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ABSTRACT

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EFFECTIVENESS EXTRACT LARVACIDES OF KECOMBRANG (Etlingera elatior) FLOWER ON DEATH OF Aedes aegypti MOSQUITO LARVAE

Based on data from the Indonesian Ministry of Health in 2021, there were 73,518 with a death toll of 705 dengue cases in Indonesia. The Ministry of Health is working to eradicate DHF through disease prevention and control efforts using chemical larvicides. Other controls can use natural larvicides whose content is safer, one of which is the kecombrang plant (Etlingera elatior). The purpose of this study was to analyze the effectiveness of extract larvacides of kecombrang flower with various concentrations on the mortality of Aedes aegypti larvae. This research used a pure experimental method (true experimental) with a post test only one group design. The independent variable was kecombrang flower extract (Etlingera elatior) with concentrations of 0% (control), 2%, 4%, 6%, and 8% with 5 replications and an observation time of 6 hours. The dependent variable was death of Aedes aegypti larvae. Data analysis consisted of descriptive and inferential analysis using the One-Way Anova test followed by the Post Hoc LSD (Least Significant Difference) test. The results of the research showed that there was a significant difference in mean mortality between various concentrations extract of kecombrang flower (p=0.000) and the most effective concentration was 6%. The result of probit test showed that LC50 value 6.577 and LC90 was 12.113 for 6 hours. This study concluded that kecombrang flower extract (Etlingera elatior) was effective in being used as a vegetable larvicide. Suggestions for further researchers can innovate the solution of kecombrang flower extract to be clear and odorless so that it is more easily accepted by the public.

Key Word: Dengue haemorrhagic fever (DHF), Kecombrang (Etlingera elatior) flower, Aedes aegypti larvae