



## INTISARI

Pengembangan probiotik untuk budidaya ikan yang berkelanjutan terus dilakukan. Tujuan penelitian ini adalah untuk menemukan kandidat probiotik berupa bakteri proteolitik. Penelitian ini menggunakan metode eksploratif dengan mengambil dan menapis bakteri yang ada di saluran pencernaan ikan laut. Seleksi bakteri proteolitik dilakukan dengan medium *skim milk agar* 3%, lalu dilakukan uji antagonisitas terhadap bakteri patogen, uji toleransi terhadap lingkungan asam, uji resistensi antibiotik, dan uji non-patogen. Hasil pengujian menunjukkan 39 isolat memiliki aktivitas proteolitik, 21 isolat toleran terhadap asam, 19 isolat sensitif terhadap antibiotik uji dan dua isolat bersifat non patogen terhadap ikan uji. Berdasarkan hasil tersebut dipilih isolat JC 18 dan JAL 12 untuk diidentifikasi secara molekuler berdasarkan gen 16S r RNA dan secara fenotipik. Kedua isolat tersebut diidentifikasi sebagai *Aeromonas sobria* dan *Lactococcus lactis*.

Kata Kunci: penapisan, proteolitik, *Aeromonas*, *Lactococcus*, ikan laut



## ***ABSTRACT***

Development of probiotics for sustainable aquaculture continues to be carried out. The purpose of this study was to find probiotic candidate in the form of proteolytic bacteria. This study used an exploratory method by isolating bacteria in marine fish gut. Proteolytic bacteria selection was carried out with 3% skim milk agar medium then followed by antagonism test against pathogenic bacteria, tolerance test for acidic environment, antibiotic resistance test, and non-pathogen test. The results showed that 39 isolates had proteolytic activity. Total of 21 isolates were acid tolerant, 19 isolates were sensitive to antibiotics, and two isolates were confirmed as non-pathogenic strain. Isolates JC 18 and JAL 12 were selected for identification based on the molecular (16S r RNA gene) and phenotypic characters. The bacteria were identified as *Aeromonas sobria* and *Lactococcus lactis* respectively.

Kata Kunci: screening, proteolytic, *Aeromonas*, *Lactococcus*, marine fish