

Public Seminar

A Feasibility Study on Pearl Oyster Cultivation In Mariculture Zones in Hong Kong

Date: 17 September 2021

Time: 10:00 - 10:45 AM

Venue: 6N-11, KBSB + Zoom



About the speaker:

Wa Tat Yan is a PhD candidate supervised by Prof. Kenneth Leung and Dr. Moriaki Yasuhara. His PhD research investigated the feasibility of using the fish rafts in the mariculture zones to restart the pearl oyster culture in Hong Kong.

Abstract:

Pearling is part of Hong Kong's marine heritage. However, past attempts to establish the industry failed in the 1950s and 60s. This study aimed to investigate the feasibility of using fish rafts in the mariculture zones for cultivation of pearl oysters and pearls. Through a field-based experiment, I found that the growth rate and survival rate of pearl oysters in the Sai Kung area were better than those in Tolo Harbour areas. In another series of experiments, I discovered that a regular immersion of culture nets and pearl oysters in freshwater was a cost-effective way to control the biofouling. This method can reduce a lot of the operating cost of the farm. Comparisons among different business models showed that a farm cultivating pearl oysters only for oyster meat and pearl powder was the most profitable business model in terms of the net present value and internal rate of return. Based on the overall results, I finally made some practical recommendations to the HKSAR Government for rejuvenating the industry.

