

ABSTRAK

Mutia Khairani, NIM 4173220014 (2017). Uji Toksisitas (LC₅₀-24 jam) Daun Kemangi (*Ocimum sanctum* L.) Terhadap Larva Nyamuk *Aedes aegypti*.

Penelitian ini bertujuan untuk mengetahui tingkat toksisitas (LC₅₀-24) ekstrak daun kemangi (*Ocimum sanctum* L) terhadap larva instar I nyamuk *Aedes aegypti* untuk memutus mata rantai pertumbuhan larva nyamuk *Aedes aegypti*. Penelitian ini didesain secara Rancangan Acak Lengkap (RAL), dengan dua kali uji pendahuluan dan lima kali uji sesungguhnya. Penelitian dilaksanakan bulan Februari – Mei 2021 di Laboratorium Biologi Fakultas MIPA, Universitas Negeri Medan. Konsentrasi ekstrak daun kemangi yang digunakan pada uji pendahuluan adalah 0%, 0,3%, 0,9%, 1,5%, dan 2,1%. Hasil analisis probit uji pendahuluan LC₅₀-24 jam = 1,055%. Berdasarkan perhitungan Busvine maka ditentukan konsentrasi uji sesungguhnya yaitu K1(0%) sebagai kontrol, K2 (0,888%); K3 (0,9918%); K4 (1,106%); K5(1,233%) dan pengulangan dilakukan sebanyak lima kali. Hasil menunjukkan nilai LC₅₀-24 jam ekstrak daun kemangi adalah 1,178%.

Kata kunci: Ekstrak daun kemangi, LC₅₀-24 jam, larva insar 1 *Aedes aegypti*.



ABSTRACT

Mutia Khairani, NIM 4173220014 (2017). Toxicity Test (LC₅₀-24hr) of Basil Leaf (*Ocimum sanctum* L.) against *Aedes aegypti* Mosquito Larvae.

This research aims to determine the level of toxicity (LC₅₀-24hr) of basil leaf extract (*Ocimum sanctum* L.) towards first instar larvae of the *Aedes aegypti* mosquitoes to break the growth cycle of *Aedes aegypti* mosquito larvae. This research was designed in a completely randomized design (CRD), with two preliminary test and five preliminary the full-scale test. The research was carried out in February – Mei 2021 at the Mathematics and Natural Science, Universitas Negeri Medan. The concentration of basil leaf extract used was 0%, 0,3%, 0,9%, 1,5%, 2,1%, in the preliminary test. The results of the preliminary test probit analysis LC₅₀-24 hours = 1,055%. Based on the Busvine's calculations, the full scale test concentrations were determined, namely K1 (0%) as control, K2 (0,888 %), K3 (0,9918%), K4 (1,106%); K5 (1,233%) and the repetition was done five times. The results showed that the LC₅₀-24hr basil leaf extract was 1,178 %.

Keywords: Basil leaf extract, LC₅₀ in 24 hr, 1st instar larvae of *Aedes aegypti*.

