

ABSTRAK

Nama : Mega Rosalina
Program Studi : Farmasi
Judul : Uji Daya Hambat Antifungi Minyak Atsiri Hasil GC-MS
Rimpang Kencur (*Kaempferia galanga* L.) Aksesori Pacitan
Terhadap *Trichophyton rubrum* L.

Kencur (*Kaempferia galanga* L.) merupakan tanaman yang dapat dimanfaatkan sebagai obat. Rimpang kencur mengandung senyawa metabolit sekunder seperti alkaloid, flavonoid, tanin, fenol, kuinon, steroid dan triterpenoid, sedangkan minyak atsiri rimpang kencur mengandung senyawa γ -muurolene, Germacrene B, Pentadecane, Ethyl cinnamate dan etil-p-metoksisinamat yang dapat menghambat pertumbuhan *Trichophyton rubrum* L. Tujuan penelitian adalah untuk mengetahui aktivitas antifungi minyak atsiri rimpang kencur (*K. galanga* L.) pada aksesori Pacitan. Pembuatan minyak atsiri dilakukan di laboratorium unit penyulingan minyak atsiri Balai Penelitian Tanaman Rempah dan Obat (BALITTRO) Bogor dan identifikasi komponen senyawa minyak atsiri menggunakan metode GC-MS. Rendemen minyak atsiri dari rimpang kencur diperoleh sebanyak 3,24%. Pengujian aktivitas antifungi dilakukan dengan mengukur diameter daya hambat (DDH) menggunakan metode difusi cakram. Konsentrasi minyak atsiri yang digunakan pada pengujian DDH yaitu 0,1; 0,25; 0,5 dan 1,0%. Kontrol positif yaitu cakram disk ketokonazol dan kontrol negatif yaitu aquadest. Hasil penelitian menunjukkan bahwa minyak atsiri rimpang kencur pada konsentrasi 1,0% yang efektif mampu menghambat pertumbuhan *Trichophyton rubrum* L. dengan kekuatan daya hambat sebesar sebesar $11,6 \pm 2,15$ mm (kategori kuat). Berdasarkan hasil analisis GC-MS menunjukkan bahwa minyak atsiri rimpang kencur mengandung senyawa Pentadecane (5,95%), Cinnamic acid (2,99%) dan Propenenitrile (86,77%).

Kata kunci : Aksesori Pacitan, Antifungi, *Kaempferia galanga*, Minyak Atsiri.

ABSTRACT

Name : Mega Rosalina
Study Program : Pharmacy
Title : Test of Antifungal Inhibitory Power of Essential Oil of Rhizome
Kencur (*Kaempferia galanga* L.) Pacitan Accession by GC-MS
Method Against *Trichophyton rubrum* L.

Kencur (Kaempferia galanga L.) is a plant that can be used as medicine. Kencur rhizomes contain secondary metabolite compounds such as alkaloids, flavonoids, tannins, phenols, quinones, steroids and triterpenoids, while the essential oil of kencur rhizomes contains γ -muurolene compounds, Germacrene B, Pentadecane, Ethyl cinnamate and ethyl-p-methoxycinnamate which can inhibit the growth of Trichophyton rubrum L. The purpose of the study was to determine the antifungal activity of kencur rhizome essential oil (K. galanga L.) in Pacitan accession. The production of essential oil was carried out in the laboratory of the essential oil distillation unit of the Spice and Medicinal Plants Research Center (BALITTRO) Bogor and the identification of essential oil compound components using the GC-MS method. The yield of essential oil from kencur rhizome was obtained as much as 3.24%. Antifungal activity testing was carried out by measuring the diameter of inhibition (DDH) using the disc diffusion method. The concentration of essential oil used in DDH testing is 0.1; 0.25; 0.5 and 1.0%. The positive control was ketoconazole disk and the negative control was aquadest. The results showed that the essential oil of kencur rhizome at a concentration of 1.0% was effective in inhibiting the growth of Trichophyton rubrum L. with an inhibition strength of 11.6 ± 2.15 mm (strong category). Based on the results of GC-MS analysis, it shows that the essential oil of kencur rhizome contains compounds of Pentadecane (5.95%), Cinnamic acid (2.99%) and Propenenitrile (86.77%).

Keywords : Accession of Pacitan, Antifungal, Essential Oil, Kaempferia galanga.