

ABSTRAK

Bawang putih (*Allium sativum L.*) mengandung senyawa yang dapat digunakan sebagai obat untuk beberapa penyakit, salah satunya bisa berguna sebagai obat anti jamur. Kandungan Allicinnya dapat menghambat enzim *sistein proteinase* dan berperan dalam proses infeksi dengan cara merusak dan menembus lapisan dinding sel. Enzim alcohol dehydrogenase berfungsi untuk membantu jamur dalam mempertahankan hidup dan berkembangbiakan. Allicin akan berperan dalam menghambat kinerja kedua enzim ini dan menyebabkan jamur tersebut mati. Kandungan ajoene dalam bawang putih dapat menginaktivasi lipase pada keadaan asam. Sedangkan pH dari Sabaroud Dextrose Broth adalah $5,6 \pm 0,2$. Sehingga jamur *Malassezia sp* tidak dapat bertumbuh dengan normal karena enzim lipase ter-inaktivasi oleh *ajoene* yang terkandung dalam bawang putih. Bertujuan untuk mendapat informasi efektivitas sari bawang putih bagi pertumbuhan jamur penyebab *Malassezia Folliculitis*. Jenis penelitian ini bersifat eksperimental dan dilaksanakan di Laboratorium Mikologi Jurusan Teknologi Laboratorium Medis pada bulan Mei 2023. metode yang digunakan dilusi cair, dengan perasan bawang putih konsentrasi 10%, 20%, 30%, 40% 50% dan 60% dengan replikasi sebanyak 4 kali. Perasan tersebut diinokulasi sebanyak 0,5 mL suspensi fungi *Malassezia sp* lalu diinkubasi 7 x 24 jam, lalu uji penegasan ditanam di media *Sabaroud Dextrose Agar* (SDA) dan diinkubasi kembali 7 x 24 jam. Hasil penelitian yakni bawang putih dapat menghambat pertumbuhan jamur penyebab *Malassezia Folliculitis* dengan Kadar Hambat Minimum (KHM) pada konsentrasi 10% dan Kadar Bunuh Minimum (KBM) pada konsentrasi 20%.

Kata kunci : Jamur *Malassezia sp*, *Malassezia Folliculitis*, Kadar Hambat Minimum (KHM), Kadar Bunuh Minimum (KBM), Perasan Bawang Putih (*Allium sativum L.*)

ABSTRACT

Garlic (*Allium sativum* L.) contains compounds that are efficacious drugs for amongst the range of illnesses, there is one in which it can serve as an effective antifungal medication. Allicin content can inhibit cysteine proteinase enzymes and play a role in the infection process by damaging and penetrating the cell wall layer. The enzyme alcohol dehydrogenase serves to assist fungi in maintaining life and breeding. Allicin will play a role in compressing the performance of these two enzymes and causing the fungus to die. The content of ajoene in garlic can inactivate lipase in an acidic state. While the pH of Sabaroud Dextrose Broth is 5.6 ± 0.2 . So that *Malassezia* sp fungi cannot grow normally because the lipase enzyme is inactivated by ajoene contained in garlic. The purpose of this study was to determine the effectiveness of garlic juice against the growth of fungi that cause *Malassezia* Folliculitis. This type of research is experimental and will be at Mycology Laboratory of the Department of Medical Laboratory Technology in May 2023. Study used liquid dilution method, using garlic juice at concentrations of 10%, 20%, 30%, 40%, 50% and 60% with 4 times replication. The juice was inoculated as much as 0.5 mL of *Malassezia* sp mushroom suspension and then incubated for 7 x 24 hours, For the affirmation test it was planted on Sabaroud Dextrose Agar (SDA) media and again incubated for 7 x 24 hours. The results showed that garlic can inhibit the growth of fungi that cause *Malassezia* Folliculitis with Minimum Inhibition Levels (KHM) at a concentration of 10% and Minimum Kill Rates (KBM) at concentration 20%.

Keywords : *Malassezia* sp Mushroom, *Malassezia* Folliculitis, Minimum Inhibition Rate (MIR), Minimum Kill Rate (MKR), Garlic Juice (*Allium sativum* L.)