

**EFFECT OF PLANT-BASED INSECTICIDES ON MORTALITY AND
FEEDING ABILITY OF GRAYAK CATERPILLAR
(*Spodoptera litura* F.)**

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ABSTRACT

The grayak caterpillar (*Spodoptera litura* F.) is one of the essential types of pests that attack tobacco plants and can cause a decrease in the productivity of yields. There are several ways to control pests, one of which is with vegetable pesticides, namely holiness plants. This research was carried out in January - February 2022 at the Plant Protection Laboratory of the Jember State Polytechnic. The purpose of this study was to determine the effect of plant-based insecticides on the mortality of grayak caterpillars and also to determine the impact of feeding ability on grayak caterpillar pests (*S. litura* F.). This study used a Non-Factorial Randomized Group Design, consisting of 4 treatments with 6 tests, there are control, fruit extract, purifying leaf extract, and a combination of fruit extract and purifying leaves at a concentration of 500gram/l. The experimental data were analyzed using ANOVA, if the results showed a real influence, a further test of BNJ was carried out at a level of 5% while determining LT50 using probit analysis. There are 4 parameters used: mortality, LT50, ability to eat, and physical changes. The results showed that vegetable insecticides are effective and have a very noticeable effect on grayak caterpillar (*S. litura* F.) with the fastest LT value of 50 on the treatment of fruit extract (118 hours). And the ability to eat has a very noticeable effect on the grayak caterpillar (*S. litura* F.) on tobacco leaves.

Keywords: Noni, Mortality, Eat Ability, (*Spodoptera litura* F.)