

Curious find of an ivory whelk *Babylonia areolata* at Kranji mangroves

Subject: Maculated ivory whelk, *Babylonia areolata* (Mollusca: Gastropoda: Babyloniidae).

Subject identified by: Tan Siong Kiat.

Location, date and time: Singapore Island, Kranji Dam; 21 November 2013; late afternoon.

Habitat: Upper intertidal zone, fringe of mangrove forest.

Observers: Contributors & Chan Sow Yan.

Observation: An empty weathered shell, slightly broken and covered with algae (Fig. 1), measuring 78.1 mm in shell height, was found lying on the surface of sandy mud. It was collected, subsequently cleaned (Fig. 2) and deposited as a voucher (catalogued as ZRC.MOL.5702) in the Zoological Reference Collection of the Raffles Museum of Biodiversity Research at the National University of Singapore.

Remarks: *Babylonia areolata* is distributed from Eastern Indian Ocean to the Western Pacific, but has not been hitherto reported from Singapore or its immediately adjacent areas (van Regteren Altena & Gittenberger, 1981; Fraussen & Stratmann, 2013; Tan & Low, 2013). Nevertheless we regard this find as very unlikely to be of local origin despite it being a first record of the species for Singapore. This species is usually found on substrates of fine sand to muddy sand at depths of about 10 m to more than 30 m (van Regteren Altena & Gittenberger, 1981; Hu & Tao, 1995), and has not been reported in mangroves or estuarine conditions.

Babylonia areolata is widely farmed in several Asian countries including Taiwan, Thailand, and Vietnam, and is available in large quantities from the international seafood trade (Fraussen & Stratmann, 2013). However this species has not hitherto been offered in the local seafood trade in Singapore (Tan & Low, 2013).

Many *Babylonia areolata* shells offered in the seashell trade originate from China and Taiwan (Fraussen & Stratmann, 2013). The conchological characteristics of the shell collected at Kranji also agree well with the typical shell form (also called “*chemnitziana*”) from this part of its range. This form has a distinct subsutural canal and grows to a larger size, but it is not recognised as a distinct subspecies because intermediate specimens are known to occur around Vietnam (Fraussen & Stratmann, 2013). How this shell got to the area where it was found remains an interesting mystery.

References:

- Fraussen, K. & D. Stratmann, 2013. *A Conchological Iconography: The Family Babyloniidae*. ConchBooks, Harxheim. 96 pp., 48 pls.
- Hu, C.-H. & H.-J. Tao, 1995. *Shells of Taiwan Illustrated in Colour*. National Museum of Natural Science, Taichung. v + 483 pp.
- Regteren Altena, C. O. van & E. Gittenberger, 1981. The genus *Babylonia* (Prosobranchia, Buccinidae). *Zoologische Verhandelingen*, Leiden. **188**: 3–57, pls. 1–10.
- Tan, S. K. & M. E. Y. Low, 2013. First record of *Babylonia spirata* (Linnaeus) in Singapore, with notes on congeners in the local seafood trade (Mollusca: Gastropoda: Babyloniidae). *Nature in Singapore*. **6**: 191–195.

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Fig. 1



Fig. 2.

Photographs by Tan Siong Kiat