

## Record of the flat-furrow hard clam, *Meretrix planisulcata*, in Singapore

Chan Sow-Yan & Leo Nguang

[chansowyan@gmail.com](mailto:chansowyan@gmail.com) (Chan)

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**Subject:** Flat-furrow hard clam, *Meretrix planisulcata* (Mollusca: Bivalvia: Veneridae).

**Subject identified by:** Chan Sow-Yan.

**Location, date and time:** Johor Strait, Changi Beach; 19 February 2019, late afternoon.

**Habitat:** Estuarine beach, in muddy fine sand.

**Observers:** Chan Sow-Yan & Leo Nguang.

**Observation:** A small live clam of 28.2 mm shell length was found partially embedded in muddy fine sand at low tide (see accompanying picture). It has a fine thread of algae attached at its posterior edge which is marked by a dark brown band. It was deposited as a voucher specimen in the Zoological Reference Collection (ZRC) of the Lee Kong Chian Natural History Museum at the National University of Singapore, and catalogued as ZRC.MOL.14041. Nearby, an empty right valve was found with countersunk borehole at the beak of the shell.

**Remarks:** Four species of *Meretrix* - *M. meretrix*, *M. lusoria*, *M. astricta* and *M. lyrata*, are recorded from Singapore (see Morris & Purchon, 1981; Tan & Woo, 2010; Tan et al, 2017). *Meretrix lyrata* is the easiest to identify from the presence of concentric lirate sculpture on its shells (Huber, 2010). The smaller *Meretrix planisulcata* has flatter but larger concentric sculpture in proportion to the size of its shell. The presence of algae on the shell posterior edge and borehole may indicate a natural population. The countersunk borehole on the empty valve is typical of predation by moon snail. *Meretrix planisulcata* is herein documented as a new record for Singapore.

### References:

- Huber, M., 2010. *Compendium of Bivalves*. Conchbooks, Hackenheim. 901 pp. + CD-ROM.
- Morris, S. & R. D. Purchon, 1981. The marine shelled Mollusca of West Malaysia and Singapore. Part 3, Bivalvia. *Journal of Molluscan Studies*. 47 (3): 322-327.
- 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. 78 pp.
- Tan S. K., M. E. Y. Low, H. H. Tan, S. Y. Chan, L. Nguang & I. Iesa, 2017. Lyrate Asiatic hard clam, *Meretrix lyrata*, at Changi Coast. *Singapore Biodiversity Records*. 2017: 119-120.



In-situ image of clam half-embedded in the sand. Photograph by Chan Sow-Yan