

**UJI EFEKTIVITAS ANTIFUNGI EKSTRAK KULIT BIJI
KAKAO (*Theobroma cacao*, L.) TERHADAP PERTUMBUHAN
Trichophyton rubrum SECARA *IN VITRO***

Chintya Mei Desia Hutasoit

ABSTRAK

Dermatofitosis adalah infeksi fungi yang disebabkan dermatofita, dengan penyebab tersering *Trichophyton rubrum*. Agen antijamur memiliki beberapa permasalahan seperti resistensi jamur dan efek samping terapi. Uji fitokimia ekstrak kulit biji kakao (*Theobroma cacao* L.) mengandung alkaloid, saponin dan flavonoid yang memiliki efek antifungi. Penelitian bertujuan menguji efektivitas antifungi ekstrak kulit biji kakao terhadap pertumbuhan jamur *Trichophyton rubrum* secara *in vitro* dengan metode difusi sumuran. Penelitian menggunakan rancangan studi eksperimen (*true eksperimen*), rancangan *post-test-only control group* menggunakan kulit biji kakao konsentrasi 25%, 50%, 75%, dan 100%, kontrol positif (Ketokonazol), dan kontrol negatif akuades. Konsentrasi 25%, 50%, 75% dan 100% menghasilkan diameter hambat rata-rata 10,65 mm, 18 mm, 26,92 mm, dan 37,22 mm dan Ketokonazol sebesar 51,52 mm. Terdapat perbedaan bermakna antara setiap kelompok perlakuan, $p = 0,003$. Ekstrak kulit biji kakao (*Theobroma cacao* L.) memiliki efektivitas antifungi dalam menghambat pertumbuhan *Trichophyton rubrum* secara *in vitro* dengan metode difusi sumuran.

Kata kunci : diameter daerah hambat, difusi sumuran, kulit biji kakao (*Theobroma cacao* L.), *Trichophyton rubrum*

**ANTIFUNGAL EFFECTIVENESS EXAMINATION OF CACAO
BEAN SHELLS (*Theobroma cacao L.*) TOWARDS THE GROWTH
OF *Trichophyton rubrum* IN VITRO**

Chintya Mei Desia Hutasoit

ABSTRACT

Dermatophytosis is a fungal infection caused by dermatophytes, with the most common cause is *Tricophyton rubrum*. Antifungal agent have several problems such as fungal resistance and side effects of therapy. The result of phytochemical test of cacao bean shells extract (*Theobroma cacao L.*) contained alkaloids, saponins and flavonoids which have antifungal effect. The aim of this study is to test the effectiveness of antifungal cacao bean shells extract to *Tricophyton rubrum* growth *in vitro* by agar well difussion method. The experimental method was used in this research with post test only control group design using cacao bean shells extract concentration 25%, 50%, 75%, and 100%, Ketokonazol as control positive, and aquades as control negative. Cacao bean shells extract concentration 25%, 50%, 75%, and 100% produced an average inhibitory diameter of 10,65 mm, 18mm, 26,92 mm, and 37,22 mm respectivity and Ketokonazol 51,52 mm. There are significant differences between each treatment group, $p = 0,003$. Cacao bean shells extract (*Theobroma cacao L.*) has antifungal effectiveness in inhibiting the growth of *Tricophyton rubrum in vitro* by agar well difussion method.

Keyword : inhibitory diameter, agar well difussion method, cacao bean shells
(*Theobroma cacao L.*), *Tricophyton rubrum*