

**UJI EFEKTIVITAS EKSTRAK BUAH TERONG BELANDA (*Solanum
betaceum* Cav.) TERHADAP PERTUMBUHAN *Trichophyton rubrum*
SECARA *in vitro***

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ABSTRAK

Trichophyton rubrum merupakan penyebab dermatofitosis paling umum. Penggunaan antijamur sintetik memiliki beberapa efek samping dan adanya resistensi. Ekstrak buah terong belanda (*Solanum betaceum* Cav.) mengandung senyawa aktif yang berpotensi sebagai antijamur diantaranya alkaloid, saponin, tanin, fenolik, dan flavonoid. Penelitian ini bertujuan untuk mengetahui efektivitas ekstrak buah terong belanda terhadap pertumbuhan *T. rubrum*. Penelitian ini menggunakan ekstrak buah terong belanda dengan konsentrasi 20%; 40%; 60%; dan 80%, ketokonazol sebagai kontrol positif, dan aquades sebagai kontrol negatif. Pengujian antijamur dilakukan dengan metode difusi sumuran pada media *Saboraud Dextrose Agar* dan diinkubasi selama 24 jam, 48 jam dan 72 jam. Data dianalisis dengan uji Kruskal-Wallis dengan hasil nilai $p=0,01$, $p=0,000$, $p=0,000$ sesuai lama waktu inkubasi, terdapat perbedaan bermakna ekstrak buah terong belanda dalam menghambat pertumbuhan *T. rubrum*. Data dianalisis *Post-Hoc* dengan uji Mann-Whitney menunjukkan ketiga kelompok data terdapat perbedaan hasil yang bermakna antara dua kelompok perlakuan. Kelompok ekstrak paling efektif yaitu ekstrak dengan konsentrasi 20% pada waktu inkubasi 24 jam dengan daya antijamur yang tergolong kuat. Hasil penelitian menunjukkan bahwa ekstrak buah terong belanda efektif sebagai antijamur terhadap pertumbuhan *T. rubrum*.

Kata kunci : Antijamur, Buah Terong Belanda, Metode Sumuran,
Trichophyton rubrum

**EFFECTIVENESS OF TAMARILLO (*Solanum betaceum* Cav.) FRUITS
EXTRACT TOWARDS GROWTH OF *Trichophyton rubrum*: *in vitro*
STUDY**

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ABSTRACT

Trichophyton rubrum is the most common cause of dermatophytosis. The use of synthetic antifungals has several side effects and resistance. Extract of Tamarillo (*Solanum betaceum* Cav.) fruits contains active compounds that have potential as antifungal, including alkaloids, saponins, tannins, phenolics, and flavonoids. This study aims to determine the effectiveness of tamarillo extract as antifungals against the growth of *T. rubrum*. This study used tamarillo with concentration of 20%; 40%; 60%; and 80%, ketoconazole as positive control, and aquadest as negative control. The antifungal test was conducted by using well diffusion method on *Saboraud Dextrose Agar* medium and was incubated for 24 hours, 48 hours and 72 hours. Data were analyzed by Kruskal-Wallis test with the results $p=0.01$, $p=0.000$, $p=0.000$ respectively according to the length of incubation time. There is significant difference in the antifungal activity of tamarillo extract in inhibiting the growth of *T. rubrum*. Data were analyzed for *Post-Hoc* by Mann-Whitney test showing the three groups of data had significant differences in results between the two treatment groups. Most effective extract group was the extract with concentration of 20% at incubation time of 24 hours with relatively strong antifungal properties. The result showed that tamarillo extract is effective as antifungals against the growth of *T. rubrum*.

Keywords : Antifungal, Tamarillo Fruits, Well Diffusion Method,
Trichophyton rubrum