Virulence Test of *Spodoptera litura* F. Nuclear Polyhedrosis Virus (Sl-NPV) With The Addition Of Ultra Violet Protectants Against Tobacco leaf caterpillar (*Spodoptera litura* F.)

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ABSTRACT

Sl-NPV is a specific type of NPV used to control *S.litura*. Exposure to ultraviolet light causes a decrease in the effectiveness of Sl-NPV, so a protective material is needed that can maintain the virulence of Sl-NPV from UV exposure. The purpose of this study was to determine the virulence of Sl-NPV with the addition of a protective agent and to determine the most efficient protective agent for the virulence of Sl-NPV against S.litura. This study used a Randomized Block Design (RAK) consisting of one treatment factor, namely the type of protective material, with 6 treatments, namely control (without UV protector), Sl-NPV+kaolin 5%, Sl-NPV+ husk charcoal 5%, Sl- NPV + molasses 5%, Sl-NPV + yam extract 5%, Sl-NPV + cucumber extract 5%. The observation parameters used in this study were mortality of S. litura larvae, LT50, ER, and physical changes. The results showed that the addition of a protective agent (uv protector) had an effect on Sl-NPV in causing mortality of S. litura F. The most efficient protective agent was molasses with an ER value of 1.64 and an LT50 of 54 hours.

Key words : *Spodoptera litura*, Sl-NPV, virulence, protective agent, ultra violet