

Biodiversity Record: New record of the keyhole limpet, *Diodora jukesii*, in Singapore

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Subjects: Jukes' keyhole limpet, *Diodora jukesii* (Mollusca: Gastropoda: Fissurellidae).

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

Location, date and time: Singapore Island along Johor Strait, Punggol Beach Park; 15 December 2024; around 1532 hrs.

Habitat: Estuarine shore. Under rocks in the intertidal zone at low tide.

Observer: Lau Wing Lup.

Observation: Two specimens of about 11 mm (Figs. 1, 3, 5a) and 12.5 mm (Figs. 2, 4, 5b) in shell diameter were found separately under rocks.

When cleared of fouling organisms, the shells (Figs. 3, 4) were noted to incline anteriorly, appearing conical to squarely ovate, with whitish sculptured scaly ridges and riblets that radiate from the small forams. The scales are thickly-set and vaulted. The interstices between the ridges are deep and delicately latticed as to appear thin and translucent. The forams are squarely ovate and positioned in the middle of the shell; the interiors are ornamented with dark grey irregular lines that circumnavigate the forams. The basal margins are bidentate and translucent. The smaller specimen differs in having a shell marked with narrow and irregular grey bands (Fig. 3a). The bigger specimen has some rusty red stains on its exterior (Fig. 4a). The snails have dirty yellow soles (Fig. 5) and yellowish white (Fig. 1) to dark yellow bodies.



1



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Fig. 1. Lateral view of a *Diodora jukesii* in-situ, with its whitish soft part exposed, on the underside of a rock. Fig. 2. Dorso-lateral view of a larger *Diodora jukesii* under a separate rock (Photographs by Lau Wing Lup).



Fig. 3. Cleaned shell of 11 mm (widest diameter) specimen with dorsal (a), anterior (b), posterior (c) and ventral/interior (d) views (Photographs by: Lau Wing Lup).

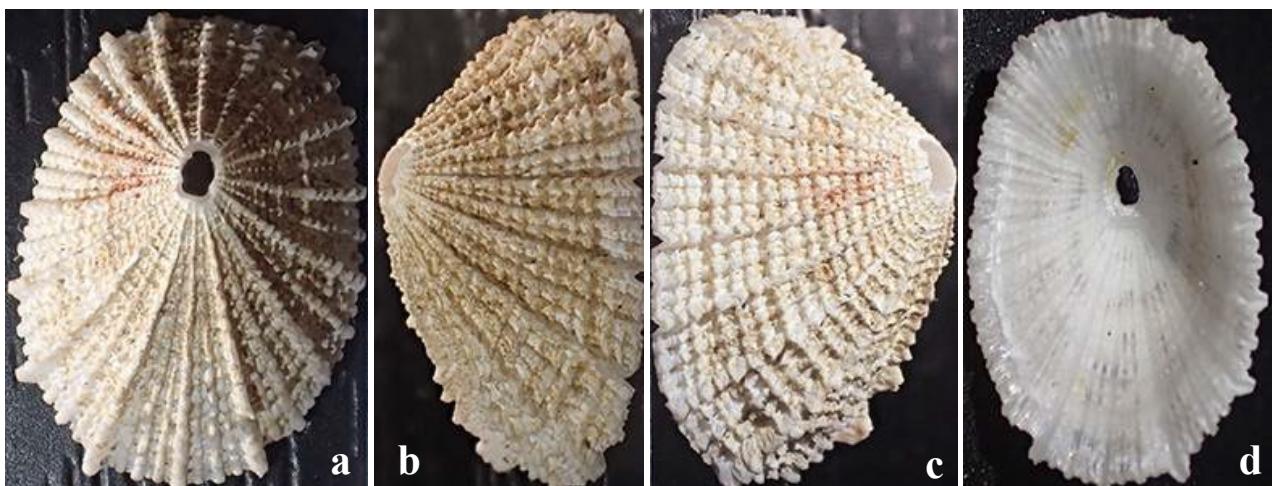


Fig. 4. Cleaned shell of *Diodora jukesii* of 12.5 mm (widest diameter) with dorsal (a), anterior (b), posterior (c) and ventral/interior (d) views (Photographs by: Lau Wing Lup).

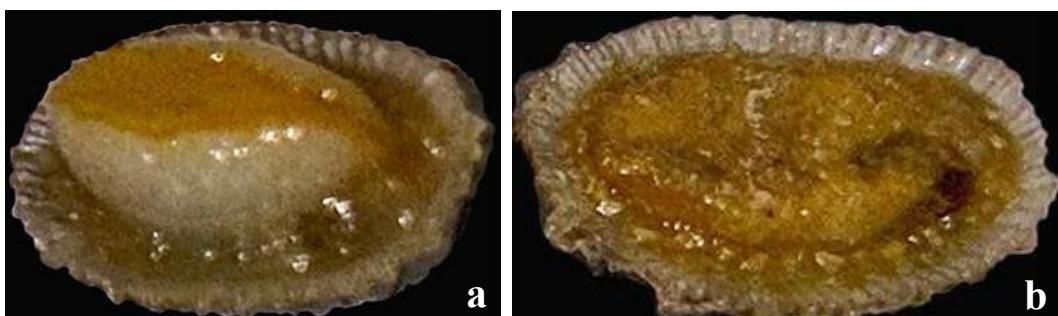


Fig. 5. Ventral views of live *Diodora jukesii* showing the foot of the 11 mm individual (a) and sole of the 12.5 mm individual (b) (Photographs by: Lau Wing Lup).

Remarks: *Diodora jukesii* is herein documented as a new record for Singapore (see Tan & Woo, 2010; Tan & Low, 2022). The two specimens herein depicted, match the original description and illustration of specimens from the coast of Australia by Reeve (1849–1850 as *Fissurella jukesii*).

The species is noted to vary in shell inclination, sculpture and pattern (Sowerby II, 1862; as *Fissurella similis*), and hence, bears many names that are since synonymised, including *Fissurella fimbriata* Reeve (1850), *Diodora plicifera* Thiele (1930), *Diodora nigropunctata* Thiele (1930) and *Diodora rugosa* Thiele (1930).

At Punggol Beach, *Diodora jukesii* is sympatric with congeners *Diodora octagona* and *Diodora ruppellii* (see Chan & Lau, 2024a, 2024b).

Literature cited:

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