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Physico-Chemical Characteristics and Microbiological Contamination Smoked Skipjack Tuna (*Katsuwonus pelamis*) Using Canary and Candlenut Shell Smoking Materials

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Abstract: Fish is one of the export commodities from marine products that need to be developed for processing methods. One method of preserving fish that is widely used is smoking. The aims of this study were: to determine the physicochemical properties and the content of microbiological contamination in smoked skipjack tuna using canary shells and candlenut shells as fumigants. The quality of smoked skipjack tuna tested were aw, moisture content, protein content, fat content, ash content and microbiological contamination test (*Salmonella*, *Escherichia coli*, *Staphylococcus aureus*). Of the two types of smoked fish smoked using canary shells and candlenut shells, the best chemical parameter values for smoked fish using candlenut shells were smoked where the Aw value was 0.95%, the water content was 56.23%, the protein content was 37.76. %, fat content was 2.21%, ash content was 2.41%, and carbohydrate content was 0.99%. Overall, the smoked fish analyzed had quality standards that were in accordance with Indonesian National Standard. Total plate number analysis on smoked fish using canary shell smoked materials were 2.19×10^3 colonies/g, while smoked fish using candlenut shell smoked materials was 2.09×10^1 colonies/g. For the lowest total plate number, smoked fish uses candlenut shell fuel and the highest is smoked fish using canary shell smoker. *E. coli* analysis results for both types of smoked fish are the same, namely < 3 APM/g. Also *S.aureus* has the same value as well as *Salmonella* analysis results for both types of smoked fish are negative.

Keywords : skipjack tuna-smoking, canary, candlenut.

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