



The University of Hong Kong
School of Biological Sciences

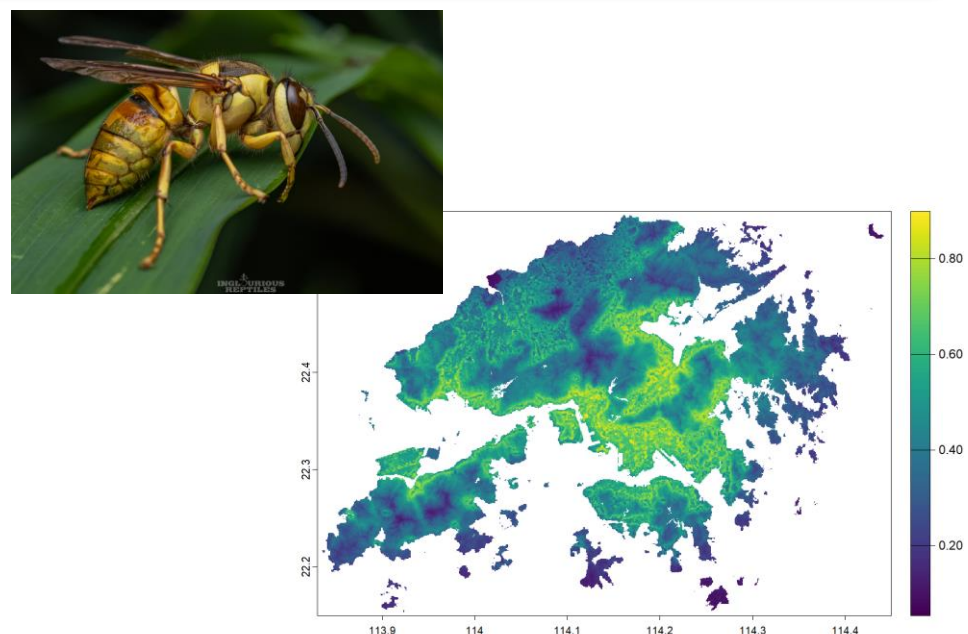
**Qualifying
Seminar**

Climate change shapes Vespidae wasp distribution in a subtropical urbanised biodiversity hotspot

Date: Friday 27 Sep 2024

Time: 14:00

Venue: 6N-11



About the speaker:

Clara Park is an MPhil student in Dr. Louise Ashton's Biodiversity and Environmental Change Lab. Her research focus is broadly on entomological responses to changing conditions over time, with a personal interest in wasps.

Abstract:

Anthropogenic climate change is widely recognised to influence species distribution and decline insect populations, but research on wasps remains scarce despite their indispensable roles in top-down control and pollination. The combined impacts of climate change and rampant urban expansion make ecological monitoring essential in conservation and protecting ecosystem functioning and services from anthropogenic disturbances. Occurrence data was combined from the Global Biodiversity Information Facility and comprehensive field records throughout Hong Kong for species distribution modelling of three social wasp species, incorporating NDVI, bioclimatic, and topographical variables at a 30m resolution. Models are projected onto future climate change scenarios to evaluate ecological consequences and identify climatic microrefugia in a mosaic landscape. Generalists were found to respond differently to climate change, and specialist species are more at risk.

