

Biodiversity Record: The black snail, *Faunus ater*, in south-eastern Singapore Island

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Subjects: Black snail, *Faunus ater* (Mollusca: Gastropoda: Parachylidae).

Subjects identified by: Lau Wing Lup, Chan Sow-Yan and Tang Beng Yong.

Location, date and time: Three locations along the south-east coast of Singapore Island:

1. East Coast Park, Area B; 17 July 2021; around 1140 hrs.
2. Tanah Merah canal at Tanah Merah Coast Road; 15 July 2022; around 1730 hrs.
3. Bedok Park Connector at East Coast Park (Fig. 1); 15 July 2022; around 1830 hrs.

Habitat: Estuarine. In concretised monsoon drains about 1 m wide and 2.5 m deep in coastal urban parkland. Water salinity in the drains fluctuates daily, tending to be brackish during mid tides and fresh during low tides.

Observers: Lau Wing Lup, Chan Sow-Yan and Tang Beng Yong.

Observations: At East Coast Park Area B, many juvenile snails were sighted on 17 July 2021.

On 15 July 2022, at two locations (along Bedok Park Connector [Fig. 1] and Tanah Merah canal), the authors spotted populations of *Faunus ater* with shells that were relatively free of encrustations (Fig. 2).

At the East Coast locations, adult *Faunus ater* tend to have blackish brown shells (Figs. 4 & 5), while juveniles tend to have a yellow-striped axial pattern, axial riblets, and thin fragile lips (Figs. 3, 7, 8 & 9). The stripes on the young shells are each formed by a series of yellowish dashes, bars, lines or spots. One aberrant juvenile shows a crooked spire (Fig. 9), while an adult specimen has knobby growths on its early whorls (Fig. 4). The soft tissues of both adult and juvenile snails are similar. The foot is dark yellow while the main body is blackish with white spots (Figs. 5 & 6). The tentacles have alternating black and white bars. The eye spots are positioned below the tentacles and appear bluish.

Remarks: This article documents the discovery of populations of *Faunus ater* in the drain along the Bedok Park Connector and Tanah Merah canal, as well as the reappearance of the snail in the canal at East Coast Park Area B. The distinctively marked shells of juvenile *Faunus ater*, seldom depicted in malacological literature, are also illustrated (see Lok et al., 2011; Tan et al., 2012; Lau & Chan, 2019).

A population of *Faunus ater* with more slender shells and complete or less eroded early whorls (compared to another population on the south-western part of the island) was sighted on 29 April 2019 at East Coast Park Area B (Lau & Chan, 2019). On several subsequent visits to the same location, this species was distinctly absent. However, the snails, including many juveniles, were seen again on 17 July 2021. The cause of the temporary disappearance of *Faunus ater* from the drain at Area B, and their discovery in two other waterways nearby is unknown.

Literature cited:

- Lau WL & Chan S-Y (2019) A population of the black-snail, *Faunus ater*, in eastern Singapore. Singapore Biodiversity Records, 2019: 63–64.
- Lok AFSL, Ang WF, Ng PX, Ng BYQ & Tan SK (2011) Status and distribution of *Faunus ater* (Linnaeus, 1758) (Mollusca: Cerithioidea) in Singapore. Nature in Singapore, 4: 115–121.
- Tan SK, Chan SY & Clements GR (2012) A Guide to Snails and other Non-marine Molluscs of Singapore. Singapore Science Centre, 176 pp.



Fig. 1. Narrow and deep drain along the Bedok Park Connector inhabited by *Faunus ater*. Fig. 2. Top in-situ view of live *Faunus ater* snails in the drain. (Photographs by: Tang Beng Yong)



Fig. 3. A live juvenile *Faunus ater* with crooked spire and a *Clithon faba* grazing on its shell. Fig. 4. Unusual knobby growths on the early whorls of an adult *Faunus ater* shell. (Photographs by: Lau Wing Lup)



Fig. 5. An adult *Faunus ater* emerging from its shell. Fig. 6. Close-up view of the animal showing the yellow foot and white-spotted body. (Photographs by: Lau Wing Lup)



Fig. 7. A juvenile shell showing its ribbed surface and thin lip. Fig. 8. Dorsal (a) and apertural (b) views of a juvenile shell with yellow-striped pattern. Note the thin and broken lip. Fig. 9. Lateral view of an aberrant juvenile shell (about 4 cm shell height) with deformed and crooked spire. (Photographs by: Lau Wing Lup)