

First Singapore record of flying-bird ark, *Arca volucris*

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Subjects: Flying-bird ark, *Arca volucris* (Mollusca: Bivalvia: Arcidae).

Subjects identified by: Tan Siong Kiat.

Location, date and time: Singapore Strait –

1) Pulau Pawai; November 1933; time not recorded.

2) Pulau Jong; 4 June 2013; around 1200 hrs.

Habitat: Marine. Not noted for Pulau Pawai. At Pulau Jong, subtidal coral reef at around 15 m depth.

Observers: Material from Pulau Pawai collected by M. W. F. Tweedie. Material from Pulau Jong obtained during the Comprehensive Marine Biodiversity Survey (CMBS).

Observation: The featured records are based on material deposited and catalogued at the Zoological Reference Collection (ZRC) of the Lee Kong Chian Natural History Museum at the National University of Singapore. One specimen measuring 40.4 mm in shell length (ZRC.MOL.10153) was collected by the Comprehensive Marine Biodiversity Survey (CMBS) (see accompanying figure). The other example was found in a mixed lot of shells collected from Pulau Pawai in 1933 (ZRC.MOL.7668 [formerly registered as ZRC 1975.6.11.9-10]). This smaller specimen (shell length 30.2 mm) was reassigned ZRC.MOL.12025.

Remarks: Compared to the more common *Arca avellana*, *Arca volucris* is more squarish, and its colour is always whitish, tinged with brown especially the posterior ribs (Reeve, 1844; Huber, 2010). In addition *Arca volucris* lacks the dark yellow or brown periostracum on the ligamental area (Huber, 2010). This species is herein reported as a first record for Singapore as its presence there does not appear to have been previously reported (e.g., Tan & Woo, 2010).



Arca volucris (ZRC.MOL.10153), shell length 40.4 mm, from Pulau Jong, showing exterior of left valve (left) and interior of right valve (right). Photograph by Tan Siong Kiat

References:

- Huber, M., 2010. *Compendium of bivalves. A full-color guide to 3,300 of the world's marine bivalves. A status on Bivalvia after 250 years of research.* Conchbooks, Hackenheim. 901 pp. + CD-ROM
- Reeve, L. A., 1844. Monograph of the genus *Arca*. *Conchologia iconica: or, Illustrations of the Shells of Molluscos Animals*, 2. unnumbered pages [38], *Arca* pls. 1–17.
- 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.