

Zebra crab on a sea-urchin at Changi Beach

Subjects: Zebra crab, *Zebrida adamsii* (Crustacea: Decapoda: Brachyura: Eumedonidae);
Sea-urchin, *Salmacis sphaeroides* (Echinoidea: Camarodonta: Temnopleuridae).

Subjects identified by: Neo Mei Lin.

Location, date and time: Singapore Island, Changi Beach; 25 June 2017; around 0600 hrs.

Habitat: Estuarine. Intertidal seagrass meadow.

Observers: Contributors.

Observation: A single zebra crab with carapace width of about 10 mm was found on the surface of a sea-urchin, *Salmacis sphaeroides* (Fig. A & B).

Remarks: Members of the eumedonid crabs are known obligates on sea-urchins. *Zebrida adamsii* is widely distributed throughout the Indo-West Pacific (Ng & Chia, 1999), and has been documented on one occasion in Singapore (Johnson, 1962). This is believed to be the first record of the species on Changi Beach. The host sea urchin was found with a naked inter-ambulacral zone (as indicated by the white arrow in Fig. A), which could be due to *Z. adamsii* feeding on the urchin's tube-feet and tissues (Saravanan et al., 2015). This suggests that the crab is parasitic on the sea urchin.

References:

- Johnson, D. S., 1962. Commensalism and semi-parasitism amongst decapod Crustacea in Singapore waters. *Proceedings of the First Regional Symposium, Scientific Knowledge Tropical Parasites, Singapore*. University of Singapore. pp. 282–288.
- Ng, P. K. L. & D. G. B. Chia, 1999. Revision of the genus *Zebrida* White, 1847 (Crustacea: Decapoda: Brachyura: Eumedonidae). *Bulletin of Marine Science*. 65: 481–495.
- Saravanan, R., N. Ramamoorthy, I. S. Sadiq, K. Shanmuganathan & G. Gopakumar, 2015. A note on the obligate symbiotic association between crab *Zebrida adamsii* White, 1847 (Decapoda: Pilumnidae) and flower urchin *Toxopneustes pileolus* (Lamarck, 1816) (Camarodonta: Toxopneustidae) from the Gulf of Mannar, India. *Journal of Threatened Taxa*. 7: 7726–7728.

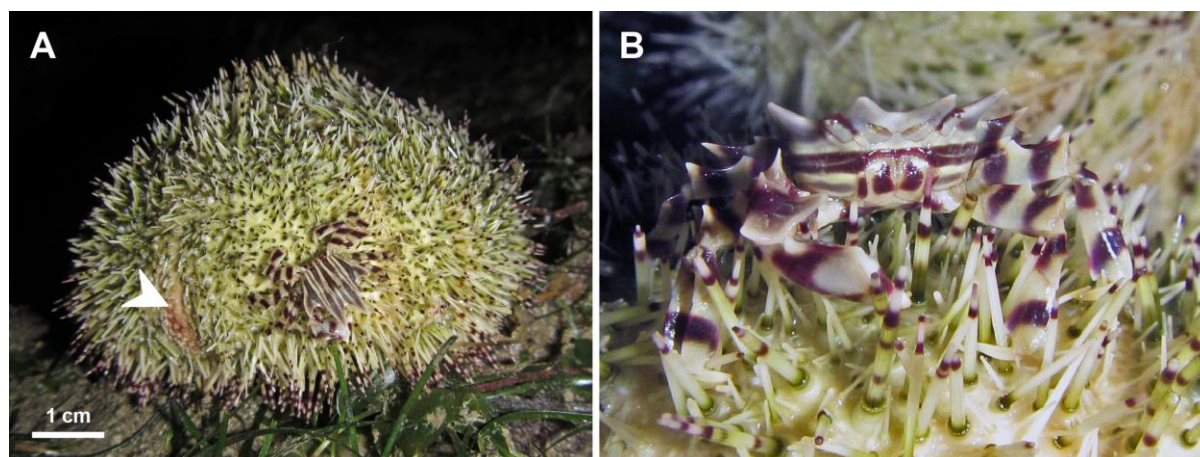


Fig. A. *In situ* view of *Zebrida adamsii* with head facing downwards on the surface of a sea-urchin, *Salmacis sphaeroides*. White arrow points to the naked inter-ambulacral zone on the urchin. Fig. B. Dorso-frontal view of *Zebrida adamsii*. Photographs by Neo Mei Lin

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