

## ***Macromphalus styliferina*, a marine microsnail at Lazarus Island**

**Subject:** *Macromphalus styliferina* (Mollusca: Gastropoda: Vanikoridae).

**Subject identified by:** Tan Siong Kiat.

**Location, date and time:** Singapore Straits, Lazarus Island, western shore; 17 May 2014, between 0630 and 0800 hrs.

**Habitat:** Marine, at intertidal zone of rocky shore, exposed at 0.1 m – 0.2 m tidal height.

**Observers:** Contributors.

**Observation:** One example of this minute marine snail was found perched on a rock, and could be easily detached. Its shell is 3.3 mm (length from apex to anterior-most part of aperture) x 1.6 mm (at the widest part of the aperture) (Fig. 1) and carried slight brown pigmentation (Fig. 2). The final whorl is extremely large compared to the apical ones, similar to the original description of this species (Nevill, 1884: 167), and has a rough texture consisting of horizontal striations. The nuclear whorls form a digital-shaped knob atop the large whorl. When the animal was active, we observed a fairly extensible foot that was translucent white, though no siphons were visible. Its tentacles, when extended forward, are of a flattened-lanceolate shape.

**Remarks:** Very little is known about marine micro-snails in Singapore. They are rarely seen, and often mistaken as juveniles of other snails, as in the present case before the specimen was identified. *Macromphalus styliferina* was described by Nevill (1884: 167, as *Fossar [Couthouyia] styliferinus*) based on a specimen collected by C. J. Irving on a *Malleus* shell from Singapore. It was later reported as *Couthouyia styliferinus* by Chuang (1973) and Tan & Woo (2010), and by Chou et al. (1994, as *Couthouyia styliferina*). It was previously classified under the family Fossaridae in Chuang (1973), under Potamididae in Chou et al. (1994), and under Planaxidae in Tan & Woo (2010). Its current reclassification under family Vanikoridae (see Tan & Low, 2014) is further supported by our observations of its live form, and following the family description by Ponder (1998).

### **References:**

- Chou L. M., P. K. L. Ng & K. K. P. Lim, 1994. Animalia. In: Wee, Y. C. & P. K. L. Ng (eds.). *A First Look at Biodiversity in Singapore*. National Council on the Environment, Singapore. pp 70–106.
- Chuang S. H., 1973. Sea shells. In: Chuang S. H. (ed.). *Animal Life and Nature in Singapore*. Singapore University Press, Singapore. pp. 175–201.
- Nevill, G., 1884. *Hand List of Mollusca in the Indian Museum, Calcutta. Part II. Gastropod. Prosobranchia-Neurobranchia (contd.)*. Order of the Trustees of the Indian Museum, Calcutta. p. 176.
- Ponder, W. F., 1998. Superfamily Vanikoroidea. Part B. Chapter 15. Prosobranchs. In: Beesley, P. L., G. J. B. Ross & A. Wells (eds.). *Mollusca: The Southern Synthesis. Fauna of Australia. Vol. 5*. CSIRO Publishing, Melbourne, Australia. pp. 796–772.
- Tan S. K. & M. E. Y. Low, 2014. Singapore Mollusca: 5. The subfamily Planaxinae (Gastropoda: Caenogastropoda: Cerithioidea: Planaxidae). *Nature in Singapore*. 7: 15–23.
- Tan S. K. & H. P. M. Woo, 2010. *A Preliminary Checklist of the Molluscs of Singapore*. Raffles Museum of Biodiversity Research, National University of Singapore, Singapore. 78 pp.

**Note:** This is a contribution of the Singapore **Comprehensive Marine Biodiversity Survey** conducted by the National University of Singapore's Tropical Marine Science Institute and the National Parks Board.

