THE EFFECTS OF APPLICATION OF COCONUT SHELL LIQUID SMOKE CONCENTRATION AND SOAKING TIME AS AN ANTIMICROBIAL ON THE QUALITY OF COPRA

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ABSTRACT

Conventional copra is coconut meat that was processed by drying it in the sun or roasting it to reduce the water content and inhibit microbial growth. This microbial attack results in a decrease in the quality of copra. Liquid smoke treatment in making copra can be an alternative as an antimicrobial agent, because liquid smoke contains phenolic compounds and organic acids. This research aimed to determine the effect of the combination of concentration and soaking time of coconut shell liquid smoke on the quality of copra. This experiment was carried out from February 2024 to March 2024. This experiment was arranged in a Completely Randomized Design consisting of ten treatment combinations of concentration and duration of immersion in the liquid smoke solution, namely concentration of 10% liquid smoke, 15% liquid smoke, 20% liquid smoke with a soaking time of 5 minutes, 10 minutes, 20 minutes and two replications were carried out. Observation data were analyzed using the F test and if there were differences between treatments, it was continued with the Duncan Multiple Range Test with a confidence level of 95%. The results of the research showed that the combination of treatment with a concentration of 10% liquid smoke with a soaking time of 10 minutes had the best effect as an antimicrobial agent and produced good quality copra.

Keywords: Antimicrobial, copra, liquid smoke