

## Biodiversity Record: New record of the pyram snail, *Turbonilla osyuensis*, in Singapore

Chan Sow-Yan\* & Lau Wing Lup

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

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**Subject:** Pyram snail, *Turbonilla osyuensis* (Mollusca: Gastropoda: Pyramidellidae).

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

**Location, date and time:** Johor Strait, Pasir Ris, near mouth of Loyang canal; 19 June 2022, around 0936 hrs.

**Habitat:** Estuarine shore. Intertidal zone, in seagrass meadow during low tide.

**Observer:** Lau Wing Lup.

**Observation:** A live example of about 6 mm shell length, was found together with a *Monotygma amoena* snail on a spotted sea hare (*Aplysia oculifera*) (Fig. 1).

The shell of *Turbonilla osyuensis* (Figs. 2 & 3) is tall, slender and conical, whitish with a rounded, protruding, helicoid and heterostrophic (coiled in a different direction to those of the teleoconch) protoconch. The teleoconch whorls are slightly convex, flattened, and ornamented by thin but strong, oblique, and slightly curved axial ribs. The intercostal spaces are depressed and a little wider than the ribs. The sutures are clearly demarcated. The aperture is sub rectangular and moderately large. The outer lip is thin, the external sculpture visible through its aperture with back lighting. The columella is slender, straight, and devoid of any folds or tooth. The operculum is thin, yellowish, corneous and oligogyrous. The head-foot is pale grey with two black eyespots.

**Remarks:** *Turbonilla osyuensis* is distributed in Japan (Okutani, 2000) and the Philippines (Poppe, 2010), and is usually found in benthic environments. The featured specimen is the first record of this species in Singapore (see Tan & Woo, 2010), and also a southward extension of its previously known range.

*Turbonilla osyuensis* appears similar to two other pyramidellids in Singapore – *Turbonilla kuraenohamana* and *Chrysallida eppersoni*. It can be told apart from *Turbonilla kuraenohamana* by not having any spiral bands (see Chan & Lau, 2021a), and from *Chrysallida eppersoni* by having a whitish shell with more whorls (see Chan & Lau, 2021b). *Turbonilla osyuensis* is distinguished from *Monotygma amoena* (Amathinidae) by its taller stature and absence of prominent spiral cords (see Fig. 2; Chan & Lau, 2021c). Being ectoparasites, it is likely that both the *Turbonilla osyuensis* and *Monotygma amoena* herein featured were feeding on the body fluids of their sea hare host.

### Literature cited:

Chan S-Y & Lau WL (2021a) Biodiversity Record: First Singapore record of the pyram snail, *Turbonilla kuraenohamana*. Nature in Singapore, 14: e2021129.

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Poppe GT (2010) Philippine Marine Mollusks. Volume III (Gastropoda Part 3 and Bivalvia Part 1). ConchBooks, Hackenheim, 665 pp.

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Fig. 1. *Turbonilla osyuensis* (larger snail) and *Monotygma amoena* (smaller snail) in-situ on a sea hare *Aplysia oculifera*. Fig. 2. *Turbonilla osyuensis* (left) beside *Monotygma amoena* (right). Fig. 3. Lateral view of *Turbonilla osyuensis*. (Photographs by: Lau Wing Lup)