

ABSTRACT

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DIFFERENCES IN CONCENTRATION OF YLANG FLOWER *Cananga odorata* AND LONG PURPLE EGGPLANT FRUIT (*Solanum melongena L.*) AS LARVACIDE AGAINST THE DEATH OF LARVAE *Culex sp.*

x + 64 pages + 21 tables + 6 images + 4 attachments

Filariasis is caused by infection with Worms of *Brugia malayi*, *Brugia timori*, and *Wucheria bancrofti*, which are transmitted by the *Culex sp* mosquito. This disease is chronically breeding in the lymph nodes and blood, can cause defects such as the bending of the legs, arms until genitals. Eradication needs to be determined to reduce the number of Filariasis disease in Indonesia. The use of natural pesticides from Ylang Flower (*Cananga odorata*) extract and Long Purple Eggplant Fruit (*Solanum melongena L.*) can be another alternative to controlling *Culex sp* larvae.

The objective of this research is to learn the differences in concentration variations in the concentration of Ylang Flower (*Cananga odorata*) extract and Long Purple Eggplant Fruit (*Solanum melongena L.*) as larvalides against the death of *Culex sp* larvae. This research uses a pre-experiment method and Static Group Comparison design. The number of research samples is uses 720 larvae of *Culex sp* instar III, by providing a variation in concentrations of 0% : 100%, 25% : 75%, 50% 50%, 75% : 25%, and 100% : 0%. Each medium contains 25 larvae of *Culex sp*. Conducted 24-hour observations and calculated his death every 1 hour. In this study there were five replications.

Based on the results of the study can be known that the variation of concentration 50% : 50% has the highest effectiveness. The results of analysis and statistical tests with Anova One Way can be obtained that there is a difference in the concentration of mixed extracts of Ylang Flower (*Cananga odorata*) and Long Purple Eggplant Fruit (*Solanum melongena L.*).

From the results of this study, it can be concluded that a mixture of Ylang Flower (*Cananga odorata*) extract and Long Purple Eggplant Fruit (*Solanum melongena L.*) can kill *Culex sp* larvae at a concentration variation of 50% : 50%, so that it can be used as an alternative to the eradication of Filariasis vectors, especially to kill *Culex sp* larvae. For more research needs to be researched with other variables that are different in this study.

Literature : 35 (2010-2020)

Keyword : *Culex sp*, Ylang Flower, Long Purple Eggplant Fruit, Extract