

## Biodiversity Record: The angled venus clam, *Dosinia angulosa*, in Singapore

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**Subjects:** Angled venus clam, *Dosinia angulosa* (Mollusca: Bivalvia: Veneridae).

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

**Location, date and time:** Singapore Island, Pasir Ris Park, near mouth of Sungei Tampines; 8 October 2021; around 1755 hrs.

**Habitat:** Intertidal zone of mangrove-fringed estuarine shore.

**Observers:** Lau Wing Lup and Chan Sow-Yan.

**Observation:** Three freshly dead clams (Figs. 1–3) with articulate valves were exposed during low tide on muddy sand among seaweed and mangrove aerial roots. Two of the clams are about 30 mm, while the third, an aberrant juvenile, is 19 mm. The interior valves of the aberrant specimen have blackish-grey, scar-like growths (Fig. 2A).

The shell of *Dosinia angulosa* is round to ovate, with a slightly angular posterior edge. The exterior surface of each valve is generally white with a thin layer of periostracum, and sculptured with fine and closely positioned concentric striations with a smooth texture from the beak to mid-portion of the valves (Fig. 1). Irregular striae also radiate from the umbones. If not eroded, the posterior margins are squamately laminated. The ligament area is wide and large with a slight depression (Fig. 3). The interior surface of the valve is chalk white, and its pallial sinus is deep, horizontal and tongue-shaped (Fig. 2).



Fig. 1. Right valves of *Dosinia angulosa*. Note shells are ovate and can be conspicuously angular on their posterior side (left) in younger sample. The shell sculpture consists of very fine and closely positioned striations with a polished and smooth texture from the beak to middle portion of the valves. Note mild and rather irregular striae radiating from the umbone area. Space between black bars is 1 mm. (Photograph by: Lau Wing Lup).

**Remarks:** *Dosinia angulosa* is widely distributed across the Indo-Pacific (Higo et al., 1999; Okutani, 2000; Huber, 2010), and was recorded from Singapore by Fischer-Piette & Delmas (1967). However, the species was already known from there as its junior synonym *Dosinia simplex* by Adams (1856), Römer (1862) and Jukes-Browne (1912). It was later misidentified as, or confused with, *Dosinia exasperata* (see Lim, 1969, 1970; Tan & Woo, 2010). *Dosinia angulosa* can

be distinguished from its congeners in Singapore, including *Dosinia exasperata*, by its flat, rather glossy and relatively large shell. The *Dosinia exasperata* figured in Lim (1969) matches the samples featured herein, and also the original illustrations and descriptions by Philippi (1847, as *Cytherea angulosa*). It should be re-identified as *Dosinia angulosa*.

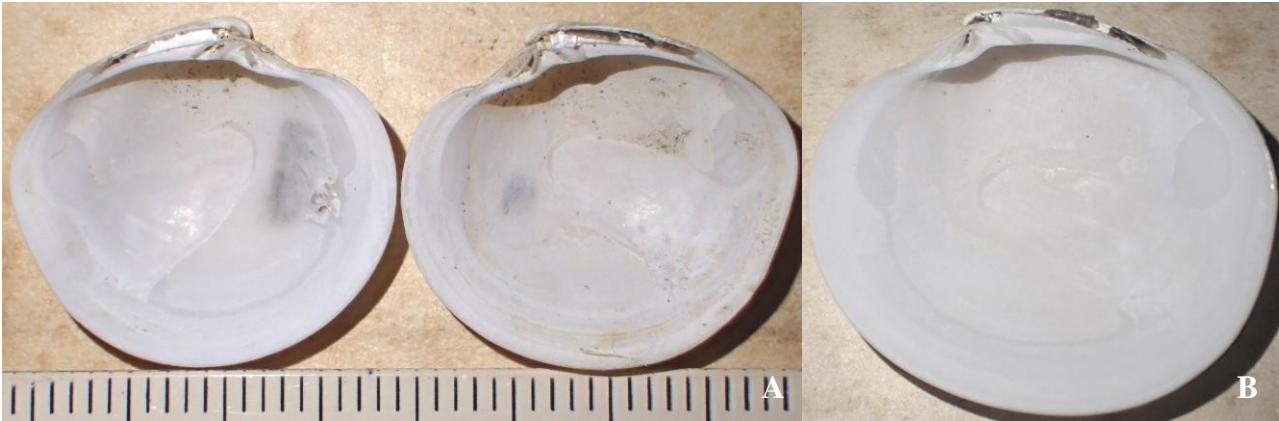


Fig. 2. Interior of valves of *Dosinia angulosa*. A, valves of the aberrant juvenile specimen with blackish-grey, scar-like growths on the interior surfaces; B, interior right valve of one of the larger specimens. Note the deep, horizontal and tongue-shaped pallial sinus. (Photographs by: Lau Wing Lup).



Fig. 3. Lateral view of an articulate *Dosinia angulosa* specimen. The posterior margin is squamately laminated. (Photograph by: Lau Wing Lup).

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