

ABSTRAK

Nama : Diyah Iswari

Program Studi : Sarjana Farmasi

Judul : "Aktivitas Antifungi Ekstrak Etanol 96% *Sarcophyton* sp. Terhadap *Trichophyton rubrum*."

Infeksi fungi kulit yang disebabkan oleh *Trichophyton rubrum* merupakan masalah kesehatan yang umum terjadi di berbagai negara. Penggunaan antifungi sintetis sering kali menghadapi tantangan seperti resistensi fungi dan efek samping yang merugikan. Oleh karena itu, pencarian alternatif berbasis bahan alam menjadi penting. Penelitian ini bertujuan untuk mengevaluasi aktivitas antifungi ekstrak karang lunak *Sarcophyton* sp. terhadap *Trichophyton rubrum*. Ekstraksi dilakukan dengan metode maserasi menggunakan etanol 96%. Skrining fitokimia menunjukkan bahwa ekstrak *Sarcophyton* sp. mengandung saponin dan terpenoid yang berpotensi sebagai agen antifungi. Uji aktivitas antifungi dilakukan menggunakan metode difusi cakram dan dilusi cair dengan 3 konsentrasi yaitu 600 mg/mL, 900 mg/mL dan 1200 mg/mL untuk menentukan Konsentrasi Hambat Minimum (KHM). Hasil penelitian menunjukkan bahwa ekstrak dengan konsentrasi 1200 mg/mL menghasilkan zona hambat sebesar $18,68 \pm 1,07$ mm, sementara konsentrasi 900 mg/mL dan 600 mg/mL masing-masing menghasilkan zona hambat sebesar $15,01 \pm 1,54$ mm dan $11,82 \pm 0,70$ mm. Kontrol positif (*ketoconazole*) menunjukkan daya hambat sebesar $42,5 \pm 1,93$ mm, sedangkan kontrol negatif (DMSO) tidak menunjukkan aktivitas antifungi. Berdasarkan hasil ini, ekstrak *Sarcophyton* sp. memiliki aktivitas antifungi yang cukup kuat terhadap *Trichophyton rubrum*, meskipun masih lebih rendah dibandingkan *ketoconazole disc* 15 µg.

Kata Kunci: antifungi, ekstrak etanol, *Sarcophyton* sp., *Trichophyton rubrum*, zona hambat

ABSTRACT

Name : Diyah Iswari
Study Program : Bachelor Pharmacy
Title : "Antifungal Activity of Ethanol 96% Extract of *Sarcophyton* sp. Against *Trichophyton rubrum*."

Skin fungal infections caused by *Trichophyton rubrum* are a common health issue in various countries. The use of synthetic antifungals often faces challenges such as fungal resistance and adverse side effects. Therefore, the search for natural-based alternatives becomes important. This study aims to evaluate the antifungal activity of the soft coral extract *Sarcophyton* sp. against *Trichophyton rubrum*. Extraction was performed using the maceration method with 96% ethanol. Phytochemical screening showed that the extract of *Sarcophyton* sp. contains saponins, and steroids, which have the potential to act as antifungal agents. The antifungal activity test was conducted using the disk diffusion method and liquid dilution with three concentrations, namely 600 mg/mL, 900 mg/mL, and 1200 mg/mL to determine the Minimum Inhibitory Concentration (MIC). The results showed that the extract at a concentration of 1200 mg/mL produced an inhibition zone of $18,68 \pm 1,07$ mm, while concentrations of 900 mg/mL and 600 mg/mL produced inhibition zones of $15,01 \pm 1,54$ mm and $11,82 \pm 0,70$ mm, respectively. The positive control (ketoconazole) showed an inhibition zone of $21,5 \pm 1,93$ mm, while the negative control (DMSO) showed no antifungal activity. Based on these results, the extract of *Sarcophyton* sp. exhibits relatively strong antifungal activity against *Trichophyton rubrum*, although it is still lower than that of ketoconazole disc 15 μ g.

Keywords: antifungal, ethanol extract, inhibition zone, *Sarcophyton* sp., *Trichophyton rubrum*.