ABSTRAK

Gracia Anzani Tambunan, NIM 417322008 (2021). Tingkat Toksisitas (LC_{50}-24 Jam) Ekstrak Daun Kemangi (*Ocimum sanctum* L.) Terhadap Larva Nyamuk *Culex* sp.

Penelitian ini bertujuan untuk mengetahui tingkat toksisitas (LC_{50}-24 Jam) ekstrak daun kemangi (*Ocimum sanctum L*) terhadap larva instar I nyamuk *Culex* sp untuk memutus mata rantai pertumbuhan larva nyamuk *Culex* sp. Penelitian ini didesain secara Rancangan Acak Lengkap (RAL), dengan satu kali uji pendahuluan dan uji sesungguhnya. Penelitian dilaksanakan bulan Februari – Maret 2021 di Laboratorium Biologi Fakultas MIPA, Universitas Negeri Medan. Konsentrasi ekstrak daun kemangi yang digunakan adalah 0%, 0,5%, 1,5%, 2,5%, 3,5%, 4,5% pada uji pendahuluan. Hasil analisis probit uji pendahuluan LC_{50}-24 jam = 0,606%. Berdasarkan perhitungan Busvine maka ditentukan konsetrasi uji sesungguhnya yaitu K1(0%) sebagai kontrol, K2 (0,171%); K3 (0,286%); K4 (0,42%); K5(0,658%) dan K6(1,03%) dan pengulangan dilakukan sebanyak tiga kali. Hasil menunjukan nilai LC_{50}-24 jam ekstrak daun kemangi adalah 0,478%.

Kata Kunci : Ekstrak daun kemangi, larva *Culex* sp, LC_{50}-24 Jam,

ABSTRACT

Gracia Anzani Tambunan, NIM 417322008 (2021). Toxicity Level (LC_{50}-24 Hours) of Basil Leaf Extract (*Ocimum sanctum* L.) against *Culex* sp Mosquito Larvae.

This research aims to determine the level of toxicity (LC_{50}-24 hours) of basil leaf extract (*Ocimum sanctum* L.) for first instar larvae of the *Culex* sp mosquitoes to break the growth chain of larvae of *Culex* sp mosquitoe. This research was designed in a completely randomized design (CRD), with one preliminary test and the actual test. The research was carried out in February – March 2021 at the Biology Laboratory, and Natural Sciences, Medan State University. The concentratio of basil leaf extract used was 0%, 0.5%, 1.5%, 2.5%, 3.5%, 4.5% in the preliminary test. The results of the preliminary test probit analysis LC_{50}-24 hours = 0.606%. Based on the Busvine's calculations, the actual test concentrations were determined, namely K1 (0%) as control, K2 (0,171%), K3 (0,286%), K4 (0,42%); K5 (0,658%), and K6 (1,03) and the repetition was done three times. The results showed that the LC_{50}-24 hours basil leaf extract was 0.478%.

Keywords : Basil leaf extrac, *Culex* sp mosquito larvae, LC_{50} in 24 hours