

## ABSTRAK

**Fitri Kurniati, NIM 4182220015 (2018), Toksisitas LC<sub>50</sub>-24 Jam Ekstrak Etanol Kulit Buah Nangka (*Artocarpus heterophyllus*) Terhadap Larva Nyamuk *Aedes aegypti*.**

Penelitian ini bertujuan untuk mengetahui tingkat toksisitas LC<sub>50</sub>-24 Jam ekstrak kulit buah nangka (*Artocarpus heterophyllus*) terhadap larva instar I nyamuk *Aedes aegypti* sebagai larvasida alami untuk memutus mata rantai pertumbuhan larva nyamuk *Aedes aegypti*. Desain penelitian ini menggunakan Rancangan Acak Lengkap (RAL), dengan tiga kali uji pendahuluan dan lima kali uji sesungguhnya. Penelitian ini dilaksanakan bulan September – Desember 2022 di Laboratorium Biologi Fakultas MIPA, Universitas Negeri Medan. Konsentrasi ekstrak kulit buah nangka yang digunakan pada uji pendahuluan yaitu dengan konsentrasi 0%, 0,5%, 1%, 1,5%, 2% . Hasil analisis probit dari uji pendahuluan diperoleh nilai LC<sub>50</sub>= 1.260% . Berdasarkan perhitungan Busvine ditentukan konsentrasi pada uji sesungguhnya yaitu konsentrasi 0%, 0,44%, 0,69%, 1,08% dan 1,68% dengan hasil nilai LC<sub>50</sub>= 3,804%. Berdasarkan hasil penelitian dapat disimpulkan bahwa Tingkat toksisitas ekstrak kulit buah nangka (*Artocarpus heterophyllus*) terhadap larva nyamuk *Aedes aegypti* masih termasuk dalam kategori tidak toksik karena nilai LC<sub>50</sub>-24 jam yang diperoleh > 1000 ppm atau >1000µg/ml.

**Kata Kunci :** Kulit buah nangka, Larva *Aedes aegypti*, LC<sub>50</sub>-24 Jam



## ABSTRACT

**Fitri Kurniati, NIM 4182220015 (2018), Toxicity LC<sub>50</sub>-24 Hours Ethanol Extract of Jackfruit Peel (*Artocarpus heterophyllus*) Against *Aedes aegypti* Mosquito Larvae.**

This research aims to determine the toxicity level of LC<sub>50</sub>-24 hours of jackfruit peel extract (*Artocarpus heterophyllus*) against the first instar larvae of *Aedes aegypti* mosquitoes as natural larvicides to break the growth chain of *Aedes aegypti* mosquito larvae. The research design used a completely randomized design (CRD), with three preliminary tests and five actual tests. This research was conducted from September to December 2022 at the Biology Laboratory, Faculty of Mathematics and Natural Sciences, Medan State University. The concentration of jackfruit peel extract used in the preliminary test was 0%, 0.5%, 1%, 1.5%, 2%. The results of the probit analysis from the preliminary test obtained the value of LC<sub>50</sub> = 1.260%. Based on Busvine's calculations, the concentrations determined in the actual test were concentrations of 0%, 0.44%, 0.69%, 1.08% and 1.68% with an LC<sub>50</sub> = 3.804%. Based on the results of the study, it can be concluded that the toxicity level of jackfruit peel extract (*Artocarpus heterophyllus*) to *Aedes aegypti* mosquito larvae is still included in the non-toxic category because the 24-hour LC<sub>50</sub> value obtained is > 1000 ppm or > 1000µg/ml.

**Keywords:** Jackfruit peel, *Aedes aegypti* larvae, LC<sub>50</sub>-24 hours

