

INTISARI

DAYANI, G.I., 2018, UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL, FRAKSI *n*-HEKSAN, ETIL ASETAT DAN AIR DARI DAUN BELIMBING WULUH (*Averrhoa bilimbi* L.) TERHADAP BAKTERI *Shigella dysenteriae*, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun belimbing wuluh (*Averrhoa bilimbi* L.) adalah tanaman yang digunakan secara empiris sebagai obat disentri. Kandungan kimia daun belimbing wuluh adalah flavonoid, saponin dan tanin. Penelitian ini dilakukan untuk mengetahui aktivitas antibakteri ekstrak etanol, fraksi *n*-heksan, etil asetat dan air dari daun belimbing wuluh (*Averrhoa bilimbi* L.), ketiga fraksi teraktif, dan Konsentrasi Hambat Minimum dan Konsentrasi Bunuh Minimum dari fraksi teraktif terhadap *Shigella dysenteriae*.

Ekstraksi daun belimbing wuluh menggunakan metode maserasi dengan pelarut etanol 70%, kemudian difraksinasi menggunakan pelarut *n*-heksan, etil asetat dan air. Hasil ekstraksi dan fraksinasi dilakukan uji aktivitas antibakteri terhadap *Shigella dysenteriae* menggunakan metode difusi dengan konsentrasi 50%, 25%, 12,5% dan metode dilusi dengan konsentrasi 50%, 25%, 12,5%, 6,25%, 3,12%, 1,56%, 0,78%, 0,39%, 0,19% dan 0,09%.

Hasil uji metode difusi menunjukkan fraksi etil asetat memiliki daya hambat paling aktif terhadap *Shigella dysenteriae* yaitu 12,43 mm pada konsentrasi 50%. Konsentrasi Bunuh Minimum (KBM) fraksi etil asetat terhadap *Shigella dysenteriae* adalah konsentrasi 12,5% dengan menggunakan metode dilusi cair.

Kata kunci: daun belimbing wuluh (*Averrhoa bilimbi* L.), *Shigella dysenteriae*, uji aktivitas antibakteri, fraksi

ABSTRACT

DAYANI, G.I., 2018, ANTIBACTERIAL ACTIVITY TESTS OF ETHANOL EXTRACT, *n*-HEXANE FRACTION, ETHYL ACETATE AND WATER FROM BELIMBING WULUH LEAVES (*Averrhoa bilimbi* L.) TOWARD *Shigella dysenteriae* BACTERIA, SETIA BUDI UNIVERSITY, SURAKARTA.

Belimbing wuluh leaves (*Averrhoa bilimbi* L.) is a plant which is used empirically as a medicine for dysentery. The chemical contents of belimbing wuluh leaves are flavonoids, saponins and tannin. This research was conducted to know the antibacterial activities of ethanol extract, *n*-hexane fraction, ethyl acetate and water from belimbing wuluh leaves (*Averrhoa bilimbi* L.), the three most active fractions, and Minimum Inhibition Concentration and Minimum Kill Concentration from active fraction toward *Shigella dysenteriae*.

The extraction of belimbing wuluh leaves used maceration method with 70% of ethanol solvent, and then it was fractionated by using *n*-hexane solvent, ethyl acetate and water. The results of extraction and fractionation were tested of antibacterial activity toward *Shigella dysenteriae* using diffusion method with 50%, 25%, 12,5% concentrations and dilution method with 50%, 25%, 12,5%, 6,25%, 3,12 %, 1,56%, 0,78%, 0,39%, 0,19% and 0,09% concentrations.

The test result of diffusion method showed that ethyl acetate fraction has the most active inhibitory effect on *Shigella dysenteriae* which is 12,43 mm at concentration 50%. Minimum Kill Concentration (MKC) ethyl acetate fraction toward *Shigella dysenteriae* is concentration 12,5% by using dilution liquid method.

Key words: belimbing wuluh leaves (*Averrhoa bilimbi* L.), *Shigella dysenteriae*, antibacterial activity test, fraction