ABSTRACT

THE EFFECTIVENESS EXTRACT OF Pandanus amaryllifolius (Roxb.) AS OVICIDE TO Aedes aegypti (Linn.)

By

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Dengue Haemorrhagic Fever (DHF) is one of public health problem in Indonesia, the number of sufferers is likely to increase and spread more widely. Dengue vector control is done with the use of natural ovicides. Extract of Pandannus amaryllifolius (R.) has alkaloida, saponin, and flavonoida, can be used as natural ovicide to inhibit phase the egg becomes a larva of Aedes aegypti. Purpose was to determine the effectiveness Pandannus amaryllifolius (R.) extracts as the ovicides of Aedes aegypti. The type of this research is experimental by using Randomize Trial Design (RTD). The groups divided into 0% (negative control) and 5 concentrations which are 0.1%, 0.3%, 0.5%, 0.7% and 1% with 25 eggs in each group and 4 time repetitions. Then, it was observed in three days. The result of one-way ANOVA test produced p < 0.05 and post-hoc Bonferroni analysis perform that all effective (p < 0.05) concentrations compared with controls (0%). The results showed that the Pandannus amaryllifolius (Roxb.) extracts effective as the ovicides of Aedes aegypti with estimates ED50 was 0.537%, and the lower bound was 0.446% and upper bound was 0.664%.

Keywords: Aedes aegypti, Dengue Hemorragic Fever, Ovicides, Pandanus amaryllifolius, (Roxb.).