

**A NEW RECORD OF
CORALLIOPHILA RUBROCOCCINEA MELVILL & STANDEN, 1901
(GASTROPODA: MURICOIDEA) IN SINGAPORE**

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INTRODUCTION

As part of on-going efforts to contribute to the knowledge of molluscan-diversity in Singapore, a number of trips to the reclaimed coastlines of East Coast Park were made to collect and identify small-shelled marine molluscs. The coralliophilids, as suggested by the name, belong to a large group of coral-dwelling gastropods comprising about 10 genera (Olivero & Mariottini, 2001). They are parasitic on their hosts, and except for the absence of radula, are anatomically very similar to members of the Muricidae. There has been much debate as to whether this group should be considered as a subfamily of the Muricidae or an independent family of its own (Kantor, 1996; Olivero & Mariottini, 2001), and no attempt is made herein to qualify either view. According to historical data in Lim (1969), Chuang (1973), Way & Purchon (1981), Wee & Ng (1994) and Tan & Chou (2000), no *Coralliophila* species has been recorded to occur in Singapore. Possible reasons why they have been neglected could be that their habitats are often sublittoral or that they often are limited to the proximity of their coral hosts.

SPECIMEN DETAILS

On 30 Aug. 2008, *Coralliophila rubrococcinea* specimens were found off Bedok Jetty, East Coast Park, Singapore in the crevices of delicate and fragile hard corals (Fig. 1) uprooted by anglers' tangled fishing lines. The specimens were dried in 70% isopropanol and photographed before being deposited into the Zoological Reference Collection, Raffles Museum of Biodiversity and Research, National University of Singapore under the catalogue number ZRC.MOL.2841.

Collected specimens were compared with the illustrations of the type specimens in Kosuge & Suzuki (1985). The shell is diamond-shaped, fusiform, and collected specimens ranged from 7.0–13.0 mm long. The shell is yellow when fresh, similar to the live shell illustrated in Okutani (2000), and fades to pale yellow or cream upon desiccation. Shell sculpturing consists of broad rounded axial ribs overlaid with primary and secondary spiral cords (Fig. 2a–c). The surface of the shell is covered with closely spaced axial cords and scales (Fig. 2f). The aperture, anterior canal and columella are white, with reddish-brown blotches in the aperture interior.

Coralliophila rubrococcinea has only been collected from Bedok Jetty and it is unknown if it occurs anywhere else in Singapore. This species is reported to have a geographical distribution from the Indian Ocean to the Philippines (Kosuge and Suzuki, 1985; Okutani, 2000).

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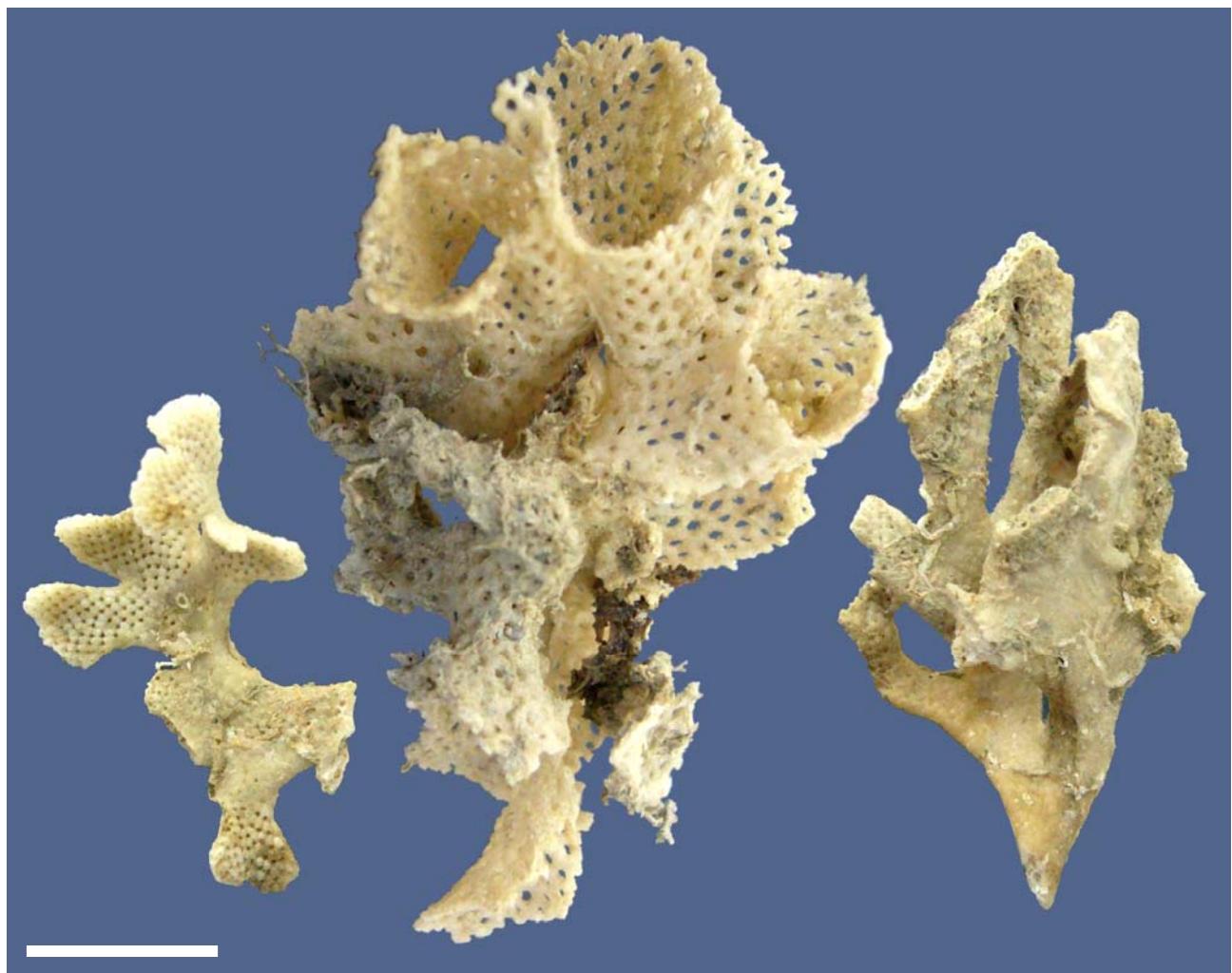


