

ABSTRAK

Nama : Fadlilatunnisa
Program Studi : Farmasi
Judul : Uji Aktivitas Antifungi Ekstrak Etanol 70% Buah Kapulaga (*Wuerfbainia compacta* Sol. Ex Maton) Terhadap *Candida albicans* dan *Trichophyton rubrum*

Kapulaga (*Wurfbainia compacta* Sol. ex Maton) merupakan salah satu tanaman yang dapat dimanfaatkan sebagai obat tradisional. Buah kapulaga mengandung senyawa metabolit sekunder seperti alkaloid, flavonoid, tannin, saponin, steroid dan triterpenoid yang dapat digunakan sebagai antimikroba. Tujuan penelitian ini untuk mengevaluasi aktivitas antifungi ekstrak etanol 70% buah kapulaga (*Wurfbainia compacta* Sol. ex Maton) terhadap Fungi *Trichophyton rubrum* dan *Candida albicans*. Pengujian aktivitas antifungi dilakukan dengan mengukur diameter daya hambat (DDH) Menggunakan metode difusi sumuran dan mengukur konsentrasi hambat minimum (KHM) serta konsentrasi bunuh minimum (KBM) menggunakan metode dilusi agar padat. Konsentrasi ekstrak yang digunakan pada pengujian DDH yaitu 20%, 40%, 60% dan 80%. Kontrol positif digunakan ketokonazole. Kontrol negatif digunakan DMSO 10%. Pengujian KHM dilakukan pada konsentrasi 20%, 40%, 60% dan 80%. Hasil penelitian menunjukkan bahwa pada konsentrasi *Tricophyton rubrum* memiliki diameter daya hambat (DDH) sebesar 10,1 mm. Sementara itu, KHM pada *Tricophyton rubrum* terdapat pada konsentrasi 80%. Nilai KBM *Tricophyton rubrum* terdapat pada konsentrasi 40%. Kesimpulan yang diperoleh ekstrak etanol buah kapulaga berpotensi sebagai antifungi.

Kata kunci : Antifungi, Buah Kapulaga, Etanol 70%, *Wuerfbainia compacta* Sol. Ex Maton

ABSTRACT

Name : Fadlilatunnisa
Study program : Pharmacy
Title : Antifungal Activity Test of 70% Ethanol Extract of Cardamom Fruit (*Wurfbainia compacta* Sol. Ex Maton) Against the *Candida albicans* and *Trichophyton rubrum*

Cardamom (*Wurfbainia compacta* Sol. ex Maton) is a plant that can be used as traditional medicine. Cardamom fruit contains secondary metabolite compounds such as alkaloids, flavonoids, tannins, saponins, steroids and triterpenoids which can be used as antimicrobials. The aim of this study was to evaluate the antifungal activity of 70% ethanol extract of cardamom fruit (*Wurfbainia compacta* Sol. ex Maton) against the *Candida albicans* and *Trichophyton rubrum*. Antifungal activity testing was carried out by measuring the inhibitory diameter (DDH) using the well diffusion method and measuring the minimum inhibitory concentration (MIC) and minimum kill concentration (KBM) using the solid agar dilution method. Extract concentrations used in the DDH test were 20%, 40%, 60% and 80%. The positive control used ketoconazole. The negative control used 10% DMSO. MIC testing was carried out at concentrations of 20%, 40%, 60% and 80%. The results of the study showed that the concentration of *Tricophyton rubrum* had a diameter of inhibition (DDH) of 10.1 mm. Meanwhile, the MIC in *Tricophyton rubrum* is at a concentration of 80%. The KBM value of *Tricophyton rubrum* is found at a concentration of 40%. The conclusion obtained is that the ethanol extract of cardamom fruit has the potential to be an antifungal.

Keywords: Antifungal, Cardamom Fruit, Ethanol 70%, *Wurfbainia compacta* Sol. Ex Maton