

Biodiversity Record: Pink-lipped agate snails, *Lissachatina immaculata*, at Toa Payoh

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Subjects: Pink-lipped agate snail, *Lissachatina immaculata* (Mollusca: Gastropoda: Achatinidae).

Subjects identified by: Lau Wing Lup.

Location, date and time: Singapore Island, Toa Payoh housing estate, Toa Payoh Lorong 6; 5 December 2025 at about 2013 hrs.

Habitat: Urban parkland (Fig. 1).

Observer: Lau Wing Lup

Observations: Five snails of varying sizes (Figs. 2–5) were found on the periphery of a plot of greenery freshly planted with horticultural plants. The largest adult had a shell height of 94 mm despite its broken protoconch. The smallest specimen was 29 mm. All were found separately on the ground. Members of the similar looking congener, *Lissachatina fulica*, were also found at the site.



Fig. 1. Location where a population of *Lissachatina immaculata* was found (Photograph by: Lau Wing Lup).



Fig. 2. In-situ dorsal view of an adult specimen (94 mm shell length), shell covered with dirt, gazing on the substrate. Fig. 3. In-situ dorsal view of a juvenile (46 mm shell length) with dirt-covered shell. Fig. 4. Dorsal view of a 71 mm (shell length) individual cleaned of dirt (Photographs by Lau Wing Lup).



Fig. 5. Aperture (top row) and dorsal (bottom row) views of *Lissachatina immaculata* shells found at Toa Payoh on 5 December 2025 – (from left to right) 94, 71, 46, 37 and 29 mm (shell height). Note the diagnostic purple or dark pink parietal callus indicated by arrow on the largest shell on the top row (Photographs by: Lau Wing Lup).

Remarks: *Lissachatina immaculata* is the third achatinid species to be introduced in Singapore (Tan & Woo, 2010; Tan et al., 2012). The species was first recorded there based on an empty shell found on a beach in January 2019 (Chan, 2019, as *Achatina immaculata*). A subsequent report of this species at Dairy Farm by Leow (2019, as *Achatina immaculata*) is possibly a misidentification. *Lissachatina immaculata* can easily be distinguished from the common giant African snail, *Lissachatina fulica* by the presence of a pinkish or purplish parietal callus (Bequaert, 1950; Herbert & Kilburn, 2004; Fig. 5). As the parietal callus of the specimen illustrated by Leow (2019) was covered by its flesh, its identity as *Lissachatina immaculata* cannot be confirmed. The specimen appears to have a smoother shell resembling *Lissachatina fulica*, unlike the coarser sculpture noted by Bequaert (1950) to be a consistent feature of *Lissachatina immaculata*. The present record shows the presence of at least one established population in Singapore. The presence of populations in other parts of Singapore, as well as interactions with local populations of *Lissachatina fulica* are worthy of investigation.

Lissachatina immaculata is native to Africa. This species had been found outside of its natural range in islands in the western part of the Indian Ocean, where all its reported introductions occur before the 20th century. (Bequaert, 1950). In more recent times, the species has been recorded in southern Taiwan by Chiu et al. (2012, as *Achatina panthera*). Online photographic records (iNaturalist, 2020a, 2020b, 2024) suggest that *Lissachatina immaculata* is present and possibly established in southeastern China.

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