NATURE IN SINGAPORE 16: e2023112

Date of Publication: 29 November 2023 DOI: 10.26107/NIS-2023-0112 © National University of Singapore

Biodiversity Record: Occurrence of the pyram snail, Evalea elegans, in Singapore

Chan Sow-Yan* & Lau Wing Lup

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

Recommended citation. Chan S-Y & Lau WL (2023) Biodiversity Record: Occurrence of the pyram snail, *Evalea elegans*, in Singapore. Nature in Singapore, 16: e2023112. DOI: 10.26107/NIS-2023-0112

Subjects: Elegant pyram snail; *Evalea elegans* (Mollusca: Gastropoda: Pyramidellidae).

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

Location, date and time: Singapore Island, Pasir Ris Park, Sungei Api Api; 26 June 2023; around 1130 hrs.

Habitat: Estuarine. Intertidal zone along river embankments fringed by mangroves. At low tide.

Observers: Lau Wing Lup and Chan Sow-Yan.

Observation: Two live but immobile snails were found next to each other on mangrove prop roots that were heavily encrusted by worm tubes, bivalves, barnacles and organic debris (Fig. 1). Both specimens are about 3.5 mm and 4.5 mm in shell height.

Evalea elegans has a ventricose and conical shell that is pale yellow, but whitish when devoid of its periostracum. The shell has about five convex whorls, the protoconch is intorted, the teleoconch has sharply incised spiral lines, the aperture is ovate and anteriorly dilated, the columella is plicate, and the lip is thick. The soft tissue appears yellowish white with yellow blotches (Fig. 2).

Remarks: Members of the family Pyramidellidae are ectoparasites of molluscs, as well as polychaete and sipunculid worms. The genus *Evalea* has 31 species and is recorded in the coastal areas of the Indo-Pacific at Japan southwards to New Zealand, and westwards to India and South Africa, and in the western Atlantic (MolluscaBase, 2023). *Evalea elegans* was described from material found at a depth of 63 fathoms (about 113 m) off Mino-Sima, in the Sea of Japan, by Adams (1860 as *Odostomia (Evalea) elegans*).

Based on the two examples herein featured, *Evalea elegans* is documented as a new record for Singapore (see e.g., Tan & Woo, 2010; Sanpanich & Tan, 2016). However, there is a previously unreported old (apparently collected in the late 19th century) specimen from Singapore identified as *Menestho (Evalea) elegans* in the collection of The Academy of Natural Sciences in Philadelphia, USA. The dried shell, accessioned as #58021, was from Samuel Archer (see <u>clade.ansp.org/malacology/collections/details.php?mode=details&catalognumber=19888</u>; for details on Samuel Archer, see Low & Pocklington, 2019).

Literature cited:

Adams A (1860) Mollusca Japonica: New species of *Odostomia*. Annals and Magazine of Natural History, 6: 20–22. Low MEY & Pocklington K (2019) 200: Points in Singapore's Natural History. Lee Kong Chian Natural History

Museum, Singapore, xix+607 pp.

MolluscaBase (2023) Evalea elegans (A. Adams, 1860). https://www.molluscabase.org/aphia.php?p=taxdetails&id=581018 (Accessed 18 September 2023).

Sanpanich K & Tan SK (2016) Shell-bearing gastropod molluscs of the Singapore Strait. Raffles Bulletin of Zoology, Supplement 34: 528–538.

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://lkcnhm.nus.edu.sg/wp-content/uploads/2017/04/preliminary_checklist_molluscs_singapore.pdf (Accessed 21 November 2023).





Fig. 1. Two *Evalea elegans* (indicated by arrows) in-situ among encrustations on a mangrove prop root.

Fig. 2. Close up apertural view of one of the snails showing the emerging yellowish foot.

- Fig. 3. Apertural view of the larger (c. 4.5 mm shell height) Evalea elegans.
- Fig. 4. Abapertural view of the larger Evalea elegans.
- Fig. 5. Abapertural view of the smaller (c. 3.5 mm shell height) Evalea elegans.

(Photographs by: Lau Wing Lup)





