ABSTRACT

EFFECTIVENESS OF THE PEPAYA LEAF (*Carica papaya* Linn) ETHANOL EXTRACT AS LARVACIDE FOR *Aedes aegypti* INSTAR III

By

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Dengue Hemorrhagic Fever (DHF) is an infectious disease caused by the dengue virus is transmitted to humans by the bite of *Aedes aegypti*. Therefore the use of natural insecticides, one of papaya (*Carica papaya* L.) which contains flavonoids, alkaloids and the enzyme papain which suspect the effect of larvicides. The study aims to determine the effectiveness of the ethanol extract of papaya (*Carica papaya* L.) as larvicides against *Aedes aegypti* larvae. This type of research is completely randomized experimental design. The total sample of 600 larvae were divided into 6 groups: 0% (negative control); 0.25%; 0.75%; 1% and Abate 1% (positive control). Each group contained 25 larvae with 4 repetitions. The data obtained were analyzed using the Kruskal-Wallis test, Mann Whitney and Post Hoc Test Simple Linear Regression. The results showed that the mean larval mortality was 67%, 71%, 85%, 95% at a concentration of 0.25%, 0.50%, 0.75% and 1% concentration. Ethanol extract of leaves of papaya (*Carica papaya* L.) effective as larvicides against third instar larvae of *Aedes aegypti*. LC$_{50}$ value is 0.37% concentration and LT$_{50}$ value is 1981 minutes.

Keywords: *Aedes aegypti*, dengue hemorrhagic fever, *Carica papaya* L, larvicides