at Punggol Beach Park. Fig. 4. Same shell, aperture view. Fig. 5. Dorso-lateral view of the same shell. Fig. 6. Lateral left view of the same shell (Photographs by: Lau Wing Lup).

The shell of *Babella crassicostata* is conical, elongated, and whitish in colour. Upon closer examination, the shell protoconch is conical-ovate, smooth, helix-like, multispiral of about 2–3 whorls, with a rather inflated last whorl and a bluntly tipped spire. The protoconch angle is about 90° and can be seen lying across the first teleoconch whorl of some clean and fresh specimens. The turreted teleoconch of about five whorls is separated by deeply grooved sutures. The later whorls are straight sided with relatively thick, straight, collabral axial ribs that bulge at the ends and terminate abruptly well above the suture. One robust suprasutural cord separates each whorl. On the periphery of the last whorl, there are two smooth and strong spiral cords with a furrow between them. The shell aperture is oval, and the umbilicus is closed. The arcuate columellar has a fold. The living animals were not seen as they remained retracted deep into their shells during the encounters.



Fig. 7. Apical view of the three shells from Changi. Fig. 8. Umbilical views of the same shells (Photographs by: Lau Wing Lup).

**Remarks:** *Babella crassicostata* was described based on specimens from Pho-Hai in Vietnam by Saurin (1958), and the specimens herein featured match the illustrations and original descriptions well. Both the genus *Babella* and species *crassicostata* are new records for Singapore (see Tan & Woo, 2010; Sanpanich & Tan, 2016; Tan & Low, 2022; Chan & Lau, 2021, 2025). The present record may even be the first record of *Babella crassicostata* beyond Vietnam since its description by Saurin in 1958. This implies that the species has a much wider distribution and was previously overlooked, or its occurrence in Singapore is a recent human-assisted extralimital spread.

The confamilial *Cingulina cingulata*, which occurs sympatrically with *Babella crassicostata* at Punggol Beach Park, can be differentiated from the latter by the absence of axial ribs and lacking a prominent tooth on the columella (Chan & Lau, 2025).

According to MolluscaBase (2025), the genus *Babella* contains 23 species, all of which are ectoparasites, distributed in the tropical and temperate regions of the Pacific Ocean (Peñas & Rolán, 2017).

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