

Second record of the non-native Siamese snail in Singapore

Tan Siong Kiat & Lee Bee Yan

nhmtsk@nus.edu.sg (Tan)

Subject: Siamese snail, *Cryptozона siamensis* (Mollusca: Gastropoda: Ariophantidae).

Subject identified by: Tan Siong Kiat.

Location, date and time: Singapore Island, Woodlands Street 31; 14 February 2019; 0015 hrs.

Habitat: In a basket of papayas, in a shop selling fresh fruits and flowers, at the ground floor of a building.

Observer: Lee Bee Yan.

Observation: A live example of about 25 mm shell diameter, was found attached to the inside of a plastic basket containing fresh papayas (Fig. 1). A cursory search did not reveal the presence of other snails in or around the basket. According to the proprietor, the basket of papayas was imported from Yong Peng in Johor, Malaysia. The snail was collected and deposited as a voucher specimen in the Lee Kong Chian Natural History Museum at the National University of Singapore.



Fig. 1. Siamese snail attached to the inside of a basket of papayas. Photograph by Lee Bee Yan

Remarks: This is the second record of this non-native species in Singapore. It was first documented in Mandai where a population is apparently established, but restricted to a small area (Tan et al., 2016). The Siamese snail can be distinguished from other land snails in Singapore with a similar discoidal shell by the fine reticulate sculpture on the dorsal part of its shell (Fig. 2; see also Tan et al., 2016).

As of now, the Siamese snail has not been found outside of Mandai, and is not considered to be an established species in Singapore. However it may be a matter of time before this species becomes firmly established. Inadvertent introductions of terrestrial snails and slugs through trade is well documented (e.g., Cowie & Davison, 2003), and the present observation of a hitchhiker suggests a continuing propagule pressure from Malaysia where this snail has been introduced (see Tan et al., 2016).

References:

- Cowie, R. H. & D. G. Robinson 2003. Pathways of introduction of nonindigenous land and freshwater snails and slugs. In: Ruiz, G. & J. T. Carlton (eds.). *Invasive species: Vectors and Management Strategies*. Island Press, Washington, D.C., USA. pp. 93-122.
- Tan S. K., S. Y. Chan, L. H. S. Nguang & M. E. Y. Low, 2016. Making its way down the peninsula: discovery of the non- native *Cryptozona siamensis* (L. Pfeiffer, 1856) in Singapore, with a note on its status in Peninsular Malaysia (Helicarionoidea: Ariophantidae). *Occasional Molluscan Papers*. 5: 1-9.



Fig. 2. Dorso-lateral view of the same snail removed from the basket. The fine reticulate sculpture on its shell is clearly discernible. Photograph by Tan Siong Kiat