



The University of Hong Kong
School of Biological Sciences

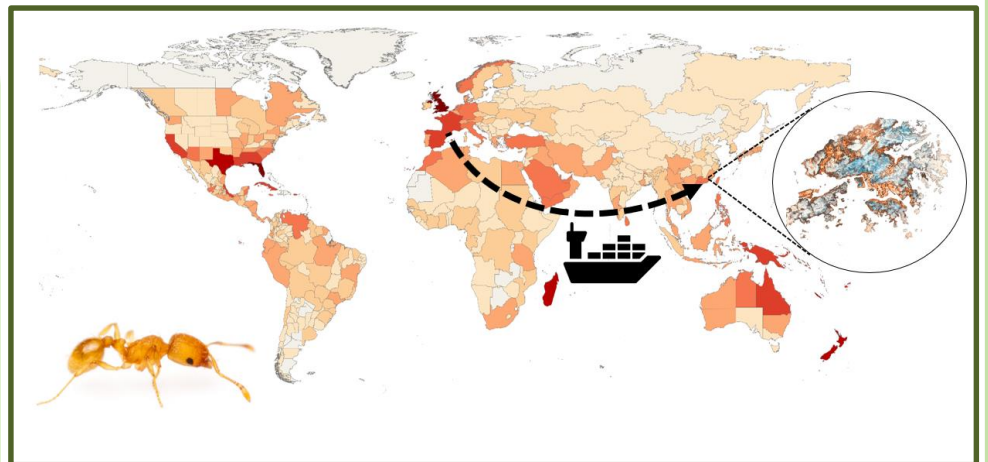
**Qualifying
Seminar**

Explaining alien insect species dispersal, establishment and spread through trait ecology

Date: 28th November 2024

Time: 14:00 - 15:00 PM

Venue: 3N01



About the speaker:

André Ibañez is a PhD student in the Insect Biodiversity and Biogeography Laboratory. Originally from Spain, he has been interested in nature and outdoor activities since childhood. He further specialized in entomology and biogeography in his undergraduate and master studies in Belgium. His current research aims to further understand invasion biology through biogeography and functional ecology to develop conservation priorities.



Abstract:

Distribution and assemblages of species have been disrupted by human activities. With increased globalization, geographical barriers are not a dispersal limitation anymore. Species are being introduced into new ecosystems and regions, leading to the disruption of native communities. Biological invasions as one of the leading causes of biodiversity loss needs to be addressed through conservation efforts and policies. Insects are the most speciose group on Earth, and many species are now considered invasive. Using insects as a study taxon (with a focus on ants), I aim to understand the traits and distribution patterns of species at different scales under the influence of human activities. First, at local scale (Hong Kong), I will identify functionally unique hotspots of ants to address priorities conservation efforts (Chapter 2). In Chapter 3, I will compare the local distribution pattern of tramp native species and exotic species across four insect taxa. In Chapters 4 & 5, I will focus on global scale and study the importance of ant traits through the invasion stages. Then, I will evaluate the risk for >600 regions across the globe to exotic ant species introductions. Overall, I aim to provide a new perspective on the understanding of invasion processes incorporating traits and advanced analyses which are relevant for biogeography studies and functional ecology. These findings will contribute to biodiversity conservation and the development of invasion risk prevention policies at different spatial scales.