

Variasi Konsentrasi Ekstrak Etanol Daun Johar (*Cassia siamea Lamk*) Terhadap Pertumbuhan *Trichophyton sp* Secara In Vitro

Ayu Windi Wijayanti¹, Sri Sinto Dewi², Tulus Ariyadi²

1. Program Studi DIII Analis Kesehatan Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang
2. Laboratorium Mikrobiologi Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang

ABSTRAK

Daun Johar (*Cassia siamea Lamk*) mengandung senyawa kimia : flavonoid, alkaloid dan tanin yang berpotensi sebagai anti jamur. Jamur *Trichophyton sp* merupakan jamur superfisial hidup di tanah, binatang atau manusia, dapat menyebabkan infeksi pada rambut, kulit, dan kuku manusia. Tujuan penelitian ini untuk mengetahui daya hambat dari ekstrak etanol daun johar (*Cassia siamea Lamk*) terhadap pertumbuhan jamur *Trichophyton sp* dengan konsentrasi 25mg, 50mg, 75mg, dan 100mg. Penelitian secara eksperimen laboratorium dengan metode difusi sumuran pada media SDA. Sampel *Trichophyton sp* di standarisasi dengan standar Mc Farland 0,5 setiap sumuran diisi 100ul ekstrak etanol daun johar konsentrasi 25mg^{b/v}, 50mg^{b/v}, 75mg^{b/v}, dan 100mg^{b/v} diinkubasi pada suhu ruang selama 3 hari. Hasil penelitian menunjukkan bahwa pertumbuhan *Trichophyton sp* dapat dihambat dengan ekstrak etanol daun johar konsentrasi 100mg dengan diameter zona hambat 6,8mm lebih kecil dari kontrol positif ketokenazole.

Kata Kunci: Antifungi, Daun Johar, *Trichophyton sp*.



Variation Concentration of Ethanol Extract of the Johar Leaf (*Cassia siamea Lamk*) Againts to the Growth of *Trichophyton* sp In Vitro

Ayu Windi Wijayanti¹, Sri Sinto Dewi², Tulus Ariyadi²

1. Three years Diploma of Health Analyst Study Program, Nursing and Health Faculty, Muhammadiyah University of Semarang
2. Microbiology Laboratory, Nursing and Health Faculty, Muhammadiyah University of Semarang

ABSTRACT

Johar leaf (*Cassia siamea Lamk*) contains several chemical : flavonoid, alkaloid, and tanin which is as an antifungal againts of *Trichophyton* sp because interfere function of the fungal cell membrane and inhibit syntesis of khitin. The fungus *Trichophyton* sp is the fungal group of dermatophytes that living on the ground, animal, and the man can cause infection on the hair, skin and nail in the human. The purpose of this study is to determine the inhibition of ethanol extract of the johar leaf (*Cassia siamea Lamk*) againts to the growth of *Trichophyton* sp concentraion of 25mg, 50mg, 75mg and 100mg. Experimental research with diffusion method of wells. Using a sample of pure *Trichophyton* sp standardized to the Mc standart farland 0.5. The medium used was Saboroud Dextrose Agar and each wells was filled with 100ul extract ethanol of the johar leaf with concentration of 25mg, 50mg, 75mg, and 100mg then incubated at room temperature for 3 days. The result of reasearch suggest that growth of *Trichophyton* sp can be inhibited with the ethanol extract of johar leaf with the 100mg concentration with a drag zone diameter of 6,8mm but smaller than positive control ketokanazole inhibition.

Key Words : Antifungi, Johar (*Cassia siamea Lamk*), *Trichophyton* sp

