

ABSTRAK

Adi, Amanda Lupita. 2013. **Efek Ekstrak Daun Pacar Air (*Impatiens balsamina*) terhadap Pertumbuhan Jamur *Candida albicans***. Tugas Akhir. Fakultas Kedokteran Universitas Brawijaya. Dosen pembimbing: (1) Prof Dr. dr. Sanarto Santoso, DTM&H, SpMK (2) Dr. dr. Umi Kalsum., M.Kes.

Pacar air adalah tanaman yang berasal dari famili *Balsaminaceae*. Merupakan tanaman hias yang dapat tumbuh sepanjang tahun dan sering dijumpai di negara-negara tropis seperti Indonesia dan India. Di masyarakat, daun pacar air sering digunakan untuk pengobatan keputihan. Sedangkan salah satu penyebab keputihan terbanyak di Indonesia diakibatkan infeksi jamur terutama spesies *Candida*. Namun hingga saat ini, tidak banyak penelitian dilakukan untuk membuktikan bahwa daun pacar air mempunyai efek antifungi, terutama terhadap *Candida albicans*. Penelitian ini dilakukan untuk membuktikan bahwa ekstrak daun pacar air mempunyai efek antifungi terhadap *Candida albicans*. Penelitian ini dilakukan di Laboratorium Mikrobiologi Universitas Brawijaya dengan menggunakan metode dilusi tabung. Konsentrasi yang diuji adalah 25%, 30%, 35%, 40%, 45% dan 50%. Kadar Hambat Minimal (KHM) dapat ditentukan pada konsentrasi 25% dimana isi tabung terlihat lebih jernih daripada tabung yang berisi kontrol kuman. Sedangkan Kadar Bunuh Minimal (KBM) dapat ditentukan pada konsentrasi 45%, dimana tidak terdapat pertumbuhan koloni pada lempeng SDA. Data analisis menunjukkan terdapat perbedaan yang bermakna jumlah pertumbuhan koloni jamur *Candida albicans* pada setiap konsentrasi ekstrak daun pacar air *Impatiens balsamina* (ANOVA $p < 0.05$), semua konsentrasi yang diuji mempunyai efek terhadap bilangan koloni (Pos Hoc Tukey < 0.05). Tes korelasi Spearman menunjukkan bahwa terdapat korelasi kuat antara dua variabel yang diuji ($r = -0.970$, $p = 0.000$). Penelitian ini telah membuktikan bahwa ekstrak daun pacar air *Impatiens balsamina* mempunyai efek antifungi terhadap pertumbuhan *Candida albicans* secara in vitro.

Kata kunci: daun pacar air (*Impatiens balsamina*), *Candida albicans*, keputihan, metode dilusi tabung, Kadar Hambat Minimal, Kadar Bunuh Minimal

ABSTRACT

Adi, Amanda Lupita. 2013. ***The Effect of Pacar Air (Impatiens balsamina) Leaves Extract on the Growth of the Fungus Candida albicans***. Final Assignment. Medical Faculty of Brawijaya University. Supervisor: (1) Prof. Dr. dr. Sanarto Santoso, DTM&H, SpMK (2) Dr. dr. Umi Kalsum., M.Kes.

Pacar air comes from the family of *Balsaminaceae*. This plant is a houseplants that can be grown throughout the year and often found in tropical countries such as Indonesia and India. In the community, pacar air leaves often used for the treatment of vaginal discharge. While one of the causes of vaginal discharge in Indonesia due to the fungal infection, *Candida* species mainly. But until now, not much research done to prove that extract of pacar air leaves has the antifungal effect, especially for *Candida albicans*. This research was conducted to prove that pacar air had an antifungal effect on the growth of the *Candida albicans*. This research was conducted in the laboratory of Microbiology of the University of Brawijaya by using the method of dilution tubes. Concentrations tested was 25%, 30%, 35%, 40%, 45% and 50%. The Minimum Inhibitory Concentration (MIC) can be determined at concentrations of 25% where the contents of the tube looks clearer than a tube that contains control germs. Whereas the Minimum Fungicidal Concentration (MFC) can be specified on the concentration of 45% where is no growth of colonies on the plates of SDA. Data analysis shows there is a meaningful difference in the number of fungal colony growth of *Candida albicans* on each concentrations of extract of pacar air leaves (ANOVA $p < 0.05$), all concentrations tested has an effect on the number of colonies (Post Hoc Tukey < 0.05). Spearman correlation test showed that there is a strong correlation between the two variables is tested ($r = -0.970$, $p = 0000$). This research has proved that the extract of pacar air *Impatiens balsamina* leaves has an antifungal effect on the growth of *Candida albicans* in vitro.

Keywords: Pacar air leaves (*Impatiens balsamina*), *Candida albicans*, vaginal discharge, method of dilution tubes, Minimum Inhibitory Concentration, Minimum Fungicidal Concentration