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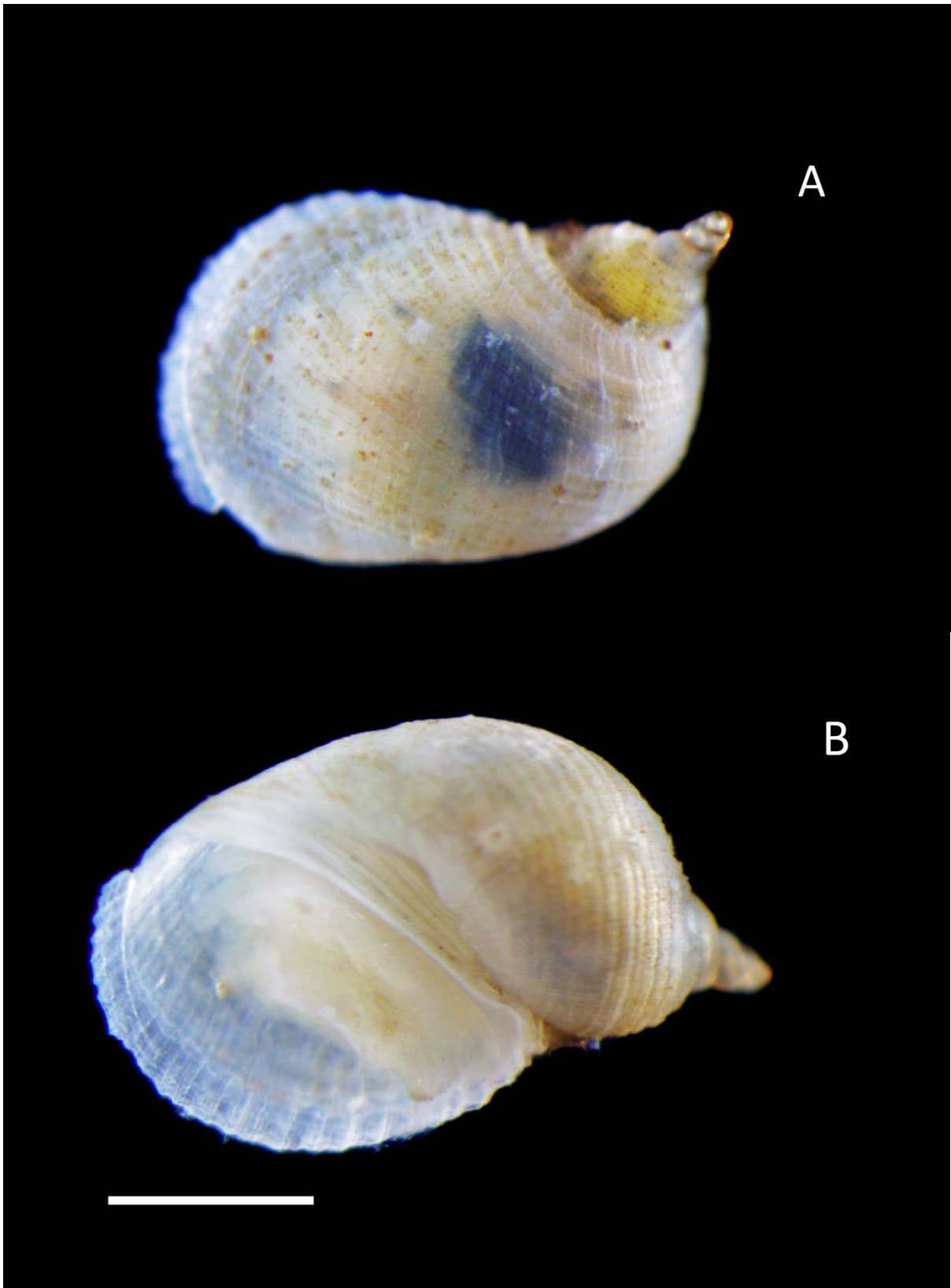


Fig. 1. Dorsal view of the whorls (A) and apertural view (B) of the *Macromphalus styliferina* from Lazarus Island. Scale bar = 1 mm. Photographs by Rene Ong



Fig. 2. Dorsal view (above) and apertural view (below) of *Macromphalus styliferina* showing the living animal. Photographs by Rene Ong