



## **Optimizing The Usage of Liquid Smoke from Coconut Shells as Natural Preservative for Fresh Fish**

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**Abstract :** Through these times the handling process or preservation method of fresh fish caught by fishermen is done only with ice refrigeration because this method is considered to be the most effective one. However, the fuel price is rising today and make their buying power of ice cubes for preserving their commodities felt more difficult. Therefore it is necessary to seek other alternate ways to preserve fish that cheap, easy to find, with real effect in maintaining the quality of fresh fish and harmless or safe to be used for fresh fish preservation. Liquid smoke technology is one potential way that effective to help maintaining the quality of fresh fish by using coconut shells as the raw material. The purpose of this research is achieving the best result quality from time duration of drying process in coconut shells into liquid smoke.

This research is using experiment method to find the duration of drying time of coconut shells. The research started with cleansing, chopping, and drying the coconut shells for 0 day, 1 day, 2 days and 3 days. Next, the researcher employs a pyrolysis process which followed by redistillation process and column filtration. The resulted liquid smoke grade 3 and grade 1 then will be analyzed by GC-MS and LC-MS. Treatment of the experimental fish conducted by measuring duration of drying time of coconut shells variabel where its result then undergoes organoleptic test of colour, odor or scent, texture and taste.

The result of this research is able to find duration of optimum drying time (3 days) with water content value of 1,96%, acidity concentration value of 6,25%, and pH value of 1,9. Whereas for the amount of yield (*rendemen*) is 35,8% on 0 day.

**Keywords :** drying process, liquid smoke, preservation, fish.

**S.P. Abrina Anggraini et al /**International Journal of ChemTech Research, 2017,10(13): 14-20.

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