



Potential of Liquid Smoke Product of Pyrolysis of Nutmeg Shell as Smoking Raw Material

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Abstract: Nutmeg shell as agricultural waste from peeling the nutmeg fruit are abundantly available in North Sulawesi regions and unfortunately not yet optimized used. Therefore this study was designed to investigate the potential of nutmeg shell as raw material for producing liquid smoke which could be used in especially fish smoking process. The results of laboratory analysis observed that chemical composition of nutmeg shell namely hemicellulose (46.82%), cellulose (21.34%), lignin (12.93%), crude fiber (53.67%), ash (6.16%), phenol (0.11%), carbonyl (0.38%) and total acid (0.46%) support the utilization of nutmeg shell as raw material to produce nutmeg liquid smoke. The GC-MS analysis of nutmeg liquid smoke identified 20 components where 2-Propanone, 1-hydroxy (53.63%) and phenol and its derivatives (14.84%), hence smoke liquid are also potential as smoke resource for food preservative.

Keywords: Liquid Smoke, Pyrolysis, Nutmeg Shell.

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