The University of Hong Kong
School of Biological Sciences

Public Seminar

ECOLOGY OF SEMI-TERRESTRIAL CRABS FOUND IN BACK MANGROVES AND ADJACENT WOODLANDS IN THE MONSOONAL TROPICS

Date: 9 October, 2024

Time: 15:30

Venue: KBSB 6N-11 & Zoom

About the speaker:

Christine Cheng is a PhD candidate supervised by Prof. Gray A. Williams and Prof. Stefano Cannicci. She is interested in mangrove biodiversity, focusing on semi-terrestrial crabs, with the goal of identifying effective conservation strategies to protect these unique habitats in Hong Kong.

Abstract:

The colonization of land from the sea, known as ‘terrestrialization’, occurred relatively recently among Brachyuran crabs (Decapoda, Crustacea). Many semi-terrestrial crab species invaded the supralittoral and terrestrial environments from the marine environment via intertidal habitats. This transition involved adaptations to challenges such as temperature fluctuations, water supply, and food availability. In Hong Kong the riparian woodland and narrow back mangroves host at least eight semi-terrestrial crab species including *Chiromantes haematocheir*, *Orisarma patshuni*, *Orisarma intermedium*, *Orisarma dehaani*, *Neosarmatium indicum*, *Parasesarma pictum*, *Parasesarma continentale* and *Chasmagnathus convexus*. This thesis investigates the adaptations in their life history strategies, behaviours and resource partitioning (including their microbiomes) that these semi-terrestrial crabs have evolved to survive in these challenging habitats, providing insights of their evolutionary pathways and also strategies for their conservation amidst current and future habitat threats.