UJI AKTIVITAS ANTIJAMUR EKSTRAK ETIL ASETAT BUAH TERONG UNGU (*Solanum melongena L.*) TERHADAP JAMUR *Candida tropicalis*

ABSTRAK

Buah terong ungu mengandung senyawa metabolit sekunder yang berkhasiat sebagai antimikroba. Ekstrak buah terong ungu sudah banyak diteliti dan diketahui mampu menghambat pertumbuhan jamur. Penelitian ini memilih jamur *Candida tropicalis* karena jamur tersebut rentan terhadap antibiotik dan telah ditetapkan sebagai *emergency pathogenic.* Penelitian ini bertujuan untuk mengetahui besarnya Konsentrasi Hambat Minimum (KHM) dan Konsentrasi Bunuh Minimum (KBM) ekstrak etil asetat buah terong ungu terhadap pertumbuhan jamur *C. tropicalis*. Desain penelitian ini yaitu *true experimental* secara *in vitro* dengan perlakuan terdiri atas kontrol negatif (tanpa pemberian jamur), kontrol media RPMI, Ekstrak 40 mg/mL, 20 mg/mL, 10 mg/mL, 5 mg/mL, dan kontrol pelarut DMSO 10%. Uji KHM melalui pengamatan langsung menggunakan metode *microbroth dilution* dalam *mikroplate* 96 *well*. Uji KBM menggunakan teknik *spread plate* yang dihitung dengan rumus *Total Plate Count*. Ekstrak etil asetat buah terong ungu memiliki KHM dan KBM yang sama yaitu pada konsentrasi 20 mg/mL. Konsentrasi ekstrak 20 mg/mL sudah mampu memberikan hambatan sebesar 100% terhadap pertumbuhan jamur *C. troicalis*. Daya hambat pertumbuhan jamur semakin besar seiring dengan peningkatan dosis ekstrak. Ekstrak etil asetat buah terong ungu memiliki aktivitas antijamur terhadap jamur *C. tropicalis*.

Kata kunci: *Candida tropicalis*, ekstrak etil asetat buah terong ungu (*Solanum melongena L*), Konsentrasi Bunuh Minimum (KBM), Konsentrasi Hambat Minimum (KHM), *microbroth dilution*

ANTIFUNGAL ACTIVITY OF ETHYL ACETATE EXTRACT OF PURPLE EGGPLANT (Solanum melongena L.) FRUIT AGAINST Candida tropicalis

ABSTRACT

Purple eggplant contains secondary metabolites that are useful as antimicrobials. The purple eggplant fruit extract has been known to inhibit fungal growth. This study used Candida tropicalis because it was susceptible to antibiotics and has become an emergency pathogenic. This study aimed to determine the Minimum Inhibitory Concentration (MIC) and Minimum Fungicidal Concentration (MFC) of purple eggplant ethyl acetate extract against C. tropicalis. This study is a true experimental in vitro that the treatment consisted of negative control, media control RPMI), extract with a concentration of 40 mg/mL, 20 mg/mL, 10 mg/mL, 5 mg/mL, and solvent control (DMSO 10%). MIC was observed directly using the microbroth dilution method in a 96-well microplate. MFC test used the spread plate technique and was calculated by total plate count. The ethyl acetate extract of purple eggplant has the same MIC and MFC at 20 mg/mL. This concentration was able to provide 100% inhibition against C. tropicalis. The inhibition of fungal growth was increased according to additional doses of extract. Ethyl acetate extract of purple eggplant fruit has antifungal activity against C. tropicalis.

Keywords: *Candida tropicalis, purple eggplant (Solanum melongena L) ethyl acetate extract, Minimum Fungicidal Concentration (MFC), Minimum Inhibitory Concentration (MIC), microbroth dilution.*