

INTISARI

OEMATAN, H.M., 2013 Uji Aktivitas Antibakteri Fraksi n-HEKSAN, ETIL ASETAT, DAN AIR DARI EKSTRAK ETANOLIK DAUN KAPUK (*Ceiba pentandra* Gaertn) TERHADAP *Escherichia coli* ATCC 25922, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun kapuk (*Ceiba pentandra* Gaertn) mengandung saponin, flavonoid, tanin dan terpenoid. Tujuan penelitian ini adalah untuk mengetahui aktivitas fraksi *n*-heksan, fraksi etil asetat, fraksi air dan ekstrak etanolik daun kapuk (*Ceiba pentandra* Gaertn) sebagai antibakteri terhadap *Escherichia coli* ATCC 25922.

Serbuk daun kapuk dimaserasi dengan etanol 70%, kemudian difraksinasi menggunakan pelarut *n*-heksan, etil asetat, dan air. Ekstrak etanolik, fraksi *n*-heksan, fraksi etil asetat, dan fraksi air diuji aktivitas antibakteri menggunakan metode dilusi dengan konsentrasi 50%, 25%, 12,5%, 6,25%, 3,12%, 1,56%, 0,78%, 0,39%, dan 0,19%.

Hasil penelitian menunjukkan bahwa fraksi etil asetat, fraksi air, dan ekstrak etanolik daun kapuk mempunyai aktivitas antibakteri terhadap *Escherichia coli* dengan kadar bunuh minimum berturut – turut 12,5%, 50% dan 50%, sedangkan fraksi *n*-heksan tidak memberikan kadar bunuh minimum sampai konsentrasi 50%. Hasil penelitian dengan metode dilusi menunjukkan fraksi etil asetat mempunyai aktivitas antibakteri paling efektif terhadap *Escherichia coli* ATCC 25922

Kata kunci : *Ceiba pentandra* Gaertn, *Escherichia coli* ATCC 25922, dilusi, antibakteri, fraksi *n*-heksan, fraksi etil asetat, fraksi air.

ABSTRACT

OEMATAN, HM, 2013 ANTIBACTERIAL ACTIVITY TEST OF FRACTION *n*-HEXANE, ETHYL ACETATE AND FRACTION OF WATER FROM ETANOLIK EXTRACT COTTONWOOD LEAVES (*Ceiba pentandra* Gaertn) AGAINST BACTERIA *Escherichia coli* ATCC 25922, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Cottonwood leaves (*Ceiba pentandra* Gaertn) contain saponin, flavonoid, tannin and terpenoid. The aim of the experiment was to find out the activity of *n*-hexane fraction, ethyl acetate fraction, water fraction and ethanol extract of Cottonwood leaves (*Ceiba pentandra* Gaertn) as antibacterial against *Escherichia coli* ATCC® 25922.

Cottonwood leaves powder macerated with 70% ethanol, and then fractionated using *n*-hexane, ethyl acetate, and water solvents. Ethanolic extract, *n*-hexane, ethyl acetate, and water fractions were tested antibacterial activity using dilution method with concentrations of 50%, 25%, 12.5%, 6.25%, 3.12%, 1.56%, 0.78%, 0.39%, and 0.19%.

The results showed that the ethyl acetate fraction, the fraction of water and ethanolic extract cottonwood leaves has antibacterial activity against *Escherichia coli* with minimum levels of suicide in a row is 12.5%, 50%, and 50%, whereas *n*-hexane fraction did not provide minimum levels of killing up to concentration 50%. The results of this dilution method showed that the fraction of ethyl acetate has the most effective antibacterial activity against *Escherichia coli* ATCC 25922

Keywords: *Ceiba pentandra* Gaertn, *Escherichia coli* ATCC 25922, dilution, antibacterial, the fraction of *n*-hexane, ethyl acetate fraction, the fraction of water.