

Abstrak

Aktivitas Ekstrak etanol Daun Lidah Buaya (*Aloe vera* Burm.F) Terhadap Menghambat Pertumbuhan *Trychophyton rubrum*

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Latar Belakang: Dermatofitosis adalah penyakit akibat kolonisasi jamur dermatofit dengan agen penyebab terbanyak yaitu jamur *Trychophyton rubrum*. Lidah buaya mempunyai senyawa yang dapat digunakan sebagai antijamur Tujuan penelitian ini adalah menentukan efek ekstrak etanol daun lidah buaya sebagai antifungi terhadap *Trychophyton rubrum*, menentukan konsentrasi ekstrak etanol lidah buaya yang efektif sebagai antifungi dan menentukan diameter zona hambatan ekstrak etanol lidah buaya terhadap *Trychophyton rubrum*.

Metodologi: Penelitian ini merupakan penelitian eksperimental, biakan *Trichophyton rubrum* murni diperoleh dari Laboratorium Sentral Universitas Padjajaran. Pengambilan sampel diinokulasi dengan sampling acak dengan kriteria umur jamur 2-3 hari. Koloni *Trichophyton rubrum* pada potatoe Dextrose Agar diambil kemudian dilarutkan dengan 100 ml aquadest sampai mencapai kekeruhan, kemudian dioleskan merata pada cawan petri yang berisi agar Potatoe. Sampel dibagi menjadi 3 kelompok, yaitu kontrol negatif berupa DMSO dan kontrol positif berupa ketokonazole, ekstrak dengan konsentrasi 2.5 %, 5% dan 10. Masing-masing kelompok terdiri dari 5 sumuran. Seluruh cawan petri diinkubasi selama 5-7 hari dengan suhu kamar. Data berupa diameter zona hambat dianalisis menggunakan uji Difusi.

Hasil Penelitian: Hasil Ekstrak lidah buaya zona hambat *Trychophyton rubrum* menunjukkan bahwa untuk konsentrasi 2.5 % tidak terdapat hambatan terhadap *Trychophyton rubrum* untuk 5% tidak terdapat hambatan terhadap *Trychophyton rubrum* dan untuk 10% tidak terdapat hambatan terhadap *Trychophyton rubrum*. Kemudian dilakukan pengulangan sebanyak 2 kali, dan hasilnya tidak terdapat hambatan terhadap *Trychophyton rubrum*.

Kesimpulan: Berdasarkan dari penelitian serta uraian pembahasan di atas dapat disimpulkan bahwa ekstrak lidah buaya (*Aloe vera* Burm.F) pada konsentrasi 2.5%, 5%, dan 10% tidak memiliki pengaruh terhadap *Trychophyton rubrum*.

Kata kunci: Lidah buaya, Antijamur, *Trychophyton rubrum*

Abstract

Activity of Ethanol Extract of Aloe Vera Leaf (Aloe vera Burm.F) Against Inhibiting the Growth of Trychophyton rubrum

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Background: Dermatophytosis is a disease caused by dermatophyte fungal colonization with the most common causative agent being the fungus *Trychophyton rubrum*. Aloe vera has compounds that can be used as antifungals. The purpose of this study was to determine the effect of ethanol extract of aloe vera leaves as antifungal against *Trychophyton rubrum*, determine the concentration of ethanolic extract of aloe vera which is effective as antifungal and determine the diameter of the inhibition zone of aloe vera ethanol extract against *Trychophyton rubrum*.

Methodology: This study is an experimental study, *Trychophyton rubrum* were obtained from the Central Laboratory of Padjajaran University. Sampling was inoculated by random sampling with the criteria of mushroom age 2-3 days. *Trychophyton rubrum* colonies on potatoe Dextrose Agar were taken and then dissolved with 100 ml of aquadest until it reached turbidity, then spread evenly on a petri dish containing Potatoe agar. The samples were divided into 3 groups, namely negative control in the form of DMSO and positive control in the form of ketoconazole, extract with a concentration of 2.5%, 5% and 10. Each group consisted of 5 wells. All petri dishes were incubated for 5-7 days at room temperature. Data in the form of the diameter of the inhibition zone were analyzed using the Diffusion test.

Results: The results of Aloe vera extract in the inhibitory zone of *Trychophyton rubrum* showed that for a concentration of 2.5% there was no inhibition against *Trychophyton rubrum* for 5% there was no inhibition against *Trychophyton rubrum* and for 10% there was no inhibition against *Trychophyton rubrum*. Then it was repeated 2 times, and the result was that there were no obstacles to *Trychophyton rubrum*.

Conclusion: Based on the research and the description of the discussion above, it can be concluded that the extract of aloe vera (*Aloe vera Burm.F*) at concentrations of 2.5%, 5%, and 10% had no effect on *Trychophyton rubrum*.

Keywords: Aloe vera, Antifungal, *Trychophyton rubrum*