



Identification of Lactic Acid Bacteria Proteolytic Isolated from An Indonesian Traditional Fermented Fish Sauce Bakasang by Amplified Ribosomal DNA Restriction Analysis (ARDRA)

Helen Joan Lawalata*, Utari Satiman

¹Department of Biology, Faculty of Mathematics and Natural Science, State University of Manado, Indonesia

Abstract: Lactic Acid Bacteria (LAB) is bacteria which has an important role in the process of fermentation of organic matter. 'Bakasang' is traditional fermented fish product made from the guts of fish mainly *Kastuwonus pelamis* L as well as other small fish and fish eggs. 'Bakasang' is well know as typical food of North Sulawesi (Manado) LAB have proteolytic activity that degrade fish proteins into bioactive eptide that could performe as anthyhypertensive compound during fer,emtatopm. This study aimed to identify LAB that produce strong proteolytic abilities. This study revealed that two isolates that were desigh as *Pediococcus* B3.5 and *Pediococcus* B9.7 based on phenotypic characterization have the strong proteolytic abilities. These strains were further identified by Amplified Ribosomal DNA Restriction Analysis (ARDRA) was carried out with one restriction endonucleasae enzyme (Hae3). Isolates LAB proteolytic from bakasang have a identical character with *Pediococcus acidilactici*.

Key word : Bakasang, Lactic Acid Bacteria Proteolytic, ARDRA.