The University of Hong Kong
School of Biological Sciences

Qualifying Seminar

Croaker conservation: ecology and evolutionary dynamics of the Sciaenidae

Date: 28 May 2024

Time: 15:00-16:00

Venue: KBSB 3N-01 & Zoom

About the speaker:

Baian LIN is a 2nd year PhD student under the supervision of Dr. Mathew Seymour. His work focuses on the diversity, evolution and conservation of croakers and drums (Family: Sciaenidae).

Abstract:

The Sciaenidae is a large family with around 300 species inhabiting marine and freshwater habitats in temperate and tropical environments across the global. Sciaenids are commercially, recreationally, and culturally important, particularly in Southeast Asia. However, Sciaenids are frequently exploited in fishing, largely due to their preferences for coastal habitat and due to their aggregate spawning behavior. The large yellow croaker *Larimichthys crocea* are currently classified as critically endangered by the IUCN Red List of Threatened Species, with spawning aggregation fishing listed as a principal factor in their population collapse. Additionally, sciaenids are a taxonomically complex group, with many species lacking full descriptions and species designations. Some sciaenids species remain unknown to science and need to be described for conservation efforts and to improve our understanding of the true species diversity and evolutionary dynamics within the group. Therefore, my research will locally determine the habitat preference and reproductive ecology of sciaenids, with increased focus on locally important *Larimichtys crocea*, in Hong Kong waters. I will also assess sciaenids at the regional level, across the Indo-West Pacific Ocean, to review the taxonomy of the unresolved genus *Nibea* and determine the evolutionary and biogeographic associated patterns