NATURE IN SINGAPORE 15: e2022130

Date of Publication: 30 November 2022 DOI: 10.26107/NIS-2022-0130 © National University of Singapore

Biodiversity Record: New Singapore record of the cerithiopsid snail, Clathropsis quinquepilia

Chan Sow-Yan* & Lau Wing Lup

Email: chansowyan@gmail.com (*corresponding author), suiseki1984@yahoo.com.sg

Recommended citation. Chan S-Y & Lau WL (2022) Biodiversity Record: New Singapore record of the cerithiopsid snail, *Clathropsis quinquepilia*. Nature in Singapore, 15: e2022130. DOI: 10.26107/NIS-2022-0130

Subjects: Fivefold cerithiopsid snail, *Clathropsis quinquepilia* (Mollusca: Gastropoda: Cerithiopsidae).

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

Location, date and time: Johor Strait, Changi Beach Park; 28 November 2019 at around 1800 hrs, 26 December 2019 at around 1725 hrs, 25 January 2020 at around 1842 hrs, 2 July 2022 at around 0730 hrs.

Habitat: Estuarine shore, intertidal zone among seagrass, on the shell of live windowpane oysters (*Placuna placenta*).

Observers: Lau Wing Lup and Chan Sow-Yan.

Observations: Several examples up to 4 mm in shell height were found on live windowpane oysters on each of the three visits to the shore in 2019 and 2020. On the underside of one of the shells, three specimens could be seen among the encrusting organisms (Figs. 1 & 2). During the most recent visit on 2 July 2022, only one snail was detected.

The shell is brownish, elongately conical with a straight spire. The slender protoconch has five whitish whorls which appear smooth and glassy. Matured examples have seven slightly rounded teleoconch which increase regularly. The suture is slightly impressed. The micro-sculpture of each whorl comprises three sub-equal spiral keels, with the central one being more pronounced. A fourth keel lies on the periphery of the body whorl. Rounded nodules are present at the junction of the ribs and keels, with the former being more prominent. The base is smooth with an open umbilicus. The aperture is squarish or sub-rectangular, with a thin lip. The columellar is short, thick, straight, with an obliquely truncated anterior end. The anterior canal is short (Figs. 3, 4 & 5). The body, foot and tentacles are white (Fig. 3). A pair of black eye spots is located at the base of the tentacles (Fig. 3c).





Fig. 1. In-situ view of the underside of a live windowpane oyster shell with three live *Clathropsis quinquepilia* snails (circled in red). Fig. 2. Close-up in-situ view of an individual *Clathropsis quinquepilia* among barnacles and other encrusting organisms on a saddle oyster shell. (Photographs by: Lau Wing Lup).







Fig. 3. Dorsal (a) and apertural (b) views of a living *Clathropsis quinquepilia* snail, about 4 mm in shell height, including a close-up of the animal and its black eye (c). (Photographs by: Lau Wing Lup).





Fig. 4. Dorso-lateral (left) and apertural (right) views of a dried shell around 4 mm in height.

Fig. 5. Dorso-lateral (left) and apertural (right) views of a dried shell around 3 mm in height.

(Photographs by: Lau Wing Lup).

Remarks: Clathropsis quinquepilia was described by Laseron (1951) from Australia based on three specimens dredged at a depth of about 25.6 m off Long Reef, near Sydney. It has also been found under rocks in tide pools (Laseron, 1951). The general appearance of the specimens featured here match the type material of Laseron (1951). Clathropsis quinquepilia is herein presented as a new record for Singapore, and the third cerithiopsid species to be recorded in the country (see Tan & Woo, 2010; Sanpanich & Tan 2016; Chan & Lau, 2020; Cecalupo & Perugia, 2016). The authors have observed all three species of Cerithiopsidae on saddle oysters in the seagrass beds at Changi (see Chan & Lau, 2020).

Literature cited:

Cecalupo A & Perugia I (2016) Report on some Cerithiopsidae from Indo-Pacific area (Caenogastropoda: Triphoroidea). Bollettino Malacologico, 52: 98–109.

Chan S-Y & Lau WL (2020) Records of two cerithiopsid snails in Singapore. Singapore Biodiversity Records, 2020: 146–147.

Laseron CF (1951) Revision of the New South Wales Cerithiopsidae. Australian Zoologist, 11: 351–371, figs. 37–41, pls. 35–37.

Sanpanich K & Tan SK (2016) Shell-bearing gastropod molluscs of the Singapore Strait. The Raffles Bulletin of Zoology, Supplement No. 34: 528–538.

Tan SK & Woo HPM (2010) A Preliminary Checklist of the Molluscs of Singapore. Raffles Museum of Biodiversity Research, National University of Singapore, 78 pp. Uploaded 2 June 2010. https://lkcnhm.nus.edu.sg/wp-content/uploads/sites/10/app/uploads/2017/04/preliminary checklist molluscs singapore.pdf (Accessed 29 November 2022)