

**EFFECTIVENESS OF COCONUT SHELL LIQUID SMOKE
ON THE QUALITY OF COCONUT SAP (*Cocos nucifera* L)
FOR COCONUT SUGAR**

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ABSTRACT

Coconut sap is the main raw material in producing coconut sugar which is very vulnerable to changes in quality and freshness, especially if not handled properly. Liquid smoke production from coconut shell waste is one of the innovations that has great potential in the sustainable utilization of natural resources to be used as a natural preservative. This research aims to determine the effect of liquid smoke application and determine the effective concentration on the quality of coconut sap. The experiment was arranged in a Completely Randomized Design consisting of 5 concentration treatments, namely 0.05% sodium metabisulfite, 2% coconut shell liquid smoke, 3% coconut shell liquid smoke, 4% coconut shell liquid smoke and 5% coconut shell liquid smoke, with 5 replications. Observation data were analyzed using the F test if there were differences, further testing was carried out with the Duncan Multiple Range Test with a confidence level of 95%. The results of the research showed that the best concentration of coconut shell liquid smoke can be used as a preservative for coconut sap and printed coconut sugar at a concentration of 3% and 5%.

Keywords: Coconut sap, coconut sugar, coconut shell, liquid smoke