

Biodiversity Record: New Singapore record of the pyram snail, *Cingulina cingulata*

Chan Sow-Yan* & Lau Wing Lup

Email: chansowyan@gmail.com (*corresponding author), suiseki1984@yahoo.com.sg

Recommended citation. Chan-SY & Lau WL (2025) Biodiversity Record: New Singapore record of the pyram snail, *Cingulina cingulata*. Nature in Singapore, 18: e2025048. DOI: 10.26107/NIS-2025-0048

Subjects: Belted pyram snail, *Cingulina cingulata* (Mollusca: Gastropoda: Pyramidellidae).

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

Locations, dates and times: Singapore Island along the Johor Strait, Punggol Beach Park; 15 December 2024, around 1554 hrs.

Habitat: Estuarine shore, along the intertidal zone.

Observer: Lau Wing Lup.

Observation: One live juvenile example of about 4 mm shell height and a freshly dead shell of about 5 mm shell height were found under two separate rocks (Figs. 1–3).

The shell has an elongate-conic shape and is milky-white. The protoconch contains three smooth whorls that have their axis at a right angle to the axis of the teleoconch. The 12 scarcely convex whorls of the teleoconch are separated by channels of about the same width. The channels are crossed by numerous somewhat equally developed and equally spaced slender axial riblets. The outer lip is arcuate and crenulated. The columella is short, slender, and curved. The parietal wall is covered by a thin callus. The shell attains a height of up to 10 mm (see Dunker, 1860). The head-foot is white with blackish eyespots (Fig. 3).



Fig. 1. *Cingulina cingulata* shell on the underside of a rock in-situ at Punggol Beach Park (Photograph by: Lau Wing Lup).

Remarks: In addition, two dead shells were previously found at Changi Beach Park (Fig. 4); one on 19 June 2022, the other on 1 September 2023. Both were found on *Placuna* clams.

Cingulina cingulata is herein documented as a new Singapore record (see Tan & Woo, 2010). The Singapore specimens match the original description of Dunker (1860 as *Turbonilla cingulata*) and photographs by Okutani (2000). The species was described from Japan (Dunker, 1860 as *Turbonilla cingulata*) and hitherto recorded only from the region of the Japan Sea (Kantor & Sysoev, 2006; Hori & Iizumi, 1997) and southern Taiwan (Chen & Lee, 2007) where it inhabits both marine and estuarine environments (MolluscaBase, 2024). The present record appears to be the first record of *Cingulina cingulata* in Singapore, but it cannot be ascertained if this snail is native there.

Cingulina cingulata is superficially similar to *Monotygmamoena* (see Chan & Lau, 2021), but it can be differentiated by the former species lacking a prominent tooth on the columella. Additionally, *Monotygmamoena* shells tend to be yellow, shorter, with fewer whorls that are more convex and adorned with irregular inconspicuous axial riblets.



Fig. 2. Aperture (left) and dorso-lateral views of the same *Cingulina cingulata* shell from Punggol Beach Park (Photographs by: Lau Wing Lup).



Fig. 3. Aperture (left) and dorso-lateral views of the live juvenile *Cingulina cingulata*. Note the white animal and eyespots on the left picture (Photographs by: Lau Wing Lup).



Fig. 4. Aperture (left) and dorso-lateral views of a *Cingulina cingulata* shell of about 5 mm from Changi Beach Park (Photographs by: Lau Wing Lup).

Literature cited:

- Chan S-Y & Lau WL (2021). Biodiversity Record: *Monotygmamoena* snails in Singapore. Nature in Singapore, 14: e2021057. DOI: 10.26107/NIS-2021-0057
- Chen WD & Lee YJ (2007) Mini-shells and small shells of Hengchun Peninsula, Taiwan. National Museum of Marine Biology & Aquarium, Pingtung, Taiwan, 293 pp.
- Dunker W (1860) Neue japanische Mollusken. Malakozoologische Blätter, 6: 221–240.
- Hori S & Iizumi H (1997) Pyramidellid fauna of intertidal zone to shallow depths of Oshoro Bay, Japan sea coast on middle Hokkaido, Japan (Mollusca: Gastropoda: Pyramidellidae). Bulletin of the Hokkaido National Fisheries Research Institute, 61: 27–53.
- Kantor YI & Sysoev AV (2006) Marine and brackish water Gastropoda of Russia and adjacent countries: an illustrated catalogue. KMK Scientific Press, Moscow, 372 pp. + 140 pls.
- MolluscaBase (2024) *Cingulina cingulata*. <https://www.marinespecies.org/aphia.php?p=taxdetails&id=576639> (Accessed 25 December 2024)
- Okutani T (ed.) (2000) Marine Mollusks in Japan. Tokai University Press, Japan, 1173 pp.
- Tan SK & Woo HPM (2010) A Preliminary Checklist of the Molluscs of Singapore. Raffles Museum of Biodiversity Research, National University of Singapore, 78 pp. Uploaded 2 June 2010. https://lknhm.nus.edu.sg/wpcontent/uploads/sites/11/2024/02/preliminary_checklist_molluscs_singapore.pdf (Accessed 25 December 2024).