

**PROFILE ANALYSIS OF RED KAKAP FISH (*Lutjanus*) BASED SDS-PAGE
WITH OLD AND LOWER VARIATIONS CONCENTRATION OF VINEGAR
ACID**

Naharia Jufri¹, Stalis Norma Ethica², Ayu Rahmawati Sulistyaningtyas.³

1. DIV Program of Health Analyst Faculty of Nursing and Health Sciences Muhammadiyah University of Semarang
2. Laboratory of Molecular Biology Faculty of Nursing and Health University of Muhammadiyah Semarang
3. Chemistry Laboratory Faculty of Nursing and Health Sciences University of Muhammadiyah Semarang

ABSTRACT

Fish is a potential animal protein, unfortunately, it easily decomposed. Vinegar can be added to the fish to avoid spoilage. The purpose of this research is to know the profile of red snapper protein with concentration of 5% and 10% on soaked vinegar acid with variation 15, 30 and 60 minutes. The used research method is GEL electrophoresis (SDS-PAGE) aimed to determine the value of molecular weight (BM). The results showed that there were 14 protein bands consisting of 8 major bands and 6 minor bands; S1 showed 13 protein bands consisting of 2 small major bands and 11 minor bands; S2 showed 11 protein bands consisting of 2 small major bands and 9 minor bands; S3 shows 10 protein bands consisting of 2 thin major bands and 8 bands; S4 denotes 10 protein bands consisting of 2 thin major ribbons and 8 bands; S5 denotes 9 minor protein bands consisting of 2 small major bands and 7 minor bands; S6 shows 6 protein bands consisting of 2 small major bands and 4 minor bands. Thus it can be concluded that the higher concentration and duration of vinegar immersed in Red Snapper, the protein contained in the fish will be denatured. Based on the results of this research, 5% vinegar submersion process for 5 minutes on Red Snapper fish is the most recommended because protein bands on protein profiles show the least change relative to control or standard of vinegar over 5% and time of immersion.

Keywords: vinegar acid, Red Snapper fish, protein profile, SDS-PAGE