SINGAPORE BIODIVERSITY RECORDS 2019: 108-109

Date of publication: 30 August 2019. © National University of Singapore

New Singapore record of the mangrove-dwelling snail, Stenothyra nana

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Subjects: Stenothyra nana (Mollusca: Gastropoda: Stenothyridae).

Subjects identified by: Chan Sow-Yan.

Location, date and time: Singapore Island, Sungei Tampines; 5 June 2019; about 1000 hrs.

Habitat: Mangrove. In pools of brackish water at the back mangrove during low tide.

Observer: Lau Wing Lup.

Observation: More than a dozen individuals, each around 2 mm shell length, were found gregariously on decaying dead leaves and other organic substrates in the tide pools. They were difficult to detect as they resemble organic debris, or the droppings or eggs of other mangrove creatures. The living animal has a greyish white body, a pair of black eyes and reddish pink snout. There are dark grey stripes on the head and some parts of the body (see Fig. 1).

Remarks: Although regarded here as a new record for Singapore (see Tan & Woo, 2010), *Stenothyra nana* was previously figured in Tan & Chou (2000) as '*Stenothyra* sp.'. It is not one of the five species of *Stenothyra* that were known from Singapore (Tan & Woo, 2010). This record also represents a significant range extension for *Stenothyra nana*, which is hitherto known only from India and Thailand (Annandale & Prashad, 1921; Brandt, 1974). Because of their small size, these snails are often overlooked.

The animal has a single trailing tentacle at the posterior end of its foot (see Tan & Chow, 2000) which function is unknown. As mud and algae often cover the shells of live animals, the sculpture of small irregular pits on the surface of the shell is usually not noticeable. The earliest whorls on the shells are also usually eroded (Fig. 2 & 3). According to Brandt (1974), the red shell colour (which is not obvious in the illustrations) is one of the diagnostic features of *Stenothyra nana* (Fig. 2). We note that unlike most other congeners in Southeast Asia, irregular dark wavy bands are present on clean empty shells of *Stenothyra nana* (Fig. 3). Of the sixteen brackish water *Stenothyra* species in Thailand, only *Stenothyra maculata* was documented to have bands while all others have monochrome shells (Brandt, 1974).



Fig. 1. Dorsal view of live *Stenothyra nana* in situ at Sungei Tampines.

Photograph by Lau Wing Lup

References:

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Tan K. S. & L. M. Chou, 2000. A Guide to the Common Seashells of Singapore. Singapore Science Centre. 168 pp.

Tan S. K. & H. P. M. Woo, 2010. *A Preliminary Checklist of the Molluscs of Singapore*. Raffles Museum of Biodiversity Research, National University of Singapore. 78 pp.



Fig. 2. Apertural view of empty shells of *Stenothyra nana*.



Fig. 3. Dorsal view of empty shells of *Stenothyra nana* with periostracum removed to reveal the dark wavy bands on the shells.

Photographs by Lau Wing Lup