

INTISARI

ARUM, L.L., 2021, UJI AKTIVITAS ANTIBAKTERI FRAKSI N-HEKSAN, ETIL ASETAT, DAN AIR DARI EKSTRAK ETANOL DAUN KAYU PUTIH (*Melaleuca leucadendron* L.) TERHADAP BAKTERI *Staphylococcus aureus* ATCC 25923, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun kayu putih (*Melaleuca leucadendron* L.) mengandung senyawa tanin, flavonoid, dan saponin yang berkhasiat untuk mengobati infeksi bakteri. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri dari fraksi *n*-heksan, etil asetat, air, dan ekstrak daun kayu putih, mengetahui fraksi yang paling aktif, mengetahui Konsentrasi Hambat Mimum dan Konsentrasi Bunuh Minimum dari fraksi teraktif terhadap *Staphylococcus aureus* ATCC 25923.

Serbuk daun kayu putih diekstraksi dengan pelarut etanol 96%, difraksinasi menggunakan pelarut *n*-heksan, etil asetat, dan air. Fraksi dan ekstrak diuji antibakteri terhadap *Staphylococcus aureus* ATCC 25923 menggunakan metode difusi pada konsentrasi 20%, 10%, 5%, dan metode dilusi konsentrasi 20%; 10%; 5%; 2,5%; 1,25%; 0,62%; 0,31%; 0,15%; 0,07%; 0,03%. Kontrol positif antibiotik cefadroxil dan kontrol negatif DMSO 5%. Hasil yang diperoleh pada metode difusi dilakukan analisis data menggunakan ANOVA.

Hasil penelitian menunjukkan bahwa terdapat aktivitas antibakteri terhadap *Staphylococcus aureus* ATCC 25923 pada ekstrak dan fraksi daun kayu putih. Daya hambat terbesar yakni fraksi etil asetat pada konsentrasi 20%. Fraksi teraktif yaitu fraksi etil asetat dengan nilai KBM sebesar 0,62%.

Kata kunci : Daun kayu putih (*Melaleuca leucadendron* L.), fraksinasi, antibakteri, *Staphylococcus aureus* ATCC 25923.

ABSTRACT

ARUM, L.L., 2021, ANTIBACTERIAL ACTIVITY TEST OF N-HEXANE, ethyl acetate, AND WATER FROM ETHANOL EXTRACT OF WHITE LEAF (*Melaleuca leucadendron* L.) AGAINST THE BACTERIA *Staphylococcus aureus* ATCC 25923, FACULTY OF FACULTY.

Eucalyptus leaves (*Melaleuca leucadendron* L.) contain tannins, flavonoids, and saponins which are effective for treating bacterial infections. This study aimed to determine the antibacterial activity of the n-hexane, ethyl acetate, water, and eucalyptus leaf extract fractions, to determine the most active fraction, to determine the Minimum Inhibitory Concentration and Minimum Bactericidal Concentration values of the most active fraction against *Staphylococcus aureus* ATCC 25923.

Eucalyptus leaf powder was extracted with 96% ethanol solvent, fractionated using n-hexane, ethyl acetate, and water as solvents. The fractions and extracts were tested for antibacterial against *Staphylococcus aureus* ATCC 25923 using the diffusion method at a concentration of 20%, 10%, 5%, and the dilution method at a concentration of 20%; 10%; 5%; 2,5%; 1,25%; 0,62%; 0.31%; 0.15%; 0.07%; 0.03%. The positive control was cefadroxil antibiotic and the negative control was DMSO 5%. The results obtained in the diffusion method were analyzed using ANOVA.

The results showed that there was antibacterial activity against *Staphylococcus aureus* ATCC 25923 in the extract and fraction of eucalyptus leaves. The greatest inhibition was the ethyl acetate fraction at a concentration of 20%. The most active fraction was the ethyl acetate fraction with a KBM value of 0.62%.

Keywords : Eucalyptus leaves (*Melaleuca leucadendron* L.), fractionation, antibacterial, *Staphylococcus aureus* ATCC 25923.