

Date: Fri, Nov 8th
Time: 16:00 (UTC+8)
Venue: 3N01 + Zoom



Approximately 70% of plant species are sexually monomorphic and produce hermaphrodite flowers with both male and female reproductive organs. While hermaphrodite flowers can potentially both receive and disperse pollen through a single pollinator visit, these dual functions may lead to sexual conflicts within a flower, such as pollen loss. *Aristolochia* spp.

(Aristolochiaceae) address this issue by temporarily segregating male and female functions, maximizing the benefits of pollinator visits by trapping pollinators within the flower during the female phase. I will introduce a novel mechanism through which these plants trap their pollinators. In the latter part of the talk, I will examine whether antagonistic microbial transmission can induce sexual conflict in plants, drawing on our studies of hermaphrodite *Alpinia* (Zingiberaceae) and dioecious *Mallotus* (Euphorbiaceae) species. These studies underscore the importance of sexual conflict in understanding plant reproductive systems.

Sexual Conflicts and Reproductive Ecology of Plants



Shoko Sakai

Shoko Sakai is an Associate Professor in the Department of Geography at Hong Kong Baptist University. She received her training as a plant ecologist at Kyoto University and served as an Associate Professor in Japan (2013–2019) and as a Professor at the Center for Ecological Research at Kyoto University (2019–2023). Her research has focused on plant reproduction, interactions between plants and other organisms, plant diversity, and reproductive phenology in tropical plants from Borneo, Panama, and Japan, and the interactions between human society and ecosystems.

