

Identifikasi dan Uji Kemampuan Hidrolisis pada Bakteri Amilolitik dan Proteolitik yang Diisolasi dari Wadi, Makanan Khas Kalimantan Tengah

Identification and Hydrolysis Ability Test on Amylolytic Bacteria and Proteolytic Bacteria Isolated from Wadi, Traditional Food from Central Kalimantan

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Abstract: Wadi is a sort of traditional foods that made of fish from Dayak tribe in Central Kalimantan. Wadi is made by the addition of salt and lumu. People make wadi as a supply of side dishes during difficult seasons of fish and stock for farming, hunting, or collecting forest products. In wadi, there are several bacteria species that capable in degrading amylum and protein. The bacteria capability in amylum and protein degradation can be determined by calculating the hydrolysis index. The aims of this study is to: (1) identify the amylolytic bacteria and proteolytic bacteria species from wadi, (2) determine the amylum and protein hydrolysis index on each amylolytic bacteria and proteolytic bacteria species isolated from wadi, and (3) determine the amylolytic bacteria and proteolytic bacteria species that have the highest hydrolysis index. This research is descriptive explorative research. The research results showed that: (1) there were four isolates of amylolytic bacteria isolated from wadi, i.e: *Enterobacter agglomerans*, *Pseudomonas fluorescens*, *Acinetobacter baumannii*, and *Micrococcus varians*, and there were five species of isolated proteolytic bacteria from wadi, i.e: *Enterobacter agglomerans*, *Pseudomonas fluorescens*, *Nitrococcus mobilis*, *Acinetobacter baumannii*, and *Micrococcus varians*, (2) the amylum hydrolysis index of *Enterobacter agglomerans* is 3.77; on *Pseudomonas fluorescens* is 3.00; on *Acinetobacter baumannii* is 4.16; and on *Micrococcus varians* is 7.23. The protein hydrolysis index of *Enterobacter agglomerans* is 3.22; on *Pseudomonas fluorescens* is 2.25; on *Nitrococcus mobilis* is 1.67; on *Acinetobacter baumannii* is 3.42; and on *Micrococcus varians* is 3.45, (3) *Micrococcus varians* has the highest amylum, i.e: 7.23 and protein hydrolysis index is 3.45.

Keywords: hydrolysis index, amylolytic bacteria, proteolytic bacteria, wadi

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