

Random amplification polymorphic DNA-PCR (RAPD) analysis of *Vibrio alginolyticus* strains isolated from green mussels (*Perna viridis*) in Marudu Bay, Sabah

ABSTRACT

Vibrio alginolyticus infection is common in aquatic species. The species has been isolated from infected green mussels (*Perna viridis*) cultivated at Marudu Bay, Sabah. The infection of *V. alginolyticus* was prevalent since 2009 and caused more than 60% mortality of the mollusc. This study was conducted on *V. alginolyticus* isolated from clinically infected *P. viridis* at cultivation area in Marudu Bay from 2013. Twenty isolates were randomly selected and subjected to RAPD-PCR analysis using 20 sets of RAPD primers. Results showed that the most suitable primers were OPA 3, OPA 5, OPA 9, OPA 10 and OPA 12 where the significant bands ranging from 100-2500 bp. Genetic variability among the isolates as revealed by these primers indicated that RAPD-PCR method has good discriminative ability and can be used as a rapid typing method of differentiating *V. alginolyticus* strains isolated from infected green mussels for epidemiological investigation.