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Pengaruh Ekstrak Daun Pepaya (*Carica Papaya Linn*) Terhadap Kematian Larva Nyamuk *Aedes aegypti*

xvi + 93 halaman + 6 tabel + 6 gambar, dan 10 lampiran

ABSTRAK

Demam Berdarah Dengue (DBD) adalah penyakit virus yang ditularkan oleh nyamuk yang telah menyebar dengan cepat. Demam berdarah tersebar luas di seluruh daerah tropis, dengan variasi risiko lokal yang dipengaruhi oleh curah hujan, suhu, dan urbanisasi. Menurut data dan informasi profil kesehatan di Indonesia tahun 2018 ditemukan kasus DBD di Indonesia sebanyak 65.602 yang tersebar di 34 provinsi. Provinsi Lampung masuk ke dalam 10 besar penyakit Demam Berdarah Dengue (DBD), yaitu 8 tertinggi dengan jumlah 2.872 kasus, dengan angka Incidence Rate 34,31 dengan jumlah kasus meninggal 14 orang (Kementerian Kesehatan RI, 2018).

Tujuan penelitian ini adalah untuk mengetahui pengaruh ekstrak daun pepaya (*Carica papaya* L.) terhadap larva nyamuk *Aedes aegypti*. Jenis penelitian, eksperimen, dengan Rancangan Acak Lengkap Faktorial dengan 2 kali pengulangan. Lokasi penelitian dan waktu penelitian di Jurusan Sanitasi Lingkungan pada bulan April 2021. Metode pengambilan sampel, *Randomized sampling*. Variabel bebas yaitu konsentrasi (0% sebagai kontrol, 0,5%, 1%, 1,5%, 2%, 2,5% sebagai perlakuan) dan waktu kontak (6, 12, 18, 24 jam) ekstrak daun pepaya (*carica papaya* L.), variabel terikat yaitu jumlah telur nyamuk *Aedes aegypti* yang tidak menetas. Hasil penelitian ini ditunjukkan pada analisis regresi linier berganda dan Anova diperoleh berarti ada pengaruh konsentrasi daun pepaya (*Carica papaya* L.) terhadap kematian larva nyamuk *Aedes aegypti*. Berdasarkan waktu, kematian larva tertinggi pada waktu 6 jam dengan rata-rata 10,5 kematian. Kata kunci : *Aedes aegypti*, Daun Pepaya (*Carica Papaya Linn*)

Daftar bacaan : 34 (2016-2019)

POLYTECHNIC OF HEALTH MINISTRY OF HEALTH TANJUNGPINANG
PROGRAM FOR THE APPLICATION OF ENVIRONMENTAL SANITATION
ENVIRONMENTAL HEALTH DEPARTMENT

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Effect of Papaya Leaf Extract (*Carica Papaya* Linn) on the Death of *Aedes aegypti* Mosquito Larvae

xvi + 93 pages + 6 tables + 10 images, and 10 attachments

ABSTRACT

Dengue Hemorrhagic Fever (DHF) is a viral disease transmitted by mosquitoes that has spread rapidly. Dengue fever is widespread throughout the tropics, with local risk variations influenced by rainfall, temperature, and urbanization. According to data and information on health profiles in Indonesia in 2018, there were 65,602 cases of dengue fever in Indonesia spread across 34 provinces. Lampung Province is in the top 10 for Dengue Hemorrhagic Fever (DHF), which is the 8th highest with a total of 2,872 cases, with an Incidence Rate of 34.31 with 14 deaths (Ministry of Health, 2018).

The purpose of this study was to determine the effect of papaya leaf extract (*Carica papaya* L.) on *Aedes aegypti* mosquito larvae. The type of research was experimental, with a completely randomized factorial design with 2 repetitions. Research location and research time in the Department of Environmental Sanitation in April 2021. Sampling method, Randomized sampling. The independent variables were concentration (0% as control, 0.5%, 1%, 1.5%, 2%, 2.5% as treatment) and contact time (6, 12, 18, 24 hours) of papaya leaf extract (*Carica papaya* L.), the dependent variable is the number of *Aedes aegypti* mosquito eggs that do not hatch. The results of this study were shown in multiple linear regression analysis and Anova obtained that there was an effect of papaya leaf concentration (*Carica papaya* L.) on the mortality of *Aedes aegypti* mosquito larvae. Based on time, the highest larval mortality was at 6 hours with an average of 10.5 deaths.

Keywords: *Aedes aegypti*, Papaya Leaves (*Carica Papaya* Linn)

Reading list : 34 (2016-2019)