



The University of Hong Kong
School of Biological Sciences

**Qualifying
Seminar**

Character evolution and evolutionary diversification in the early-divergent Annonaceae subfamily Ambavioideae

Date: 20th Sep 2021 (Mon.)

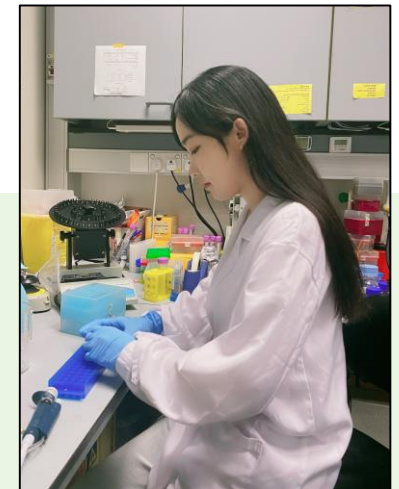
Time: 3:00 p.m.

Venue: KSBS 3N01 + Zoom



About the speaker:

Weixi Li is a PhD student in Dr. Richard Saunders' lab. Her research focuses on the reconstruction of phylogenetic relationships to help understand character evolution, species diversification and biogeographical patterns in the flowering family Annonaceae.



Abstract:

Annonaceae is a species-rich flowering plant family in the order Magnoliales. Subfamily Ambavioideae is phylogenetically problematic because of inadequate sampling of taxa and DNA regions. I will apply next-generation genome skimming techniques to generate whole chloroplast genome data to provide more informative sites for reconstructing a solid higher-level phylogeny of the Ambavioideae. Chloroplast genomic and transcriptomic comparisons can help uncover genetic, physiological and morphological variations including adaptations to limestone environments, thereby helping understand plant adaptive tolerance. The updated phylogeny also provides a solid foundation for the study of morphological character evolution and species diversification. Studying the phylogenetic relationships, biogeographical history, diversification and species evolution and adaptation in the early divergent subfamily Ambavioideae, will enhance future studies of the character evolution and evolutionary diversification in the Annonaceae.