

Identifikasi Hubungan antara Lama Waktu Destilasi dan Tingkat Rendemen Asap Cair Grade 1 dari Kulit Buah Kakao sebagai Alternatif Bahan Baku Pangan Ramah Lingkungan (*Identification of the Relationship Between Distillation Time and Grade 1 Liquid Smoke Yield From Cocoa Pod Husk as an Alternative Environmentally Friendly Food Raw Material*)
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ABSTRACT

The high production of cocoa pod husk waste in Indonesia has not been optimally utilized and has the potential to pollute the environment. Cocoa pod husk contains lignocellulose, making it a potential raw material for liquid smoke through the pyrolysis process. The liquid smoke resulting from pyrolysis still contains tar and hazardous compounds, requiring further purification through distillation to produce safer and higher quality grade 1 liquid smoke. The distillation process is influenced by several important parameters, including distillation time and yield. This study aims to examine the distillation time and yield of grade 1 liquid smoke produced from cocoa pod husk. The method used was descriptive quantitative. This study was designed with a single treatment and four replications. The result showed that the distillation process for liquid smoke from grade 2 cocoa pod husk to grade 1 cocoa pods required approximately 38-51 minutes and produced a yield of approximately 81,88-89,00%. The varying distillation times were influenced by fluctuations in heating temperature, while variations in yield were influenced by the distillation time. The average distillation time to produce liquid smoke from grade 1 cocoa pod husk was 45,75 minutes, producing an average yield of 86,97%.

Key words: *Liquid Smoke, Grade 1, Cocoa*