

## Biodiversity Record: Clouded assimininid snail, *Solenomphala cf. scalaris*, in Singapore

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**Subjects:** Clouded assimininid snail, *Solenomphala cf. scalaris* (Mollusca: Gastropoda: Assimineidae).

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

**Location, date and time:** Singapore Island, Hougang Avenue 9; 16 August 2020; 1404 hrs.

**Habitat:** Urban residential estate. In shallow concrete drain with freshwater at the ground floor of a concrete building serving as a multi-storey carpark (Fig. 1).

**Observers:** Chan Sow-Yan and Lau Wing Lup.

**Observations:** At least six live specimens were found exposed, grazing on algae at the edge of the drain (Fig. 2). Each had a shell length of about 4 mm. From a distance, the shell and the snail's flesh appear blackish or brownish (Fig. 2). When viewed under magnification, the shell is amber in colour and translucent with fine spiral lines on the surface (Figs. 3, 6). The body is yellowish with patches of grey; the foot is yellowish white; and parts of the head are pinkish (Fig. 4). An orange streak is present on each eyestalk and on the sides of the body (Fig. 5).

**Remarks:** In addition to the featured location, many specimens of *Solenomphala cf. scalaris* have previously been observed by the authors since 1994 at the following places on Singapore Island—Jurong Lake, Jalan Mashhor, Kallang River in Bishan Park, a park connector along Yishun Avenue 2, Toa Payoh Sensory Park, Jalan Kukoh, Telok Blangah Rise, Aljunied Park, Nanyang Polytechnic, Eco-Lake at Singapore Botanic Gardens, Ang Mo Kio Avenue 5 and Jurong West Street 93. *Solenomphala cf. scalaris* tend to be gregarious and largely terrestrial in habits. All examples observed in Singapore were in damp, exposed environments away from the coast, in both artificial and natural habitats. They are often found alongside other species of aquatic snails.



Fig 1. Drain on the ground floor of a multi-storey carpark where the clouded assimininid snails were found. (Photograph by: Lau Wing Lup).



Fig. 2. A live clouded assimininid snail grazing on algae on the edge of the drain at the carpark, in situ. (Photograph by: Lau Wing Lup).

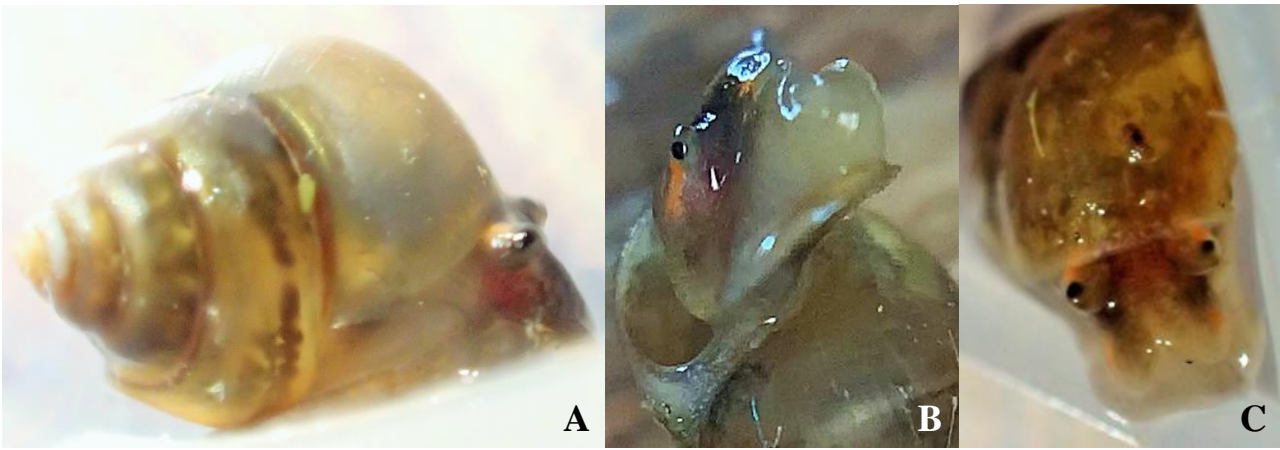


Fig. 3. Views of a live clouded assimimid snail. A, lateral view of snail and its translucent shell; B, side view of the snail's head and parts of the body; C, dorso-frontal view of the colourful head and yellowish-white foot. (Photographs by: Lau Wing Lup).

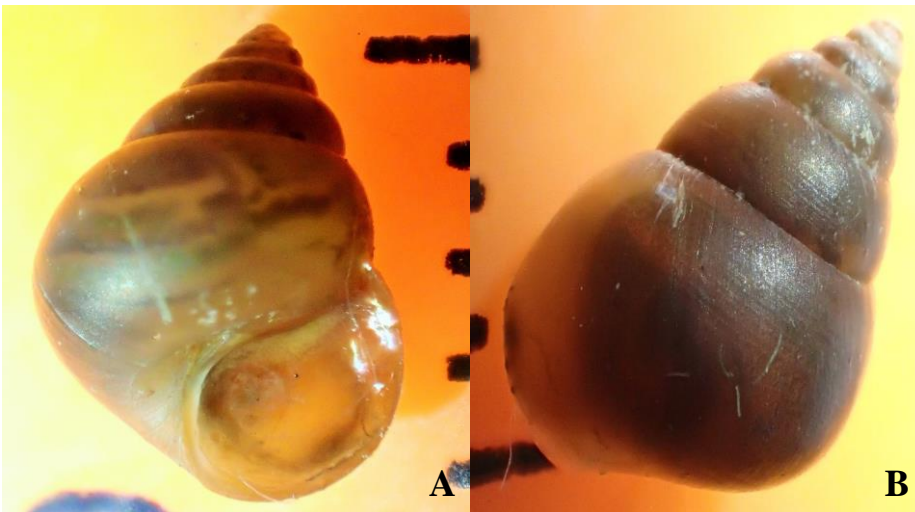


Fig. 4. Views of a *Solenomphala* cf. *scalaris* shell with the animal retracted inside. A, apertural view showing the operculum; B, dorsal view showing the fine spiral lines on the surface of the shell. Distance between black markings = 1 mm. (Photographs by: Lau Wing Lup).

Despite the presence of this diminutive snail in many parts of Singapore (Tan et al., 2012), it is seldom noticed and reported. We are unable to ascertain if the species is native there. It seems that the snails could have been unintentionally introduced along with ornamental plants, most likely from southern China where they may be native (Yen, 1941). Conclusive identification of the local *Solenomphala* cf. *scalaris* is unlikely due to a lack of contemporary taxonomic revision of this group of assimimid snails.

**Literature cited:**

- Tan SK, Chan SY & Clements GR (2012) A Guide to Snails and Other Non-marine Molluscs of Singapore. Science Centre Singapore, Singapore, 176 pp.  
Yen T-C (1941) Notes on Chinese species of *Assimineae*. *The Nautilus*, 54: 119–121.