

INTISARI

SUKMAWATI., 2018, UJI AKTIVITAS ANTIJAMUR INFUSA DAUN SIRIH MERAH (*Piper crocatum* Ruiz & Pav), INFUSA DAUN SALAM (*Syzygium polyanthum* (Wight.) Walp) DAN KOMBINASINYA TERHADAP *Candida albicans* ATCC 10231, KTI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI SURAKARTA.

Sirih merah dan daun salam merupakan tumbuhan obat tradisional yang memiliki daya antijamur terhadap *Candida albicans*. Suatu kombinasi bahan aktif menunjukkan efek sinergisme ketika efek bahan aktif secara bersama-sama lebih besar daripada efek masing-masing bahan aktif secara terpisah. Penelitian ini bertujuan untuk mengetahui aktivitas antijamur infusa daun sirih merah dan infusa daun salam beserta kombinasi keduanya terhadap *Candida albicans* ATCC 10231.

Metode ekstraksi yang digunakan dalam penelitian ini adalah metode infusa. Hasil infusa yang didapat dianggap memiliki konsentrasi 100%, selanjutnya dilakukan uji aktivitas antijamur terhadap *Candida albicans* ATCC 10231 dengan metode dilusi. Konsentrasi yang digunakan adalah 100%; 50%; 25%; 12,5%; 6,25%; 3,125%; 1,5626%; 0,7812%. Hasil seri dilusi digores ke media Sabouraud Glukosa Agar dengan cara streak. Hasil pertumbuhan pada media Sabouraud Glukosa Agar digunakan untuk menentukan Konsentrasi Bunuh Minimum.

Hasil penelitian ini menunjukkan bahwa infusa daun sirih merah, infusa daun salam beserta kombinasi keduanya memiliki aktivitas sebagai antijamur terhadap *Candida albicans* ATCC 10231. Konsentrasi Bunuh Minimum infusa daun sirih merah, daun salam beserta kombinasinya berturut-turut adalah 12,5%; 25%; 1,5626%. Infusa kombinasi kedua simplisia memiliki aktivitas antijamur lebih tinggi terhadap *Candida albicans* ATCC 10231 daripada infusa tunggal dari daun sirih merah dan daun salam.

Kata kunci: daun sirih merah, daun salam, antijamur, *Candida albicans*

ABSTRACT

SUKMAWATI., 2018, ANTIFUNGAL ACTIVITY OF THE INFUSION OF RED BETEL (*Piper crocatum* Ruiz & Pav) LEAVES, INFUSION OF BAY-LEAF (*Syzygium polyanthum* (Wight.) Walp) AND COMBINATION ON *Candida albicans* ATCC 10231, KTI, PHARMACY FACULTY, SETIA BUDI UNIVERSITY, SURAKARTA.

Red betel and bay-leaf is a medicinal traditional plant well-known of its active antifungal activity on *Candida albicans*. A combination of active ingredients shows the effect of synergism when the effect of the active ingredients together is greater than the effect of each active ingredients separately. This research aimed to find out the antifungal activity of red betel leaves and syzygium leaves infuses and combination of them on *Candida albicans* ATCC 10231.

The extraction method used in this research was infusion method. The infusion resulting was considered as having 100% concentration, and then antifungal activity test was conducted on *Candida albicans* ATCC 10231 with dilution method. The concentrations used were 100%; 50%; 25%; 12,5%; 6,25%; 3,125%; 1,5626%; 0,7812%. The result of serial dilution was smeared on Sabouraud Glucose Agar media with streaking mode. The result of growth on Sabouraud Glucose Agar media was used to determine the Minimum Killing Concentration.

The result of research showed that red betel leaves infuse, bay-leaf infusion and combination of them had antifungal activity on *Candida albicans* ATCC 10231. The Minimum Killing Concentrations of leaves infusion, bay-leaf leaves infusion and combination of them were 12,5%; 25%; 1,5626%. The combination of two botanicals them had more higher antifungal activity on *Candida albicans* ATCC 10231, then a single infusion of red betel leaves and bay-leaf infusion.

Keywords: red betel leaves, bay-leaf, antifungal, *Candida albicans*