

INTISARI

KURNIAWATI, R., 2018. UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL, FRAKSI *n*-HEKSANA, ETIL ASETAT, DAN AIR DARI BUAH BIDARA (*Zizyphus mauritiana* Lamk.) TERHADAP *Staphylococcus aureus* ATCC 25923, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Tumbuhan bidara dikenal dengan nama latin *Zizyphus mauritiana* Lamk. merupakan tanaman yang memiliki banyak khasiat dalam pengobatan tradisional. Bidara diketahui memiliki manfaat sebagai antioksidan, antimikroba, antidiare, antidiabetik, hepatoprotektif, dan antikanker. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri ekstrak etanol, fraksi *n*-heksana, etil asetat, dan air dari buah bidara terhadap *Staphylococcus aureus* ATCC 25923.

Buah bidara diekstraksi dengan metode maserasi dengan pelarut etanol 70%. Ekstrak yang diperoleh difraksinasi dengan pelarut *n*-heksana, etil asetat, dan air. Hasil fraksinasi diuji aktivitas antibakteri terhadap *Staphylococcus aureus* ATCC 25923 menggunakan metode difusi dengan konsentrasi 50%, 25%, 12,5% dan metode dilusi untuk dengan konsentrasi 50%, 25%, 12,5%, 6,25%, 3,13%, 1,57%, 0,79%, 0,40%, 0,20%, 0,10%.

Hasil penelitian menunjukkan bahwa ekstrak etanol, fraksi *n*-heksana, etil asetat, dan air dari buah bidara memiliki aktivitas antibakteri terhadap *Staphylococcus aureus* ATCC 25923. Konsentrasi 50% dari fraksi etil asetat memiliki aktivitas antibakteri paling efektif dengan diameter hambat sebesar 18,67 mm dan Konsentrasi Bunuh Minimum (KBM) sebesar 3,13% terhadap *Staphylococcus aureus* ATCC 25923.

Kata kunci: bidara (*Zizyphus mauritiana* Lamk.), *Staphylococcus aureus* ATCC 25923, antibakteri, fraksi *n*-heksana, etil asetat, dan air.

ABSTRACT

KURNIAWATI, R., 2018. ANTIBACTERIAL ACTIVITY TEST OF ETHANOL EXTRACT, FRACTION *n*-HEXANE, ETHYL ACETATE AND WATER FROM FRUIT BIDARA (*Zizyphus mauritiana* Lamk.) AGAINST *Staphylococcus aureus* ATCC 25923, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

The bidara plant known by the Latin name *Zizyphus mauritiana* Lamk. is a plant that has many benefits in traditional medicine. Bidara is known to have benefits as antioxidant, antimicrobial, antidiarrheal, antidiabetic, hepatoprotective, and anticancer. This study aims to determine the antibacterial activity of ethanol extract, fraction *n*-hexane, ethyl acetate, and water from the fruit bidara against *Staphylococcus aureus* ATCC 25923.

Fruit bidara was extracted by maceration method with ethanol 70% solvent. The extracts obtained were fractionated with solvents *n*-hexane, ethyl acetate, and water. Fractionation results were tested for antibacterial activity against *Staphylococcus aureus* ATCC 25923 using diffusion method with concentrations of 50%, 25%, 12.5% and dilution methods with concentrations of 50%, 25%, 12.5%, 6.25%, 3, 13%, 1.57%, 0.79%, 0.40%, 0.20%, 0.10%.

The results showed that ethanol extract, fractions *n*-hexane, ethyl acetate, and water of bidara had antibacterial activity against bacteria *Staphylococcus aureus* ATCC 25923. Concentration of 50% of ethyl acetate fraction had the most effective antibacterial activity with inhibitory diameter of 18.67 mm and Minimum Bactericidal Concentration (MBC) of 3,13% against *Staphylococcus aureus* ATCC 25923.

Keywords: bidara (*Zizyphus mauritiana* Lamk.), *Staphylococcus aureus* ATCC 25923, antibacterial, fraction *n*-hexane, ethyl acetate, and water.