

**Test Effectiveness of Nuclear Polyhedrosis Virus (NPV) with Different
Application Methods in Tobacco Leaf-Eating Caterpillars
(*Spodoptera litura* F)**

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ABSTRACT

The most frequently found pest and is an important pest that attacks the leaves of tobacco plants is the armyworm (*Spodoptera litura* F.). Control using chemicals can cause various negative impacts, so environmental protection is needed, one of which uses microorganisms such as fungi, bacteria, and viruses to reduce the increase in pest populations. The virus that can control *Spodoptera litura* F. is a Nuclear Polyhedrosis (NPV) virus. *Spodoptera litura* Nuclear Polyhedrosis Virus (*S/NPV*) is a pathogenic virus that infects armyworms. Larvae test used in this study was *Spodoptera litura* instar larvae test 3. The experimental design was a factorial Randomized Design with 2 factors consisting of 1 application factor from various NPV concentrations, namely 1 gr / L, 2 gr / L, and 3 gr / L. Factor 2 of the different application methods, namely contact and application on test larvae (systemic). Then there are 8 combinations that are repeated 4 times so there are 32 experimental units. The results showed that the *S/NPV* study was effective in the death of *Spodoptera litura* F. The application method had a significant effect on the death of *Spodoptera litura* F. The combination of *S/NPV* and the application method has a significant effect on mortality of *Spodoptera litura* F.

Keywords: *Spodoptera litura* F, *S/NPV*, concentration, application method