Fig. 1. Fragments of hard coral associated with *Coralliophila rubrococcinea*. Scale bar = 10 mm.

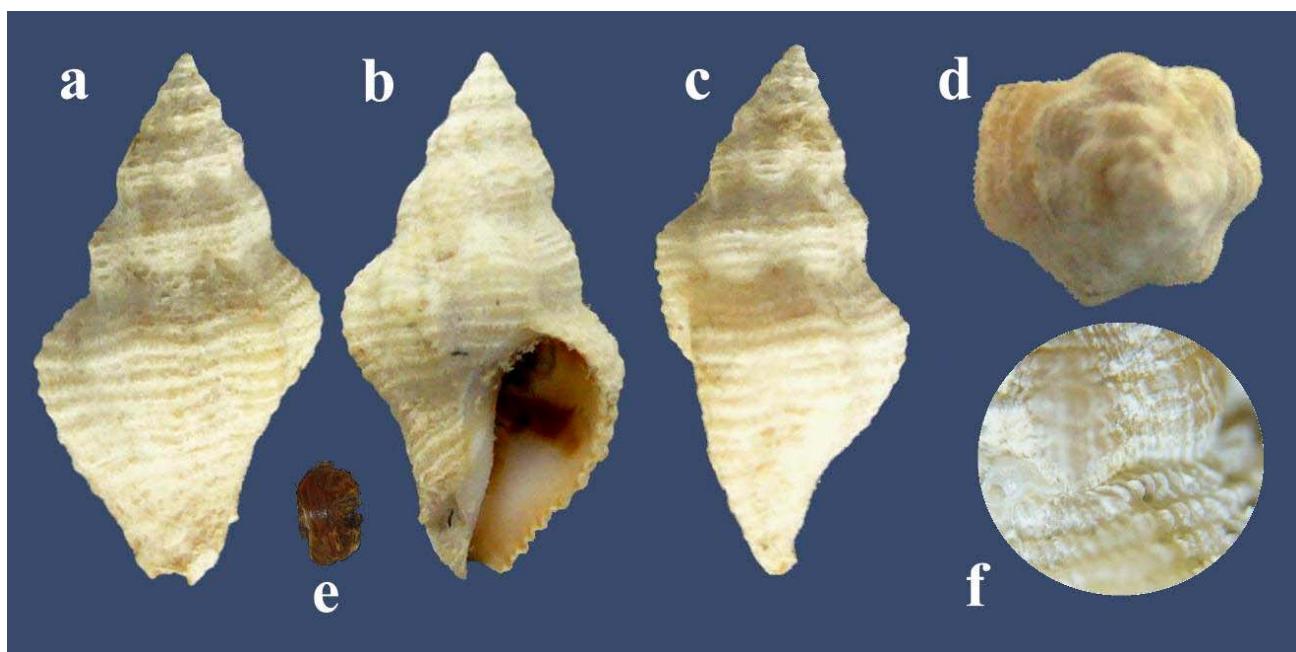


Fig. 2. *Coralliophila rubrococcinea* shell, shell length 13.0 mm: a, dorsal view; b, ventral view; c, right view; d, top view; e, operculum; f, surface of shell magnified.

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