ABSTRAK

Candida albicans merupakan spesies fungi patogen dari golongan deuteromycota.Spesies fungi ini merupakan penyebab infeksi oportunistik yang disebut kandidiasis pada kulit mukosa, dan organ dalam manusia. Secara tradisional ekstrak jahe merah *(Zingiber officinale var. rubrum)* telah digunakan untuk berbagai macam ramuan seperti meningkatkan daya tahan tubuh, mengatasi radang, batuk, luka, dan alergi akibat gigitan serangga. Penelitian ini bertujuan untuk menguji efektivitas ekstrak jahe merah *(Zingiber officinale var. rubrum)* terhadap jamur *Candida albicans* serta untuk mengetahui konsentrasi daya hambat ekstrak jahe merah *(Zingiber officinale var. rubrum)* yang dapat menghambat pertumbuhan jamur *Candida albicans* metode penelitian ini menggunakan metode eksperimen dan desain penelitian ini yaitu Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 6 pengulangan. Teknik analisis data menggunakan analisis varian ANOVA untuk menguji perbedaan lebih dari dua kelompok. Konsentrasi yang digunakan dalam penelitian ini yaitu 25%, 50%, dan 100%, dan kontrol negatif menggunakan DMSO. Berdasarkan hasil penelitian dengan hasil taraf uji 1% bahwa ekstrak jahe merah *(Zingiber officinale var. rubrum)* terhadap pertumbuhan jamur *Candida albicans* memberikan pengaruh sangat nyata karena $F_{hitung} > F_{tabel}$ (78,325>3,10) terhadap jamur *Candida albicans* sehingga Ha diterima H0 ditolak. Rata-rata zona hambat tertinggi pada penelitian ini yaitu pada konsentrasi 100% dengan nilai 13,14, Rata-rata zona hambat 50% dihasilkan nilai 11,19 mm dan rata-rata zona hambat terendah yaitu pada konsentrasi 25% dengan nilai 9,77 mm. Hal ini menunjukkan ekstrak jahe merah *(Zingiber officinale var. rubrum)* memiliki pengaruh terhadap pertumbuhan jamur *Candida albicans*. Sedangkan untuk hasil Uji Beda Jarak Nyata Duncan (BJND) pada konsentrasi perlakuan P0, P1, dan P3 terdapat beda real pada jarak 1, 2 dan 3 yang berbeda nyata.

Kata Kunci : Antijamur, *Candida albicans,* Ekstraksi, *Zingiber officinale var. rubrum,* Zona hambat.

Abstract

Candida albicans is a pathogenic fungal species from the deuteromycota group. This fungal species is the cause of opportunistic infections called candidiasis of the skin, mucosa, and internal organs of humans. Traditionally, red ginger extract (Zingiber officinale var. rubrum) has been used for various ingredients such as increasing endurance, overcoming inflammation, coughs, wounds, and allergies due to insect bites. This study aims to test the effectiveness of red ginger extract (Zingiber officinale var. rubrum) against the fungus Candida albicans and to determine the concentration of inhibition of red ginger extract (Zingiber officinale var. rubrum) which can inhibit the growth of Candida albicans. This research method uses experimental methods and The design of this study was Completely Randomized Design with 4 treatments and 6 repetitions. The data analysis technique used ANOVA analysis of variance to examine the differences between more than two groups. The concentrations used in this study were 25%, 50%, and 100%, and the negative control used DMSO. Based on the results of the research with a test level of 1% that the red ginger extract (Zingiber officinale var. rubrum) on the growth of the fungus Candida albicans gave a very significant effect because Fcount > Ftable (78.325>3.10) against the fungus Candida albicans so Ha was accepted, H0 was rejected. The highest average inhibition zone in this study was at a concentration of 100% with a value of 13.14, the average 50% inhibition zone resulted in a value of 11.19 mm and the lowest average inhibition zone was at a concentration of 25% with a value of 9.77 mm. This shows that red ginger extract (Zingiber officinale var. rubrum) has an effect on the growth of the fungus Candida albicans. As for the results of the Duncan's Real Distance Difference Test (BJND) at the treatment concentrations P0, P1, and P3 there were real differences at distances 1, 2 and 3 which were significantly different.

Keywords: Antifungal, *Candida albicans,* Extraction, Zingiber officinale var. rubrum, Zone of inhibition.