

ABSTRACT

*Indonesian Ministry of Health
Health Polytechnic of the Ministry of Health Surabaya
Sanitation Study Program Diploma III
Final Project, June 2021*

Achmad Naufal Aulia Firdaus

***THE EFFECT OF THE FORMULATION OF VARIOUS DOSAGE OF LIME
(Citrus aurantifolia) FRUIT EXTRACTS AND KING BANANA SKIN (Musa
paradisiaca variant raja) AS BIOLARVICIDES Aedes albopictus***

ix + 78 pages + 14 tables + 15 pictures + 5 attachments

Dengue Hemorrhagic Fever (DHF) is an acute febrile disease caused by the entry of the dengue virus into human blood circulation. In the chain of transmission, the dengue virus is transmitted by the Aedes aegypti mosquito as the main vector and Aedes albopictus as the secondary vector. WHO estimates that every year there are 50-100 million cases, 500 thousand cases due to dengue virus infection and 22 thousand cases cause death.

The purpose of this study was to determine the effect of formulations of various doses of Lime (Citrus aurantifolia) and Plantain (Musa paradisiaca variant raja) extracts as Aedes albopictus biolarvicides.

This type of research is analytic research with Quasi Experimental research design. This experiment is in the form of treatment or intervention on a variable and it is expected that there will be changes or effects on other variables. The total sample in this study was 750 larvae with details of 5 dose variation and 5 repetitions.

The results of the One Way Anova test showed that there was no difference in the dose variation of the lime peel and plantain peel formulations on the number of larval mortality, variations in lime peel and plantain peel with variations in the formulation of 10 ml orange peel: 0 ml banana peel, 7, 5 ml orange peel : 2.5 ml banana peel, 5 ml orange peel : 5 ml banana peel, 2.5 ml orange peel : 7.5 ml banana peel, 0 ml orange peel : 10 ml banana peel from 125 larvae tested.

The conclusion obtained is that it can be concluded that the dose of 7.5 ml of orange peel: 2.5 ml of banana peel and 0 ml of orange peel: 10 ml of banana peel is the most effective dose variation as a biolarvicide for Aedes albopictus larvae. Research suggestions need to be continued with increasing the application dose in order to obtain maximum results in getting the right dose of biolarvicide.

Keywords: Aedes albopictus, Extract, Biolarvicides

Library: 20 readings (2010 – 2020)