

## INTISARI

**ANDARI, T.Y., 2017, KAJIAN AKTIVITAS ANTIBAKTERI ASAP CAIR TEMPURUNG KELAPA TERHADAP *Staphylococcus aureus* ATCC 25923, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.**

Asap cair tempurung kelapa mengandung zat-zat aktif seperti 3,4 trimethydroxy-N-methyl, acetone, formic acid, acetic acid. Destilat asap cair tempurung kelapa mengandung zat-zat aktif seperti Benzaldehyde, ethanol, acetone, methyl ester, acetic acid. Senyawa yang terkandung di dalam asap cair tempurung kelapa memiliki aktivitas antibakteri. Tujuan penelitian ini adalah untuk mengetahui adanya aktivitas antibakteri pada asap cair tempurung kelapa terhadap *Staphylococcus aureus*.

Asap cair tempurung kelapa dilakukan destilasi. Asap cair tempurung kelapa dan destilatnya dilakukan uji aktivitas antibakteri menggunakan metode difusi dengan konsentrasi 100%, 50%, dan 25%, sedangkan metode dilusi dengan seri konsentrasi 100%, 50%, 25%, 12,5%, 6,25%, 3,125%, 1,56%, 0,78%, 0,39% dan 0,19%. Kontrol positif yang digunakan adalah amoksisilin 2,5% dan kontrol negatif DMSO 1%.

Hasil uji analisis *Anova* membuktikan bahwa asap cair tempurung kelapa dan destilatnya mempunyai rata-rata daya hambat yang berbeda ( $F=0,00>0,05$ ). Pada konsentrasi 100% destilat memiliki daya hambat paling besar sebesar 21,96 mm. Dan pada uji dilusi memberikan hasil Konsentrasi Bunuh Minimum sebesar 6,25%.

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Kata kunci : Asap cair tempurung kelapa, destilat asap cair tempurung kelapa, *Staphylococcus aureus*, Daya hambat, Konsentrasi Bunuh Minimum.

## ABSTRACT

**ANDARI, T.Y., 2017, STUDY OF ANTIBACTERIAL ACTIVITY OF COCONUT SHELL LIQUID SMOKE AND ITS DISTILLATE AGAINST STAPHYLOCOCCUS AUREUS ATCC 25923 , SKRIPSI, PHARMACEUTICAL FACTS, UNIVERSITY OF SETIA BUDI, SURAKARTA.**

Coconut shell liquid smoke contains active substances such as 3,4 trimethydroxy-N-methyl, acetone, formic acid, acetic acid. Destilate liquid smoke coconut shell contains active substances such as Benzaldehyde, ethanol, acetone, methyl ester, acetic acid. The compounds contained in coconut shell liquid smoke have antibacterial activity. The purpose of this study was to determine the presence of antibacterial activity in Coconut shell liquid smoke a leaves to *Staphylococcus aureus*.

Liquid coconut shell smoke is extracted using distillation method. The extraction result was done by antibacterial activity with 100%, 50%, and 25% concentration, while the dilution method with concentration series 100%, 50%, 25%, 12,5%, 6,25%, 3,125%, 1,56%, 0.78%, 0.39% and 0.19% respectively. Positive controls used were 2.5% amoxicillin and 1% negative DMSO control.

Anova analysis results prove that coconut shell liquid smoke and its distillate have different mean inhibitory power ( $F = 0,00 > 0,05$ ). At 100% concentration the distillate has the greatest inhibitory of 21.96 mm and in the dilution test gave the result of Minimum Kill Concentration of 6.25%

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Keywords: Coconut shell liquid smoke, distillate Coconut shell liquid smoke, *Staphylococcus aureus*, Inhibitory, Minimum Kill Concentration.