

INTISARI

AMRULLAH, M. A., 2021, UJI AKTIVITAS ANTIBAKTERI FRAKSI N-HEKSAN, ETIL ASETAT, AIR DARI DAUN SENGGANI (*Melastoma polyanthum* Bl.) TERHADAP PERTUMBUHAN BAKTERI *Staphylococcus aureus*, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun senggani (*Melastoma polyanthum* Bl.) diketahui memiliki aktivitas antibakteri terhadap bakteri *Staphylococcus aureus*. Daun ini diketahui berkhasiat sebagai antibakteri karena mengandung senyawa seperti flavonoid, tanin, dan saponin. *Staphylococcus aureus* merupakan bakteri yang dapat menyebabkan keracunan makanan, dan juga infeksi lesi kulit. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri dari daun senggani dan mengetahui nilai Konsentrasi Hambat Minimum (KHM) dan Konsentrasi Bunuh Minimum (KBM) dari daun senggani terhadap pertumbuhan bakteri *Staphylococcus aureus*.

Daun senggani diekstraksi dengan metode maserasi dengan pelarut etanol 96%. Ekstrak daun senggani difraksinasi metode ekstraksi cair-cair dengan pelarut n-heksan, etil asetat, dan air. Fraksi ekstrak daun senggani di uji aktivitas antibakteri dengan metode difusi dengan 3 seri konsentrasi 20%, 10%, dan 5%. Konsentrasi fraksi teraktif di uji konsentrasi hambat minimum dan konsentrasi bunuh minimum dengan metode dilusi 20%, 10%, 5%, 2,5%, 1,25%, 0,625%, 0,312%, 0,156%, 0,078% dan 0,039%. Data dianalisis secara statistik menggunakan aplikasi SPSS dengan uji *One Way* ANOVA dilanjutkan uji Tukey.

Hasil penelitian menunjukkan bahwa ekstrak dan fraksi daun senggani mempunyai aktivitas antibakteri terhadap *Staphylococcus aureus*. Fraksi etil asetat daun senggani konsentrasi 20% memiliki aktivitas antibakteri teraktif dan Konsentrasi Bunuh Minimum (KBM) sebesar 1,25% terhadap *Staphylococcus aureus*.

Kata kunci: *Melastoma polyanthum*, antibakteri, *Staphylococcus aureus*.

ABSTRACT

AMRULLAH, M. A., 2021, ANTIBACTERIAL ACTIVITY TEST OF N-HEXANE, ETHYL ACETATE, WATER FROM SENGGANI LEAF (*Melastoma polyanthum* Bl.) AGAINST *Staphylococcus aureus*, Thesis, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA

Senggani plant (*Melastoma polyanthum* Bl.) is known to have antibacterial activity against *Staphylococcus aureus* bacteria. This plant is known to have antibacterial properties because it contains compounds such as flavonoids, tannins, and saponins. *Staphylococcus aureus* is a bacterium that can cause food poisoning, as well as infection of skin lesions. This study aimed to determine the antibacterial activity of senggani leaves and to determine the value of the Minimum Inhibitory Concentration (MIC) and Minimum Kill Concentration (MBC) of the senggani leaves against the growth of *Staphylococcus aureus* bacteria.

Senggani leaves were extracted by maceration method with 96% ethanol as solvent. Senggani leaf extract was fractionated by liquid-liquid extraction method with n-hexane, ethyl acetate, and water as solvents. Senggani leaf extract fraction was tested for antibacterial activity by diffusion method with 3 series of concentrations of 20%, 10%, and 5%. The concentration of the most active fraction was tested for minimum inhibitory concentration and minimum kill concentration using the dilution method of 20%, 10%, 5%, 2.5%, 1.25%, 0.625%, 0.312%, 0.156%, 0.078% and 0.039%. The data were analyzed statistically using SPSS application with One Way ANOVA test followed by Tukey test.

The results showed that the extract and fraction of senggani leaves had antibacterial activity against *Staphylococcus aureus*. The ethyl acetate fraction of senggani leaves with a concentration of 20% had the most active antibacterial activity and a Minimum Kill Concentration (KBM) of 1.25% against *Staphylococcus aureus*.

Keyword: *Melastoma polyanthum*, antibacterial, *Staphylococcus aureus*.