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Uji Efektifitas Ekstrak n-Heksan Daun Tomat *(Sollanum lycopersicum L.)* Sebagai Larvasida Alami Nyamuk *Aedes aegypti*

XV + 41 halaman, 7 tabel, 11 gambar, 21 lampiran

ABSTRAK

Pengendalian nyamuk *Aedes aegypti* sebagai vektor Demam Berdarah Dengue (DBD) telah banyak dilakukan, salah satunya dengan menggunakan pengendalian kimiawi. Penggunaan pengendalian kimiawi dalam jangka panjang dapat menyebabkan resistensi pada nyamuk *Aedes aegypti*, oleh karena itu diperlukan insektisida alami sebagai alternatif. Daun tomat mengandung senyawa metabolit sekunder yang memiliki efek larvasida terhadap kematian larva *Aedes aegypti* . Tujuan penelitian ini adalah mengetahui efektivitas ekstrak n-Heksan daun tomat (*Sollanum lycopersicum L.*) terhadap kematian larva *Aedes aegypti.* Jenis penelitian ini adalah eksperimental menggunakan rancangan acak lengkap (RAL) dengan 6 perlakuan konsentrasi ekstrak n-Heksan daun tomat (*Sollanum lycopersicum L.*) 1,2%, 1,5%, 2%, 2,5%. Kontrol positif berupa *abate,* dan kontrol negatif aquadest. Sampel dalam penelitian ini adalah 25 larva *Aedes aegypti* dan 5 kali pengulangan pada setiap perlakuan. Pengamatan dilakukan setiap 2 jam sekali selama 12 jam. Data yang diperoleh berupa jumlah kematian larva dianalisis menggunakan one way ANOVA dan uji *Post hoc* LSD. Hasil penelitian ini menunjukkan perbedaan signifikan ($p < 0,05$), dan didapatkan konsentrasi 2,5% merupakan konsentrasi yang paling banyak membunuh larva instar III nyamuk *Aedes aegypti* 96,8%. Nilai LC50 ekstrak n-Heksan daun tomat (*Sollanum lycopersicum L.*) pada konsentrasi 1,3% dan nilai LT50 pada 4.318 jam dalam membunuh 50% larva nyamuk *Aedes aegypti.*

Kata Kunci: Ekstrak n-Heksan Daun Tomat (*Sollanum lycopersicum L.*), Larva *Aedes aegypti*
Daftar Bacaan: 55 (2008-2023)

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Effectiveness Test Of n-Hexan Extract Of Tomatoat Leaves (Sollanum lyocopersicum L.) As Natural Larvasida For Aedes aegypti Bird

Xvi + 41 pages + 7 tables + 11 figures, 21 appendices

ABSTRAK

*Control of the Aedes aegypti mosquito as a vector of dengue fever (DHF) has been widely practiced, one of which is by using chemical control.chemical control. The use of chemical control in the long term can Cause resistance in Aedes aegypti mosquitoes, therefore natural insecticides are needed as an alternative. natural insecticides as an alternative. Tomato leaves contain Secondary metabolite compounds that have larvicidal effects on the mortality of Aedes aegypti larvae. Aedes aegypti larvae. The purpose of this study was to determine the effectiveness of n-Hexane extract of tomato leaves (Sollanum lycopersicum L.) against the death of Aedes aegypti larvae. Aedes aegypti larvae. This type of research is experimental using a complete randomized (RAL) with 6 treatments of tomato leaf n-Hexan extract concentration (Sollanum lycopersicum L.) 1.2%, 1.5%, 2%, 2.5%. The positive control was abate, and negative control of aquadest. The samples in this study were 25 larvae of Aedes aegypti larvae and 5 repetitions in each treatment. Observations were made every 2 hours for 12 hours. The data obtained in the form of the number of deaths larvae were analyzed using one way ANOVA and Post hoc LSD test. Results The results of this study showed significant differences ($p < 0.05$), and obtained concentration of 2.5% is the concentration that kills the most larvae ofinstar III of Aedes aegypti (96.8%).The LC50 value is a concentration of 1.3% and the LT50 value is 4,318 hours in killing 50% of the larvae. killing 50% of Aedes aegypti mosquito larva*e.

Keywords ***:*** *Ekstrak n-Heksan Daun Tomato (Sollanum lycopersicum L.), Larva Aedes aegypti*
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