

**EFFECTIVENESS OF PAPAYA LEAF VEGETABLE INSECTICIDES
(*Carica papaya* L) AS A PEST CONTROLLER GRAYAK
CATERPILLARS (*Spodoptera litura* F.)
ON TOBACCO PLANTS**

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ABSTRACT

*Pests of caterpillars (*Spodoptera litura* F.) is one of the main types of pests that attack tobacco plants, armyworm pests can cause fluctuations in tobacco production. There are several ways to control armyworm pests, one of which is by using papaya leaf vegetable insecticides. The purpose of this study was to determine the effectiveness of papaya leaf vegetable insecticide on mortality. This research was conducted in October 2022 at the Plant Protection Laboratory, Department of Agricultural Production, Jember State Polytechnic. This study used a non-factorial randomized block design (RBD), consisting of 4 treatments with 6 replications: control, 200 ml/liter of papaya leaf extract, 400 ml/liter of papaya leaf extract, and 600 ml/liter of papaya leaf extract. Experimental data were analyzed using ANOVA if the results showed a significant effect then a further test of BNT level of 5% would be carried out, while to determine LT_{50} using probit analysis . Parameters observed were mortality, LT_{50} , and physical changes of armyworms . The results showed that the papaya leaf vegetable insecticide was effective and had a very significant effect on the mortality of the armyworm pest (*S. litura* F.) with the fastest LT_{50} value of 82 hours in the papaya leaf extract treatment of 400 ml/liter.*

*Keywords: garayak caterpillar (*S. litura* F.), papaya leaf, mortality*