

INTISARI

SURYAKU, N.I., 2017, UJI AKTIVITAS ANTIBAKTERI FRAKSI *n*-HEKSAN, ETIL ASETAT DAN AIR DARI EKSTRAK ETANOLIK DAUN UNGU (*Graptophyllum pictum* (L.) Griff) TERHADAP *Staphylococcus aureus* ATCC 25923. SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Penyakit infeksi merupakan salah satu masalah kesehatan terbesar di negara berkembang, salah satunya yaitu di Indonesia. *Staphylococcus aureus* merupakan penyebab 70% kasus infeksi nosokomial dan penyebab infeksi piogenik. Daun ungu diketahui mengandung flavonoid, saponin, tannin, alkaloid, steroid. Tujuan penelitian ini untuk mengetahui aktivitas fraksi *n*-heksan, etil asetat dan air dari ekstrak etanol daun ungu (*Graptophyllum pictum* (L.) Griff) sebagai antibakteri terhadap *S. aureus* ATCC 25923.

Serbuk daun ungu diekstraksi menggunakan metode maserasi dengan pelarut etanol 96%, dan difraksinasi menggunakan pelarut *n*-heksan, etil asetat dan air yang berbeda polaritasnya. Uji aktivitas antibakteri dilakukan dengan metode difusi menggunakan konsentrasi 50%, 25%, dan 12,5%. Fraksi teraktif kemudian dilakukan uji dilusi untuk mengetahui KHM dan KBM menggunakan konsentrasi 50%, 25%, 12,5%, 6,25%, 3,125%, 1,563%, 0,80%, 0,40%, 0,20%, 0,10%. Analisis statistik menggunakan ANOVA *oneway* untuk mengetahui ada tidaknya perbedaan yang signifikan dari sediaan uji.

Hasil uji aktivitas antibakteri dari ekstrak, fraksi *n*-heksan, etil asetat, dan air dengan metode difusi pada konsentrasi 50% menghasilkan zona hambat sebesar 12,99 mm; 11,33 mm; 17,11 mm; dan 12,77 mm. Hasil penelitian menunjukkan bahwa semua fraksi dan ekstrak mempunyai aktivitas antibakteri. Fraksi etil asetat dari ekstrak etanol daun ungu mempunyai aktivitas antibakteri paling aktif terhadap bakteri *S. aureus* ATCC 25923 dengan nilai KBM sebesar 12,5%. Hasil identifikasi fitokimia menunjukkan fraksi etil asetat mengandung flavonoid, alkaloid, dan steroid.

Kata kunci: antibakteri, *staphylococcus aureus*, daun ungu, fraksinasi, difusi, dilusi, *Graptophyllum pictum* (L.) Griff

ABSTRACT

SURYAKU, N.I., 2017, ANTIBACTERIAL ACTIVITY TEST OF n-HEXANE, ETHYL ACETATE AND WATER FRACTIONS FROM ETHANOL EXTRACT OF PURPLE LEAF (*Graptophyllum pictum* (L.) Griff) AGAINST *Staphylococcus aureus* ATCC 25923, SKRIPSI, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Infection disease is one of the biggest health problems in developing countries, one of which is in Indonesia. *Staphylococcus aureus* is the cause of 70% of cases of nosocomial infections and causes of pyogenic infections. Purple leaf are known to contain flavonoids, saponins, tannins, alkaloids, steroids. The purpose of the study was to determine the activity of n-hexane, ethyl acetate, and water fractions from ethanol extract purple leaf (*Graptophyllum pictum* (L.) Griff) as antibacterial against *S. aureus* ATCC 25923.

The purple leaf powder was extracted using a maceration method with 96% ethanol solvent, then fractionated using n-hexane, ethyl acetate and water solvents with different polarities. The test of the antibacterial activity was performed by using diffusion concentration 50%, 25%, and 12,5%. Then, the most active fractions were diluted to determine MIC and MKC using concentrations of 50%, 25%, 12.5%, 6.25%, 3.125%, 1.563%, 0.781%, 0.391%, 0.196%, 0.098%. Statistic alanalysis in this study using ANOVA one way to determine whether there is a significant difference from the test preparation.

The results of antibacterial activity test of extract, n-hexane, ethyl acetate, and water fractions with diffusion method at concentration 50% resulted in inhibition zone of 12.99 mm; 11.33 mm; 17.11 mm; And 12.77 mm. The results showed that all fractions and extracts had antibacterial activity. The ethyl acetate fraction of purple leaf's ethanol extract has the most active antibacterial activity against *S. aureus* ATCC 25923 with MKC value of 12.5%. The results of phytochemical identification showed ethyl acetate fraction containing flavonoids, alkaloids, and steroids.

Keywords: Antibacterial, *staphylococcus aureus*, purple leaf, fractionation, diffusion, dilution, *Graptophyllum pictum* (L.) Griff