ABSTRACT

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

By

RAMA RAPINA

Dengue Hemorrhagic Fever (DHF) is an infectious disease caused by the dengue virus is transmitted to humans by the bite of Aedes aegypty. 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 larvel 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. LC₅₀ value is 0.37% concentration and LT₅₀ value is 1981 minutes.

Keywords: Aedes aegypti, dengue hemoragic fever, Carica papaya L, larvicides