

INTISARI

ARVIAN, D.W., 2019, UJI AKTIVITAS ANTIBAKTERI EKSTRAK, FRAKSI *n*-HEKSANA, ETIL ASETAT DAN AIR DAUN SENDUDUK BULU [*Clidemia hirta* (L). D. DON] TERHADAP *Staphylococcus aureus* ATCC 25923 DAN *Escherichia coli* ATCC 25922, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Tanaman senduduk bulu [*Clidemia hirta* (L). D. Don] berkhasiat sebagai obat luka, infeksi bakteri dan diare. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri ekstrak, fraksi *n*-heksana, etil asetat dan air daun senduduk bulu terhadap *Staphylococcus aureus* ATCC 25923 dan *Escherichia coli* ATCC 25922, fraksi teraktif dan nilai KHM serta KBM.

Daun senduduk bulu diekstraksi dengan pelarut etanol 96%, di fraksinasi menggunakan pelarut *n*-heksana, etil asetat dan air. Ekstrak dan fraksi diuji antibakteri dengan metode difusi, konsentrasi 20%, 10% dan 5% dan metode dilusi konsentrasi 20%, 10%, 5%, 2,5%, 1,25%, 0,625%, 0,312%, 0,156%, 0,078% dan 0,039%. Data yang diperoleh dilakukan analisa statistik menggunakan *two way* ANOVA dilanjutkan uji Tukey.

Hasil penelitian menunjukkan bahwa ekstrak dan fraksi daun senduduk bulu mempunyai aktivitas antibakteri terhadap *Staphylococcus aureus* ATCC 25923 dan *Escherichia coli* ATCC 25922. Fraksi etil asetat daun senduduk bulu konsentrasi 20% memiliki aktivitas antibakteri teraktif, Konsentrasi Bunuh Minimum (KBM) sebesar 0,625% terhadap *Staphylococcus aureus* ATCC 25923 dan sebesar 1,25% terhadap *Escherichia coli* ATCC 25922.

Kata kunci : Daun senduduk bulu, *Staphylococcus aureus* ATCC 25923, *Escherichia coli* ATCC 25922, antibakteri.

ABSTRACT

ARVIAN, D.W., 2019, TEST OF THE ANTIBACTERIAL ACTIVITIES OF EXTRACT, *n*-HEKSANA, ETHYL ASETAT AND WATER FRACTIONS OF SENDUDUK BULU [*Clidemia hirta* (L). D. DON] AGAINST *Staphylococcus aureus* ATCC 25923 AND *Escherichia coli* ATCC 25922, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Senduduk bulu plants [*Clidemia hirta* (L). D. Don] is efficacious as a medicine for wounds, bacterial infections and diarrhea. The aim of this study was to determine antibacterial activity of extract, n-hexane, ethyl acetate and water fractions of senduduk bulu leaves against *Staphylococcus aureus* ATCC 25923 and *Escherichia coli* ATCC 25922, the most active fraction, MIC and MBC value.

Senduduk bulu leaves were extracted with ethanol 96% and fractionated using n-hexane, ethyl acetat and water. Antibacterial activities of extract and fractions were tested by diffusion method concentration 20%, 10% and 5% and dilution method concentration 20%, 10%, 5%, 2.5%, 1.25%, 0.625%, 0.312%, 0.156%, 0.078% and 0.039%. The data obtained were carried out statistical analysis using *two way* ANOVA followed by the Tukey test.

The results showed that the extracts and leaf fractions of senduduk bulu had antibacterial activity against *Staphylococcus aureus* ATCC 25923 and *Escherichia coli* ATCC 25922. The ethyl acetate fraction of senduduk bulu leaves concentration of 20% had the most active antibacterial activity, Minimum Bactericidal Concentration (MBC) of 0.625% against *Staphylococcus aureus* ATCC 25923 and 1.25% against *Escherichia coli* ATCC 25922.

Key words: Senduduk bulu leave, *Staphylococcus aureus* ATCC 25923, *Escherichia coli* ATCC 25922, antibacterial.