

INTISARI

BARAJA, M. 2020. KAJIAN AKTIVITAS ANTIBAKTERI DARI EKSTRAK ETANOL DAN FRAKSI GENUS *Angelica* TERHADAP BERBAGAI BAKTERI. SKRIPSI. FAKULTAS FARMASI. UNIVERSITAS SETIA BUDI SURAKARTA.

Tanaman dengan genus *Angelica* contohnya *ashitaba* merupakan tanaman yang dapat digunakan sebagai obat tradisional dan mengandung senyawa alkaloid, saponin, tanin, dan flavonoid yang dipercaya mempunyai aktivitas antibakteri. Tujuan dari penelitian ini adalah untuk mengetahui aktivitas antibakteri ekstrak etanol dan fraksi dari tanaman genus *Angelica* terhadap berbagai bakteri.

Serbuk daun *ashitaba* diekstraksi dengan metode maserasi menggunakan pelarut etanol 70%. Ekstrak yang diperoleh difraksinasi dengan pelarut n-heksana, etil asetat, dan air. Rendemen ekstrak etanol yang diperoleh sebesar 16,77%. Hasil data aktivitas antibakteri didapatkan dengan cara *literature review* yang menunjukkan ekstrak etanol dan fraksi genus *Angelica* terhadap berbagai bakteri memiliki aktivitas antibakteri.

Berdasarkan hasil *literature review* pada metode difusi fraksi etil asetat konsentrasi 40% dari daun *Angelica keiskei* memiliki aktivitas antibakteri paling aktif terhadap bakteri *Staphylococcus aureus* dengan diameter hambat sebesar 20,5 mm. Pada metode dilusi ekstrak etanol dari batang *Angelica keiskei* didapatkan nilai KHM 6%-8% terhadap bakteri *Mycobacterium tuberculosis* dan fraksi etil asetat dari *Angelica keiskei* didapatkan nilai KBM 10% terhadap bakteri *Staphylococcus aureus* dan *Salmonella thypi*.

Kata kunci: Antibakteri; *ashitaba*; *Angelica*; fraksi; bakteri

ABSTRACT

BARAJA, M. 2020. STUDY OF ANTIBACTERIAL ACTIVITY FROM ETHANOL EXTRACT AND FRACTION OF GENUS *Angelica* AGAINST VARIOUS BACTERIA. THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Genus *Angelica* plants for example *ashitaba* used as traditional medicine and contained chemical compounds as alkaloids, saponins, tannins, and flavonoids that are believed to have antibacterial activity. The purpose of this study was to determine activity of ethanolic extract and fraction genus *Angelica* as antibacterial against various bacteria.

Ashitaba powder was extracted with ethanol 70% by maceration method. Extract was collected and fractionated with *n*-hexane, ethyl acetate and water. The yield of ethanolic extract was 16,77%. The results of antibacterial activity data were obtained by literature review which showed ethanol extract and fraction genus *Angelica* against various bacteria had antibacterial activity.

Based on the literature review, the diffusion method of ethyl acetate fraction with a concentration of 40% from *Angelica keiskei* leaves, has the most active antibacterial activity against *Staphylococcus aureus* with an inhibitory diameter of 20.5 mm. In the dilution method of ethanol extract from *Angelica keiskei* stems, the MIC value of 6% -8% was obtained against *Mycobacterium tuberculosis* and ethyl acetate fraction from *Angelica keiskei*, obtained KBM values of 10% against *Staphylococcus aureus* and *Salmonella thypi*.

Keywords: Antibacterial; *ashitaba*; *Angelica*; fraction; bacteria