

POLITEKNIK KESEHATAN TANJUNGPUR
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Uji Ekstrak Daun Rambutan (*Nephelium Lappaceum*) Dalam Membunuh Larva Nyamuk *Aedes Aegypti* instar III.

xviii + 77 Halaman, 4 Tabel, 6 Lampiran, 4 Gambar dan 1 Grafik.

ABSTRAK

Demam berdarah *dengue* (DBD) adalah penyakit yang disebabkan oleh virus *dengue*. Solusi sederhana yang dapat dilakukan untuk pengendalian vektor adalah menggunakan insektisida alami seperti daun rambutan. Daun rambutan dipilih sebagai alternatif larvasida, karena tanaman ini dikenal luas dikalangan masyarakat. Disamping itu daun rambutan mengandung senyawa yang dapat membunuh serangga. Tujuan penelitian ini adalah untuk mengetahui kemampuan ekstrak daun rambutan dalam membunuh larva nyamuk *Aedes aegypti* instar III.

Penelitian ini merupakan penelitian eksperimental yang bertujuan untuk mengetahui kemampuan ekstrak daun rambutan (*Nephelium lappaceum*) dalam membunuh larva nyamuk *Aedes aegypti*. Penelitian dilakukan di Laboratorium Jurusan Kesehatan Lingkungan. Penelitian terhadap kematian larva *Aedes aegypti* dilakukan selama 2 jam (per 15 menit), sampel penelitian 480 larva. Pada dosis 0%/100 mL yaitu sebagai kontrol tidak ada larva *Aedes aegypti* yang mati. Untuk dosis 20%/100 mL, 25%/100 mL dan 30%/100 mL.

Hasil penelitian pada konsentrasi 20% semua larva mati dimenit 75, pada konsentrasi 25% semua larva mati dimenit 60, pada konsentrasi 30% semua larva mati dimenit 45. Konsentrasi yang paling efektif dalam membunuh larva nyamuk *Aedes aegypti* yaitu dikonsentrasi 30%. Untuk peneliti selanjutnya perlu penelitian tentang pemanfaatan ekstrak daun rambutan lebih lanjut agar warna ekstrak lebih jernih sehingga dapat digunakan untuk masyarakat, karena penelitian ini baru tahap pemula

Kata Kunci : Daun Rambutan, Larva *Aedes Aegypti*, konsentrasi
Daftar Bacaan : 2010-2022

HEALTH POLYTECHNIC OF TANJUNGPUR
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Test of Rambutan Leaf Extract (*Nephelium Lappaceum*) in Killing *Aedes Aegypti* Instar III Mosquito Larvae.

xviii + 77 Pages, 4 Tables, 6 Appendices, 4 Pictures and 1 Graph.

ABSTRACT

Dengue hemorrhagic fever (DHF) is a disease caused by the *dengue* virus. A simple solution that can be done for vector control is to use natural insecticides such as rambutan leaves. Rambutan leaves were chosen as an alternative to larvicide, because this plant is widely known among the public. Besides that, rambutan leaves contain compounds that can kill insects. The purpose of this study was to determine the ability of rambutan leaf extract to kill instar III *Aedes aegypti* mosquito larvae.

This research is an experimental study that aims to determine the ability of rambutan leaf extract (*Nephelium lappaceum*) to kill *Aedes aegypti* mosquito larvae. The research was conducted at the Laboratory of the Department of Environmental Health. The study on the mortality of *Aedes aegypti* larvae was carried out for 2 hours (per 15 minutes), with a sample of 480 larvae. At a dose of 0%/100 mL, namely as a control, no *Aedes aegypti* larvae died. For doses of 20%/100 mL, 25%/100 mL and 30%/100 mL.

The results of the study at a concentration of 20% all larvae died in 75 minutes, at a concentration of 25% all larvae died in 60 minutes, at a concentration of 30% all larvae died in 45 minutes. The most effective concentration in killing *Aedes aegypti* mosquito larvae was a concentration of 30%. For future researchers, further research is needed on the utilization of rambutan leaf extract so that the color of the extract is clearer so that it can be used by the community, because this research is only at the beginner stage.

Keyword : Rambutan Leaves, *Aedes Aegypti* Larvae, Concentration
Reading List : 2010-2022