E&B Seminar Series

SCHOOL OF BIOLOGICAL SCIENCES THE UNIVERSITY OF HONG KONG 香港大學生物科學學院

SHKU Science

ECOLOGY & BIODIVERSITY

Higher soil fauna contribution to forest leaf litter decomposition in tropics

Date	28th Jan (Fri.)
Time	16:00 (UTC+8)
Venue	Zoom

You can also email us to require the Zoom link
(check SBS website→NEWS & EVENTS)

Abstract

Decomposition is the primary process of converting dead organic material to inorganic forms, which replenishes the available nutrient pool for living plants. Microbes are considered by many as the main decomposer and some models even considered microbe-decomposer only. However, increasing studies have shown that soil fauna, such as termites, beetles, earthworms, etc., plays a non-negligible role in decomposition. Here, we used meta-analysis to integrate 476 study cases from 62 papers and found that soil fauna contributes 30.73% to forest leaf litter decay and fauna contribution in the tropics is significantly higher than that in non-tropics. This spatial variation is related to different fauna biodiversity, plant composition, and climate-soil condition in different regions.

About speaker:

Xiaoyi Zeng is a 2nd year PhD student in Dr Louise Ashton's lab. Her interest is the ecological process in forest. She majored in forestry as an undergrad and studied litter decay in subtropical forest ecosystems as a master.

At present, she focuses on the contribution of soil fauna to leaf litter decomposition in tropical forest. In addition to using the traditional litter mass loss as an indicator of decay efficiency, she also uses stable isotope to track the nutrient flux in litter decay process and quantify soil fauna contribution to decomposition.

Organized by The Biology Graduate Student Association (BGSA)