INTISARI

Latar belakang : Demam Berdarah Dengue (DBD) adalah penyakit yang ditularkan oleh nyamuk *Aedes aegypti*. Penyakit ini merupakan masalah kesehatan yang cukup serius di Negara beriklim tropis. Larvisida sintetis efektif untuk mengendalikan vektor penyakit ini, namun penggunaan yang terus-menerus dapat menimbulkan resistensi. Tanaman Jeruk Nipis *(Citrus aurantifolia)* merupakan tanaman yang berpotensi memiliki daya larvisida, dengan kandungan aktifnya yaitu alkaloida dan limonoida.

Tujuan : Mengetahui daya larvisida daun jeruk nipis dilihat dari LC_{50} dan LC_{90} serta hubungan antara penambahan konsentrasi ekstrak dan jumlah kematian larva.

Metode : Penelitian ini menggunakan metode eksperimental murni laboratorium. Digunakan 270 sampel larva *Aedes aegypti* instar III-IV, dibagi menjadi 9 kelompok uji, yaitu 0% (kontrol), 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%. Masing masing kelompok berisi 10 ekor larva dalam 100 ml infusa daun jeruk nipis. Dilakukan replikasi 3 kali. Data yang diperoleh dari pengamatan kematian larva *Aedes aegypti* selama 24 jam. Data dianalisis dengan analisa dan grafik regresi probit.

Hasil : LC_{50} 116632,5 ppm dan LC_{90} 235389,2 ppm dengan batas kepercayaan 95%.

Kesimpulan : Infusa daun jeruk nipis (*Citrus aurantifolia*) memiliki efek larvisida terhadap larva *Aedes aegypti* yang tidak efektif, Penambahan konsentrasi infusa daun jeruk nipis (*Citrus aurantifolia)*yang sedikit dapat meningkatkan mortalitas larva *Aedes aegypti*.

Kata kunci : Larvisida, *Aedes aegypti, Citrus aurantifolia*

ABSTRACT

Background : Dengue Hemorrhagic Fever (DHF) is a disease transmitted by *Aedes aegypti* mosquito. This disease is a serious problem in tropical countries. Synthetic larvicidal is effective to control the disease vectors, but the use of persistent can lead to resistence. Lime *(Citrus aurantifolia)* is a plant that has the potential of larvicides, with the active content of alkaloids and limonoida.
Purpose : Finding out the larvacides effect from lime leaves, seen from the LC_{50} and LC_{90}. As well as the correlation between the addition of extract concentration and larval mortality.
Method : This study uses a true experimental laboratory. 270 samples of *Aedes aegypti* larvae instar III-IV are used for this experiment. Divided into 9 groups of experiment, which is 0% (control), 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%. Each container was given 100 ml ethanol lime leaves extract solution, contained 10 larvas and replicated three times. The result of experiment are from observation of the mortalities of the larvae in 24 hours. Probit analized are used.
Result : LC_{50} 116632,5 ppm and LC_{90} 235389,2 ppm with 95% limits.
Conclusion : Ethanol extract of the lime leaves *(Citrus aurantifolia)* has the effect of larvicides against *Aedes aegypti* larvae not effective, increasing concentration of ethanol extract of the lime leaves can increase the mortality of *Aedes aegypti*.
Keywords : Larvicide, *Aedes aegypti, Citrus aurantifolia*