ABSTRAK

Penyakit infeksi jamur merupakan masalah kesehatan yang umum di daerah tropis seperti Indonesia. Aspergillus niger merupakan jamur yang sering menyebabkan infeksi paru-paru. Daun senggani (Melastoma malabathricum L.) diketahui memiliki potensi antijamur karena kandungan senyawa aktifnya. Tujuan penelitian ini untuk mengetahui aktivitas antijamur daun senggani (Melastoma malabathricum L.) terhadap pertumbuhan jamur Aspergillus niger. Metode penelitian ini adalah eksperimental dengan menggunakan posttest only control group design. Sampel penelitian adalah jamur Aspergillus niger yang dibagi menjadi 5 kelompok, masing-masing dengan 5 kali pengulangan, kontrol negatif DimethylSulfoxida (DMSO), kontrol positif ketokonazol, dan ekstrak daun senggani konsentrasi 5%, 10%, dan 15%. Pengukuran zona hambat menggunakan metode difusi cakram yang diukur diameternya menggunakan jangka sorong. Data dianalisis dengan uji beda menggunakan uji Kruskal-Wallis dan dilanjutkan dengan uji Post hoc Mann-Whitney. Hasil penelitian ini didapatkan zona hambat daun senggani konsentrasi 5%, 10% dan 15% terhadap pertumbuhan Aspergillus niger, masing-masing sebesar 3,6 mm, 4,3 mm dan 7,7 mm. Hasil uji analisis menunjukkan terdapat pengaruh penggunaan efek antijamur daun senggani (Melastoma malabathricum L.) terhadap zona hambat jamur Aspergillus niger. Kesimpulan dari penelitian ini ekstrak daun senggani memiliki daya efek antijamur terhadap Aspergillus niger dengan konsentrasi terbaik adalah 15% (sedang)

Kata Kunci: *Infeksi jamur, Ketokonazol, Metode difusi cakram*

ABSTRAK

Fungal infections are a common health problem in tropical areas such as Indonesia. Aspergillus niger is a fungus that often causes lung infections. Senggani leaves (Melastoma malabathricum L.) are known to have antifungal potential because of their active compound content. The aim of this research was to determine the antifungal activity of senggani leaves (Melastoma malabathricum L.) against the growth of the fungus Aspergillus niger. This research method is experimental using a posttest only control group design. The research samples were the Aspergillus niger fungus which was divided into 5 groups, each with 5 repetitions, negative control DimethylSulfoxide (DMSO), positive control ketoconazole, and senggani leaf extract in concentrations of 5%, 10%, and 15%. The inhibition zone was measured using the disk diffusion method, the diameter of which was measured using a caliper. Data were analyzed with different tests using the Kruskal-Wallis test and followed by the Mann-Whitney post hoc test. The results of this research showed that the inhibitory zones of senggani leaves with concentrations of 5%, 10% and 15% on the growth of Aspergillus niger were 3.6 mm, 4.3 mm and 7.7 mm respectively. The results of the analysis test showed that there was an effect of using the antifungal effect of senggani leaves (Melastoma malabathricum L.) on the inhibition zone of the fungus Aspergillus niger. The conclusion from this research is that senggani leaf extract has an antifungal effect against Aspergillus niger with the best concentration being 15% (medium).

Keywords: *Fungal infection, Ketoconazole, Disc diffusion method*