

ABSTRAK

Kementrian Kesehatan RI
Politeknik Kesehatan Kemenkes Surabaya
Program Studi Sanitasi Program D-III Jurusan Kesehatan Lingkungan Kampus
Magetan
Karya Tulis Ilmiah, Mei 2024

Della aristi endea putri

EKSTRAK DAUN CENGKEH (*SYZYGIUM AROMATICUM, L.*) SEBAGAI DAYA TOLAK NYAMUK *CULEX SP*

(xvii + 48 halaman + 13 tabel + 6 gambar + 18 lampiran)

Filariasis atau yang lebih dikenal dengan Penyakit kaki gajah adalah penyakit menahun yang disebabkan oleh cacing filarial yang menyerang saluran dan kelenjar getah bening dan ditularkan melalui gigitan nyamuk *Culex sp.* Pengendalian nyamuk secara kimiawi dengan menggunakan bahan/*repellent* alami lebih aman dan tidak memberikan dampak yang negatif bagi makhluk hidup maupun lingkungan. Daun cengkeh merupakan salah satu tumbuhan alami yang dapat digunakan sebagai *repellent* yang mengandung eugenol, flavonoid, saponin, tannin, alkaloid. Penelitian ini bertujuan untuk mengetahui perbedaan ekstrak Daun Cengkeh (*Syzygium Aromaticum, L.*) sebagai daya tolak Nyamuk *Culex sp.*

Jenis penelitian pada penelitian ini adalah quasi eksperimen dengan desain penelitian *The Static Group Comparassion Design*. Populasi pada penelitian ini adalah nyamuk *Culex sp* betina dengan sampel sebanyak 625 nyamuk *Culex sp* yang terbagi menjadi 5 replikasi. Analisis statistik yang digunakan adalah *One Way ANOVA (Analysis of Variance)* kemudian dilanjut uji LSD (*Least Significant Difference*).

Hasil penelitian ini menunjukkan bahwa jumlah daya tolak nyamuk *Culex sp* terhadap tangan yang telah diolesi ekstrak daun cengkeh yang dipaparkan sekama 5 menit setiap jam dalam kurun waktu 6 jam pada konsentrasi 10% sebanyak 71 ekor, konsentrasi 15% sebanyak 77 ekor, konsentrasi 20% sebanyak 93 ekor, dan konsentrasi 30% sebanyak 100 ekor. Hasil uji statistik *One Way Anova* menunjukkan p value $(0,000) < \alpha$ $(0,05)$, sehingga ada perbedaan daya tolak nyamuk *Culex sp* terhadap ekstrak daun cengkeh.

Kesimpulan penelitian adalah ada perbedaan terhadap daya tolak ekstrak Daun Cengkeh (*Syzygium Aromaticum, L.*) terhadap nyamuk *Culex sp.*

Kata kunci : Daun Cengkeh, Nyamuk *Culex sp*, daya tolak

Perpustakaan : 29 (2009 – 2023)

ABSTRACT

Indonesian Ministry of Health
Ministry of Health Surabaya Health Polytechnic
Sanitation Study Program, D-III Environmental Health Department, Magetan
Campus
Scientific Writing, May 2024

Della Aristi Endea Putri

CLOVER LEAF EXTRACT (SYZYGIUM AROMATICUM, L.) AS MOSQUITO REMOVAL POWER OF CULEX SP

(xviii + 48 pages + 13 tables + 6 figures + 18 attachments)

Filariasis or better known as elephantiasis is a chronic disease caused by filarial worms which attack the lymph channels and nodes and is transmitted through the bite of the Culex sp mosquito. Chemical control of mosquitoes using natural materials/repellents is safer and does not have a negative impact on living creatures or the environment. Clove leaves are a natural plant that can be used as a repellent which contains eugenol, flavonoids, saponins, tannins, alkaloids. This research aims to determine the difference between clove leaf extract (Syzygium Aromaticum, L.) as a repellent for Culex sp. mosquitoes.

The type of research in this research is quasi-experimental with the Static Group Comparison Design research design. The population in this study was female Culex sp mosquitoes with a sample of 625 Culex sp mosquitoes divided into 5 replications. The statistical analysis used was One Way ANOVA (Analysis of Variance) followed by the LSD (Least Significant Difference) test.

The results of this study show that the number of Culex sp mosquitoes' repulsion against hands that have been smeared with clove leaf extract and exposed to them for 5 minutes every hour over a period of 6 hours at a concentration of 10% is 71 individuals, a concentration of 15% is 77 individuals, a concentration of 20% is 77 individuals. 93 individuals, and a 30% concentration of 100 individuals. The results of the One Way Anova statistical test show p value $(0.000) < \alpha (0.05)$, so there is a difference in the repellent power of Culex sp mosquitoes towards clove leaf extract.

The conclusion of the research is that there is a difference in the repellent power of Clove Leaf extract (Syzygium Aromaticum, L.) against Culex sp mosquitoes.

Keywords: Clove leaves, Culex sp mosquitoes, repulsion
Libraries : 29 (2009 – 2023)