

## ABSTRAK

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Judul : Perbedaan Aktivitas Anti Fungal Dari Ekstrak Kulit Dan Daging Buah Markisa Ungu (*Passiflora Edulis Sims*) 5% Dan 40% Dengan Nystatin Dalam Menghambat Pertumbuhan *Candida Albicans*.

Kandidosis oral adalah peradangan jamur oportunistik yang paling sering diakibatkan dengan *Candida albicans*. Pengobatan yang umum digunakan adalah nystatin, namun penggunaannya dalam masa panjang bisa memunculkan konsekuensi dan resistensi. Maka sebab itu, diperlukan alternatif antijamur alami, salah satunya dari buah markisa ungu (*Passiflora edulis Sims*). Studi ini bertujuan guna memahamu ketidaksamaan efektivitas kekuatan hambatan pertumbuhan *Candida albicans* diantara nystatin dengan ekstrak kulit dan daging buah markisa ungu pada konsentrasi 5% dan 40% selama 24 jam. Riset ini adalah studi true experimental menggunakan desain *posttest only with control group*. Uji aktivitas antijamur dilakukan mempergunakan teknik difusi cakram terhadap *Candida albicans* dalam media Sabouraud Dextrose Agar. Diameter zona hambat diukur setelah inkubasi selama 24 jam. Analisis data dilakukan menggunakan uji Shapiro–Wilk, Levene test, Mann–Whitney, dan Kruskal–Wallis. Temuan riset memperlihatkan bahwasannya ekstrak daging buah markisa ungu konsentrasi 40% menghasilkan zona hambat terbesar dibandingkan kelompok lain dan kontrol positif nystatin. Terdapat ketidaksamaan yang bararti secara statistik diantara seluruh kelompok perlakuan ( $p < 0,05$ ). Disimpulkan bahwa ekstrak daging buah markisa ungu konsentrasi 40% memiliki potensi antijamur yang lebih baik dibandingkan nystatin dan berpotensi dikembangkan sebagai alternatif terapi kandidiasis oral.

**Kata kunci:** *Candida albicans*, markisa ungu, *Passiflora edulis*, antijamur, difusi cakram

## **ABSTRACT**

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*Judul* : Comparison of Antifungal Activity Between Peel and Pulp Extracts of Purple Passion Fruit (*Passiflora edulis* Sims) at 5% and 40% Concentrations and Nystatin in Inhibiting the Growth of *Candida albicans*

*Oral candidiasis is an opportunistic fungal infection most commonly caused by Candida albicans. Nystatin is commonly used for treatment, but long-term use can lead to consequences and resistance. Therefore, natural antifungal alternatives are needed, one of which is purple passion fruit (Passiflora edulis Sims). This study aims to understand the differences in the effectiveness of Candida albicans growth inhibition between nystatin and purple passion fruit peel and pulp extracts at concentrations of 5% and 40% for 24 hours. This research is a true experimental study using a posttest only with control group design. The antifungal activity test was performed using the disk diffusion technique against Candida albicans in Sabouraud Dextrose Agar medium. The diameter of the inhibition zone was measured after incubation for 24 hours. Data analysis was performed using the Shapiro–Wilk test, Levene test, Mann–Whitney test, and Kruskal–Wallis test. The research findings showed that the 40% concentration of purple passion fruit pulp extract produced the largest inhibition zone compared to other groups and the positive control nystatin. There were statistically significant differences between all treatment groups ( $p < 0.05$ ). It was concluded that 40% purple passion fruit pulp extract has better antifungal potential than nystatin and has the potential to be developed as an alternative therapy for oral candidiasis.*

**Keywords:** *Candida albicans, purple passion fruit, Passiflora edulis, antifungal, disc diffusion*