

## Biodiversity Record: The unarmed honeycomb oyster, *Hyotissa inermis*, in Singapore

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**Subjects:** Unarmed honeycomb oyster, *Hyotissa inermis* (Mollusca: Bivalvia: Gryphaeidae).

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

**Location, date and time:** Singapore Island, Changi Beach Park; 11 February 2021; around 1559 hrs.

**Habitat:** Estuarine shore. Intertidal zone with muddy sand substrate near sea grass meadows, at low tide.

**Observer:** Lau Wing Lup

**Observation:** Two freshly dead and articulate shells (Figs. 1–4) were found on the muddy sand substrate, unattached to any surface.



Fig. 1. Dorsal view of the exterior shell surfaces of two dead examples of *Hyotissa inermis* from Changi Beach, with one valve from each example on the left, and the other valves on the right. Note the exterior surface is rugose and wrinkled, and varies from white and cream to pink and dark purple. Its sculpture consists of dichotomous ribs radiating from the umbo, the growth lamella, and a few obsolete hyote spines on both valves, which appear concave. Space between bars = 1 mm. (Photographs by: Lau Wing Lup).

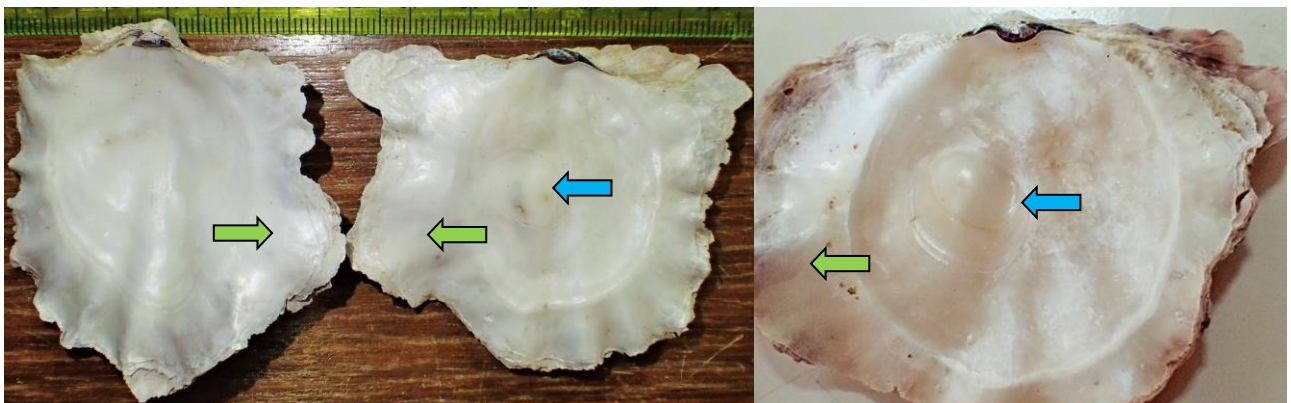


Fig. 2. Dorsal view of the interior shell surfaces of *Hyotissa inermis*, with both valves of the larger specimen on the left, and one valve from the smaller specimen on the right. Note the large and lackluster commissural shelf (indicated by green arrows). The hinge line is long and straight, the blackish ligament is short, and its umbonal cavity is shallow. The adductor muscle scar (indicated by blue arrows) is large and orbicular. Space between bars = 1 mm. (Photographs by: Lau Wing Lup).



Fig 3. Lateral view of valve margins of the two *Hyotissa inermis* specimens. Note growth lamella. The shell margins of both valves are crenulated and fit into each other. (Photographs by: Lau Wing Lup).



Fig. 4. Lateral view of the umbo part of a *Hyotissa inermis* (left). Close-up of the hinges showing the chomata that is worm-like and restricted to the sub-ligamental margin (right). (Photographs by: Lau Wing Lup).

**Remarks:** *Hyotissa inermis* occurs in the Indo-West Pacific, where mature specimens can grow to a shell length of 150 mm (Lam & Morton, 2004; Yahya et al., 2020). In Singapore, the species was first recorded locally as *Ostrea quirites* by Chuang (1973), and later cited by Tan & Woo (2010) as *Parahyotissa imbricata*. Although it is not a new record, *Hyotissa inermis* is seldom portrayed in local malacological literature (e.g., Chuang, 1973; Tan & Chou, 2000).

**Literature cited:**

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- Yahya N, Idris I, Rosli NS & Bachok Z (2020) Mangrove-associated bivalves in Southeast Asia: A review. Regional Studies in Marine Science, 38: 101382.