

Biodiversity Record: Terrestrial molluscs in Marsiling Park

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Subjects: Giant African snail, *Lissachatina fulica* (Mollusca: Gastropoda: Achatinidae) [Fig. 1]; Striated awlslug, *Striosubulina striatella* (Mollusca: Gastropoda: Achatinidae) [Fig. 2]; Dwarf awlslug, *Opeas hannense* (Mollusca: Gastropoda: Achatinidae) [Fig. 3]; Yellow-shelled semi-slug, *Parmarion martensi* (Mollusca: Gastropoda: Ariophantidae) [Fig. 4]; Micro moss snail, *Microcystina muscorum* (Mollusca: Gastropoda: Ariophantidae) [Fig. 5]; Female-cousin micro snail, *Microcystina consobrina* (Mollusca: Gastropoda: Ariophantidae) [Fig. 6]; Kelantan glass snail, *Macrochlamys kelantanensis* (Mollusca: Gastropoda: Ariophantidae) [Fig. 7]; Bioluminescent snail, *Quantula striata* (Mollusca: Gastropoda: Dyakiidae) [Fig. 8]; Javan assiminiid snail, *Taiwanassiminea javana* (Mollusca: Gastropoda: Assimineidae) [Fig. 9]; Bedali assiminiid snail, *Taiwanassiminea bedaliensis* (Mollusca: Gastropoda: Assimineidae) [Fig. 10]; Asian trampsnail, *Bradybaena similaris* (Mollusca: Gastropoda: Bradybaenidae) [Fig. 11]; Fragile arion helix, *Helicarion perfragilis* (Mollusca: Gastropoda: Helicarionidae) [Fig. 12]; Cask hive snail, *Kaliella doliolum* (Mollusca: Gastropoda: Chronidae) [Fig. 13]; Folded pythia snail, *Pythia plicata* (Mollusca: Gastropoda: Ellobiidae) [Fig. 14].

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

Location, date and time: Singapore Island, Woodlands, Marsiling Park; 9 December 2022, 1110–1150 hrs.

Habitat: Urban parkland. On the landward side of a small patch of mangroves during high tide. Among damp leaf litter and organic debris, on a cloudy day.

Observer: Lau Wing Lup.

Observation: Within 39 minutes, a total of 14 species of terrestrial molluscs were found in close proximity. Only *Helicarion perfragilis* was found arboreally on the underside of a sea hibiscus (*Talipariti tiliaceum*) leaf (Fig. 12). All species were found alive with the exception of *Microcystina consobrina* (Fig. 6) and *Opeas hannense* (Fig. 3). A juvenile *Striosubulina striatella* has yellow, orange and brown soft parts that are visible through its transparent shell (Fig. 2). A freshly dead *Lissachatina fulica* shell has aberrant pattern of pale transverse bands (Fig. 1). An aberrant and deformed *Kaliella doliolum* shell exhibits irregular growth lines (Fig. 13). Two *Parmarion martensi* were found crawling on fallen logs (Fig. 4).

Remarks: This compilation shows the high diversity of terrestrial molluscs in Marsiling Park. Most species are associated with urban environments. *Pythia* and *Taiwanassiminea* are inhabitants of the back mangrove. *Microcystina consobrina* and *Taiwanassiminea javana* from this observation were earlier reported as new records for Singapore (Chan & Lau, 2023a, 2023b). All the other species are already known to occur in Singapore (see Tan & Woo, 2010; Tan et al., 2012).

Literature cited:

- Chan S-Y & Lau WL (2023a) Biodiversity Record: New Singapore record of the micro snail *Microcystina consobrina*. Nature in Singapore, 16: e2023007.
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Fig.1. Aberrant *Lissachatina fulica* shell (about 65 mm) with unusual spiral bands. Fig. 2. Young *Striosubulina striatella* (shell about 4 mm). Fig. 3. *Opeas hannense* (shell about 4 mm). Fig. 4. *Parmarion martensi* (about 50 mm). Fig. 5. *Microcystina muscorum* (shell about 3 mm). Fig. 6. *Microcystina consobrina* (shell about 2 mm). Fig. 7. *Macrochlamys kelantanensis* (shell about 17 mm). Fig. 8. Juvenile *Quantula striata* (shell about 5 mm). (Photographs by: Lau Wing Lup).



Fig. 9. *Taiwanassiminea javana* (shell about 6 mm). Fig. 10. *Taiwanassiminea bedaliensis* (shell about 3 mm). Fig. 11. *Bradybaena similaris* (shell about 14 mm). Fig. 12. *Helicarion perfragilis* (shell about 6 mm). Fig. 13. Aberrant *Kaliella doliolum* shell (about 2 mm). Fig. 14. *Pythia plicata* (shell about 23 mm). (Photographs by: Lau Wing Lup).