

## Antibacterial activities of selected seaweed and seagrass from Port Dickson coastal water against different aquaculture pathogens

### ABSTRACT

Eight seaweed species in Teluk Kemang and three seagrass species in Teluk Pelanduk, Port Dickson, respectively, were screened for antibacterial activities. The antibacterial activities were screened using disc diffusion test, minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) against six aquacultural pathogens strains *Aeromonas hydrophila* ATCC35654, *Vibrio harveyi* BB120, *Vibrio harveyi* ATCC14126, *Vibrio alginolyticus* ATCC17749, *Vibrio parahaemolyticus* ATCC17803 and *Vibrio anguillarum* ATCC43313. The results showed that among all the pathogens, seaweed *Padina minor* and seagrass *Thalassia hemprichii* had the strongest antibacterial activity against *Vibrio harveyi* BB120 and *Vibrio harveyi* ATCC14126, respectively. The lowest values for minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) were obtained from *Padina minor* against *V. harveyi* BB120 and *Thalassia hemprichii* against *V. harveyi* ATCC14126, respectively. The findings suggested that seaweed and seagrass in Port Dickson coastal water have the potential to prevent bacterial diseases particularly in aquaculture.

**Keyword:** Antibacteria; Aquaculture pathogens; Port Dickson; Seagrass; Seaweed