

Biodiversity Record: A juvenile ramose murex, *Chicoreus ramosus*

Chan Sow-Yan^{1*} & Lau Wing Lup²

¹VBox 888313, Singapore 919191; Email: chansowyan@gmail.com (*corresponding author)

²Hougang Avenue 10, Singapore 530450; Email: suiseki1984@yahoo.com.sg

Recommended citation. Chan S-Y & Lau WL (2021) Biodiversity Record: A juvenile ramose murex, *Chicoreus ramosus*. Nature in Singapore, 14: e2021119. DOI: 10.26107/NIS-2021-0119

Subject: Ramose murex, *Chicoreus ramosus* (Mollusca: Gastropoda: Muricidae).

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

Location, date and time: Singapore Island, Changi Beach Park; 27 July 2021; 0705 hrs.

Habitat: Estuarine shore. On seagrass meadow exposed during morning low tide.

Observer: Lau Wing Lup.

Observation: A live specimen of 18.5 mm shell height (Figs. 1, 2), partially encrusted with barnacles and algae, was found on the edge of a live placuna clam, next to a live ark shell (*Anadara gubernaculum*).



Fig. 1. In situ, dorso-lateral (left) and apertural (right) views of the juvenile ramose murex among barnacles and an ark clam, on a live placuna clam. (Photographs by: Lau Wing Lup).

Remarks: *Chicoreus ramosus* is considered rare and endangered in Singapore (Chou & Tan, 2008). Although juvenile snails have been sighted on the intertidal shores of Changi and Tanah Merah (Tan & Toh, 2015), these have not been illustrated in local malacological publications (see Tan & Chou, 2000; Chou & Tan, 2008; Tan & Toh, 2015; Yau, 2020).

Juvenile *Chicoreus ramosus* appear different from adults and can easily be misidentified as other murex snails, such as the burnt murex (*Chicoreus brunneus*) and firebrand murex (*Chicoreus torrefactus*). Compared with adult specimens, the shell fronds and varix are small, obsolete and unfused. The shell's outer lip is also thin. The flesh of the animal is yellowish with black mottling (Fig. 2). The juvenile shell also differs in being reddish brown (white or light brown in adults) and the early whorls are darker brown. The dark brown spiral bands on the last whorl can be seen through the interior of the shell aperture. The protoconch is smooth and white. These colours, however, can only be fully appreciated after the shell is cleaned of fouling organisms (pers. obs. based on other similar-sized specimens).



Based on its 18.5-mm shell height, the featured juvenile snail is estimated to be three months old (Nugranad et al., 1994: table 5). Adult *Chicoreus ramosus* specimens can reach a shell height of more than 300 mm (pers. obs.). It is believed that the featured snail is the smallest example of *Chicoreus ramosus* to be recorded and illustrated in local malacological literature (see Tan & Chou, 2000; Chou & Tan 2008; Tan & Toh, 2015; Yau, 2020).

Fig. 2. Flesh of the partially extended animal at the shell aperture of the juvenile ramose murex. (Photograph by: Lau Wing Lup).

Literature cited:

- Chou LM & Tan KS (2008) Corals, worms and molluscs. In: Davison GWH, Ng PKL & Ho HC (eds.) The Singapore Red Data Book. Threatened Plants & Animals of Singapore. Second Edition. The Nature Society (Singapore), Singapore, pp. 190–207.
- Nugranad J, Poomtong T & Promchinda K (1994) Mass culture of *Chicoreus ramosus* (L., 1758) (Gastropoda: Muricidae). Phuket Marine Biology Center Special Publication, 13: 67–70.
- Tan KS & Chou LM (2000) A Guide to the Common Seashells of Singapore. Singapore Science Centre, Singapore, 168 pp.
- Tan SK & Toh CH (2015) Ramose murex *Chicoreus ramosus* spawning at Pulau Hantu. Singapore Biodiversity Records, 2015: 92–93.
- Yau JMS (2020) Ramose murex snails at Changi Beach. Singapore Biodiversity Records, 2020: 136–137.