

## ABSTRACT

Amaliyah, Siti Dakwatul. 2014. **Effectiveness in Giving Concentration of Coconut (*Cocos nucifera*) Shell Liquid Smoke and Old Storage of Total Bacteria, Protein Levels and Organoleptic Fish Carp (*Ospronemus Gourami*).** Thesis. Department of Biology. Faculty of Science and Technology. State Islamic University (UIN) Maulana Malik Ibrahim Malang. Supervisor: (I) Dr. drh. Hj. Bayyinatul Muchtaromah, M.Si and (II) Dr. H. Ahmad Barizi, M.A

**Keywords: Fish gourami, coconut shell liquid smoke, Total Number of Bacteria, protein content, Appearance.**

Fish is a source of animal protein that is high enough and also can be easily digested by humans. This is because the composition of the protein components of fish nearly equal to the composition of the protein components in humans. One example of a species of fish that have high nutritional value and are high selling points carp (*Ospronemus Gourami*). Fish included in perishable foodstuffs, therefore need a more comprehensive treatment of foodstuffs that are more durable stored. The use of coconut (*Cocos nucifera*) shell liquid smoke is expected to act as a preservative. The purpose of this study was to determine the effect of Concentration of Coconut (*Cocos nucifera*) Shell Liquid Smoke and Old Storage of Total Bacteria, Protein Levels and Organoleptic Fish Carp (*Ospronemus Gourami*).

This research was conducted experimentally in the Laboratory and uses a completely randomized design (CRD) with two factors. The first factor is the storage time with 3 treatment that consists of 0 days, 8 days and 16 days. The second factor is the difference in concentration of liquid smoke that consists of 4 treatment is 0%, 3%, 5% and 7%. Parameters measured were the total number of bacteria, protein content and organoleptic. Data obtained from this study were analyzed by analysis of variance (ANOVA). If there significant effect, then further tested using Duncan with significance level of 5%, for organoleptic tests were analyzed using the Kruskal-Wallis.

Based on the Anova test results, research data shows that the calculated F is greater than the F table, then H<sub>1</sub> is accepted and there are significant differences between different concentrations and storage time as well as the interaction between their. Further trials conducted by Duncan test level of 5%, which indicates that the interaction between the liquid smoke concentration and storage time best against the total number of bacteria (TPC) is at a concentration of 5% with a storage time of 16 days, the protein content is 7% concentration with storage time 8 day, for the organoleptic quality of the texture is a concentration of 5% and 7% to 8 days long storage, while the color and aroma organoleptic is 7% concentration with storage time of 8 days.