

## ABSTRAK

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PERBANDINGAN METODE DIFUSI DISK DAN DIFUSI SUMURAN PADA  
UJI ANTIJAMUR EKSTRAK BUAH MENGGUDU (*Morinda citrifolia L*)

TERHADAP PERTUMBUHAN JAMUR *Trichophyton rubrum*

1x + 74 Halaman + 6 Tabel + 10 Lampiran

Pengujian antijamur dapat menggunakan dua metode yaitu metode difusi dan dilusi. Metode difusi terdiri metode difusi disk dan sumuran, metode difusi disk ialah metode yang paling umum dipakai untuk melakukan uji antijamur karena prosedurnya yang mudah dibandingkan dengan metode difusi sumuran. Membandingkan metode difusi disk dan sumuran pada uji antijamur ekstrak buah mengkudu pada pertumbuhan jamur *Trichophyton rubrum* ialah tujuan dari penelitian ini. Penelitian ini dikerjakan di Laboratorium Parasitologi Jurusan Teknologi Laboratorium Medis Poltekkes Kemenkes Surabaya pada tanggal 25 februari – 17 maret 2024. Jenis penelitian ini adalah eksperimental laboratorium. Konsentrasi ekstrak buah mengkudu (*Morinda citrifolia L*) adalah variabel bebas, sedangkan zona hambat pertumbuhan jamur *Trichophyton rubrum* adalah variabel terikat. Sampel yang digunakan ekstrak buah mengkudu dengan konsentrasi 25%, 50%, 75%, 100%, kontrol positif ketokenazol 2% dan kontrol negatif aquades steril, hasil yang didapat pertumbuhan jamur *T. rubrum* dapat dihambat oleh ekstrak buah mengkudu dan uji normalitas, homogenitas, dan uji One Way Anova digunakan untuk menganalisis data penelitian. Selanjutnya, uji sampel T independen dilakukan menggunakan program SPSS. Hasil menunjukkan bahwa metode difusi sumur memiliki area hambat yang lebih besar daripada metode difusi disk, dengan diameter rata-rata 27,30 mm.

**Kata kunci** : Difusi disk, difusi sumuran, ekstrak buah mengkudu, *Trichophyton rubrum*

## ABSTRACT

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COMPARISON OF DISK DIFFUSION AND WELL DIFFUSION METHODS IN ANTI-FUNGAL TEST OF NONI FRUIT EXTRACT (*Morinda citrifolia L*) ON THE GROWTH OF *Trichophyton rubrum* FUNGUS

1x + 74 Pages + 6 Tables + 10 Appendices

Diffusion and dilution procedures are the two approaches available for antifungal testing. Two diffusion methods are available for conducting antifungal tests: the diffusion method using disks and the method using wells. The disk diffusion method is the most widely utilized approach due to its simpler procedure than the well diffusion method. This study compared the antifungal effects of noni fruit extract on *Trichophyton rubrum* fungal growth utilizing both the well and the disk diffusion methods. From February 25 to March 17, 2024, this study was completed in the Medical Laboratory Technology Department., Parasitology Laboratory, Poltekkes Kemenkes Surabaya. Research of this kind operates like an experimental laboratory. This study's dependent variable is the growth of *Trichophyton rubrum* fungus, while the study's independent variables are the concentration of noni fruit extract (*Morinda citrifolia L*), the diffusion techniques of the disk and well. The positive control in this investigation was 2% ketoconazole as the positive control, sterile aquades as the negative control, and noni fruit extract at 25%, 50%, 75%, and 100% concentrations. The study's findings demonstrated that noni fruit extract (*Morinda citrifolia L*) can stop the fungus *Trichophyton rubrum* from growing and The analysis of the study's data was done using SPSS, which offers tests for normality, homogeneity, and One Way Anova together with the T-test for Independent Samples.. The findings showed that there are variations between the well diffusion method and the disk diffusion method. Specifically, The mean circumference of the inhibition region in the well diffusion approach is greater, measuring 27.30 mm.

**Keywords:** Disk diffusion, well diffusion, noni fruit extract, *Trichophyton rubrum*