

POLITEKNIK KESEHATAN TANJUNGPURUNING
JURUSAN KESEHATAN LINGKUNGAN
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Desi Puspita

Pemanfaatan Daun Sirih (*Piper Betle*) Sebagai Larvasida Nabati Nyamuk *Aedes Aegypti*.

xvii + 61 halaman + 4 tabel + 6 gambar + 7 lampiran

RINGKASAN

Demam Berdarah Dengue (DBD) merupakan penyakit menular yang disebabkan oleh virus Dengue dan ditularkan melalui vektor nyamuk dari spesies *Aedes aegypti* atau *Aedes albopictus*. Peran vektor dalam penyebaran penyakit menyebabkan kasus banyak ditemukan pada musim hujan ketika munculnya banyak genangan air yang menjadi tempat perindukan nyamuk. Selain iklim dan kondisi lingkungan, beberapa studi menunjukkan bahwa DBD berhubungan dengan mobilitas dan kepadatan penduduk, dan perilaku masyarakat.

Tujuan penelitian ini adalah untuk mengetahui kemampuan pemanfaatan daun sirih (*Piper betle*) sebagai larvasida nabati nyamuk *Aedes aegypti*.

Jenis penelitian ini bersifat eksperimental yaitu peneliti melakukan eksperimen atau percobaan terhadap hal baru untuk menghasilkan atau mendapatkan sesuatu yang baru agar dapat berguna bagi masyarakat luas. Penelitian ini dilakukan di Laboratorium Politeknik Kesehatan Tanjung Karang Jurusan Sanitasi Lingkungan pada bulan Mei 2022. Variabel bebas yaitu Konsentrasi ekstrak daun sirih (*piper betle*) (0%, 4%, 6%, 8%). Variabel terikat yaitu jumlah kematian larva nyamuk *Aedes aegypti*.

Dari hasil eksperimen daun sirih (*Piper betle*) sebagai larvasida nabati nyamuk *Aedes aegypti*. Didapatkan hasil secara statistik berdasarkan hasil uji regresi linear yaitu adanya pengaruh jumlah larva nyamuk *Aedes aegypti* berdasarkan konsentrasi dimana nilai sig 0,000 ($P\text{-value} < \alpha$).

Kata kunci : *Aedes aegypti*, Daun sirih (*Piper betle*)

Daftar bacaan : 29 (2006-2021)

TANJUNGGARANG HEALTH POLYTECHNIC
DEPARTEMENT OF ENVIRONMENTAL HEALTH
Final project report, 27 june 2022

Desi puspita

Utilization Of Betel Leaf (Piper Betle) As A Vegetable Larvacide Of Aedes Aegypti Mosquito.

xvii+ 61 pages + 4 tables + 6 pictures + 7 appendices

ABSTRAK

Dengue Hemorrhagic Fever (DHF) is an infectious disease caused by the dengue virus and is transmitted through the mosquito vector of the *Aedes aegypti* or *Aedes albopictus* species. The role of vectors in the spread of disease causes many cases to be found in the rainy season where there are many puddles of water which are breeding grounds for mosquitoes. In addition to climatic and environmental conditions, several studies have shown that DHF is related to mobility and population density, as well as community behavior.

The purpose of this study was to determine the ability to use betel leaf (*Piper betle*) as a vegetable larvicide in *Aedes aegypti* mosquitoes.

This type of research is experimental, namely the researcher conducts experiments or experiments on new things to produce or get something new so that it can be useful for the wider community. This research was conducted at the Tanjung Karang Health Polytechnic Laboratory, Environmental Sanitation Department in May 2022. The independent variable was the concentration of betel leaf extract (*piper betle*) (0%, 4%, 6%, 8%). The dependent variable is the number of deaths of *Aedes aegypti* mosquito larvae.

From the experimental results of betel leaf (*Piper betle*) as a vegetable larvicide for the *Aedes aegypti* mosquito. Statistical results were obtained based on the results of linear regression tests, namely the influence of the number of *Aedes aegypti* mosquito larvae based on concentrations where the sig value was 0.000 (P-value < α).

Keywords : *Aedes aegypti*, Betel leaf (*Piper betle*)

Reading list : 29 (2006-2021)