

INTISARI

Candida albicans (*C.albicans*) merupakan mikroorganisme komensal rongga mulut yang jumlahnya dapat meningkat karena *oral hygiene* buruk sehingga menyebabkan munculnya sariawan. Pencegahan sariawan dapat dilakukan dengan penggunaan obat kumur. Salah satu bahan obat kumur yang dapat dipakai adalah daun jambu biji karena daun jambu biji mengandung senyawa antijamur. Tujuan penelitian untuk menentukan konsentrasi hambat minimum (KHM) dan konsentrasi bunuh minimum (KBM) ekstrak etanol daun jambu biji sebagai bahan obat kumur terhadap *C.albicans*.

Daun jambu biji dilakukan ekstraksi menggunakan metode maserasi (etanol 70%). Pengujian antifungi menggunakan metode dilusi dengan cara menyiapkan 16 tabung yang berisi 1 mL larutan bahan kumur. Larutan bahan kumur dikontakkan dengan 10 μ L suspensi *C.albicans* lalu diinkubasi 24 jam pada suhu 37°C. Larutan yang sudah diinkubasi lalu diencerkan dengan BHI 1 mL dan diamati kekeruhannya. Konsentrasi terkecil larutan yang mulai menghambat pertumbuhan jamur ditandai dengan larutan yang jernih dinyatakan sebagai KHM. Penentuan KBM dilakukan dengan cara masing-masing tabung diambil 10 μ L dan ditanam pada cawan petri dengan media SDA lalu diinkubasi selama 24 jam pada suhu 37°C serta dilakukan perhitungan jamur.

Hasil penelitian KHM menunjukkan bahwa mulai konsentrasi 10% ekstrak etanol daun jambu biji terhadap *C.albicans* jernih, sedangkan hasil KBM menunjukkan mulai konsentrasi 10% tidak dijumpai pertumbuhan *C.albicans*. Kesimpulan penelitian ini adalah nilai KHM dan KBM ekstrak etanol daun jambu biji terhadap *C.albicans* adalah 10%.

Kata kunci: Antijamur, daun jambu biji, *C.albicans*

ABSTRACT

Candida albicans (*C.albicans*) is a commensal microorganism in oral cavity, its number can increase due to the bad oral hygiene as to cause the appearance of sores. Prevention of sores can be done by the use of mouthwash. Guava leaves can be used as mouthwash material because it contains the antifungal substance. The purpose of this study was to determine the minimum inhibitory concentration (MIC) and minimum fungicidal concentration (MFC) of ethanol extract of guava leaves as mouthwash material against *C.albicans*.

Guava leaves were extracted using maceration method (ethanol 70%). Antifungal test was conducted using dilution method, 16 tubes were prepared and each tube was filled with 1 mL of mouthwash substance solution. Mouthwash substance solution was exposed to 10 μ L *C.albicans* suspension and was incubated for 24 hours at 37°C. The solution which had been incubated was then diluted with 1 mL of BHI and its turbidity was observed. The smallest concentration of solution that started to inhibit fungal growth was marked by clear solution and it was called as the minimum inhibitory concentration (MIC). The determination of minimum fungicidal concentration (MFC) was done by taking 10 μ L of the solution from each tube and plating the solution on petri dish containing SDA. Samples were incubated for 24 hours at 37°C and the number of fungi was counted.

Result of this study showed that MIC starting from the concentration of 10% ethanol extract of guava leaves against *C.albicans* was clear, while MFC indicated that from the concentration of 10%, there was is no *C.albicans* colonies found. Conclusion of this study is MIC and MFC of ethanol extract of guava leaves against *C.albicans* is 10%.

Keywords: antifungal, guava leaves, *C.albicans*