

INTISARI

ASUK, B.M.F., 2017., UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL, FRAKSI *n*-HEKSANA, ETIL ASETAT DAN AIR DAUN BUGENVIL (*Bougainvillea spectabilis*) TERHADAP *Pseudomonas aeruginosa* ATCC 27853. SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun bugenvil (*Bougainvillea spectabilis*) mempunyai kandungan kimia flavonoid, alkaloid, tanin, saponin dan triterpenoid yang diduga memiliki aktivitas antibakteri. Penelitian ini bertujuan untuk mengetahui kemampuan ekstrak etanol, fraksi *n*-heksana, etil asetat, dan air dari daun bugenvil (famili Nyctaginaceae) terhadap *Pseudomonas aeruginosa* ATCC 27853.

Daun bugenvil diekstraksi menggunakan etanol 70% lalu difraksinasi menggunakan pelarut *n*-heksana, etil asetat dan air. Ekstrak dari hasil fraksi diuji aktivitas antibakterinya menggunakan metode dilusi dan difusi. Metode difusi dengan konsentrasi 50%, 25%, 12,5% dan kontrol positif kotrimoksazol 4,8 mg. Metode dilusi menggunakan seri pengenceran 50%, 25 %, 12,5 %, 6,25 %, 3,12%. 1,56%, 0,78%, 0,39%, 0,1 %, 0,09%.

Hasil penelitian menunjukkan bahwa fraksi etil asetat mempunyai aktivitas antibakteri terbaik dibandingkan fraksi *n*-heksana, fraksi air, dan ekstrak etanol daun bugenvil. Aktivitas terbaik pada fraksi etil asetat dari ekstrak etanol daun bugenvil pada konsentrasi 50% dengan zona hambat 17,33 mm. KBM (Konsentrasi Bunuh Minimum) fraksi etil asetat dari ekstrak etanol daun bugenvil yang dapat membunuh *Pseudomonas aeruginosa* ATCC 27853 adalah konsentrasi 3,12%.

Kata kunci: daun bugenvil, fraksinasi, uji antibakteri, *Pseudomonas aeruginosa* ATCC 27853.

ABSTRACT

ASUK, B.M.F., 2017., TEST ANTIBACTERIAL ACTIVITY ETHANOL EXTRACT, *n*-HEXANE FRACTION, ETHYL ACETATE AND WATER BOUGAINVILLEA LEAF (*Bougainvillea spectabilis*) AGAINST *Pseudomonas aeruginosa* ATCC 27853. THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Bougainvillea (*Bougainvillea spectabilis*) leaf has chemical contents of flavonoid, alkaloid, tannin, saponin and triterpenoids suspected of having antibacterial activity. This study aims to determine the ability of ethanol extract, fraction of *n*-hexane, ethyl acetate and water from the *Bougainvillea* leaf (family Nyctaginaceae) against *Pseudomonas aeruginosa* ATCC 27853.

Bougainvillea leaf was extracted using percolation method with 70% ethanol and then fractionated using *n*-hexane, ethyl acetate and water. Extract and fractions were tested for their antibacterial activity using diffusion and dilution methods. Diffusion method with concentrations of 50%, 25%, 12.5% and a positive control cotrimoxazole 4.8 mg. Dilution method using serial dilutions of 50%, 25%, 12.5%, 6.25%, 3.12%, 1.56%, 0.78%, 0.39%, 0.1%, 0.09%.

The results of this study showed that the fraction of ethyl acetate has the best antibacterial activity compared to the *n*-hexane fraction, water fraction and leaf ethanol extract of *Bougainvillea* leaf. The best activity in the ethyl acetate fraction of the ethanol extract of *Bougainvillea* leaf at a concentration of 50%, with an inhibition zone of 17.33 mm. MCK (Minimum Killing Concentration) of the ethyl acetate fraction of the ethanol extract of *Bougainvillea* leaf to kill *Pseudomonas aeruginosa* ATCC 27853 is a concentration of 3.12%.

Keyword: *Bougainvillea* leaf, fractionation, antibacterial assay, *Pseudomonas aeruginosa* ATCC 27853