

INTISARI

Candida albicans merupakan jamur oportunistik yang berperan dalam terjadinya *denture stomatitis* pada pengguna gigi tiruan sebagian lepasan. Penggunaan bahan alami sebagai antifungi semakin berkembang, diantaranya daun kenikir (*Cosmos caudatus* Kunth) dan daun kemangi (*Ocimum basilicum* L). Tujuan dari penelitian ini untuk mengetahui perbedaan efek ekstrak daun kenikir dibandingkan ekstrak daun kemangi terhadap pertumbuhan *C. albicans* ATCC 10231 *in vitro*. Penelitian ini menggunakan metode eksperimental laboratoris murni menggunakan uji difusi cakram *Kirby-Bauer*. Sampel dibagi dalam delapan kelompok, yaitu ekstrak daun kenikir dan daun kemangi masing-masing pada konsentrasi 10%, 12%, dan 15%, kontrol positif (*nystatin*), dan kontrol negatif (akuades), dengan enam kali pengulangan. Cawan petri diinkubasi 24 jam, suhu 37°C. Diameter zona hambat pertumbuhan *C. albicans* diukur menggunakan jangka sorong dan dianalisis dengan uji *One-way ANOVA* dan uji *Post-Hoc Tukey Honestly Significant Difference* (HSD) pada $p < 0,05$.

Hasil penelitian menunjukkan bahwa ekstrak daun kemangi konsentrasi 15% menghasilkan diameter zona hambat tertinggi ($3,74 \pm 0,91$ mm), sedangkan ekstrak daun kenikir konsentrasi 15% ($2,67 \pm 0,86$ mm). Hasil uji *One-way ANOVA* menunjukkan perbedaan signifikan ($p < 0,05$) bahwa kedua ekstrak dapat menghambat pertumbuhan *C. albicans*. Hasil uji *Post-Hoc Tukey Honestly Significant Difference* (HSD), ekstrak kemangi 15% menunjukkan perbedaan signifikan dibandingkan kenikir 10% dan 12%, tetapi setara secara statistik dengan ekstrak daun kenikir 15%. Kesimpulan penelitian ini bahwa ekstrak daun kemangi setara efektif dengan ekstrak daun kenikir dalam menghambat pertumbuhan *Candida albicans* pada konsentrasi 15%.

Kata kunci: Ekstrak daun kenikir, ekstrak daun kemangi, *Candida albicans*, penghambatan pertumbuhan *C. albicans*, *denture stomatitis*

ABSTRACT

Candida albicans is known as an opportunistic fungus that plays a role in the occurrence of *denture stomatitis* in partial denture wearers. The use of natural antifungal agents has increasingly developed, including *Cosmos caudatus* Kunth (kenikir) and *Ocimum basilicum* L (kemangi). This study was aimed to determine the difference in the effects of kenikir leaf extract compared to kemangi leaf extract on the growth of *Candida albicans* ATCC 10231 *in vitro*. A true laboratory experimental method using the Kirby-bauer disk diffusion test was employed. Samples were divided into eight groups, consisting of kenikir and kemangi leaf extracts at concentrations of 10%, 12%, and 15%, a positive control (*nystatin*), and a negative control (*aquades*), each repeated six times. Petri dishes were incubated for 24 hours at 37°C. The inhibition zone diameter of *C. albicans* growth was measured using a caliper and analyzed by *One-way* ANOVA and *Post-hoc* Tukey Honestly Significant Difference (HSD) test at $p < 0,05$.

The results showed that 15% kemangi extract produced the highest inhibition zone diameter ($3,74 \pm 0,91$ mm), followed by 15% kenikir extract ($2,67 \pm 0,86$ mm). *One-way* ANOVA indicated a significant difference ($p < 0,05$), demonstrating that both extracts inhibited *C. albicans* growth. The HSD test showed that 15% kemangi extract had a significantly different effect compared to 10% and 12% kenikir extract, but was statistically equivalent to 15% kenikir extract. It was concluded that kemangi leaf extract was more effective in inhibiting the growth of *C. albicans* than kenikir leaf extract and had statistically similar inhibitory ability at a concentration 15%.

Keywords: Kenikir leaf extract, kemangi leaf extract, *Candida albicans*, inhibition of *C. albicans* growth, *denture stomatitis*