

***THE EFFECT OF APPLICATIONS OF *Spodoptera litura* Nuclear
Polyhedrosis Virus (SL-NPV) ON AGROECOSYSTEM VARIETY
IN SOYBEAN CULTIVATION***

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ABSTRACT

The Variety and abundance of arthropods influence the quality and quantity of cultivated plant products. In a natural ecosystem, the presence of insect pests is no longer harmful because of the stability between the abundance of pests and their natural enemies. One of the influencing factors is the type of insecticide. SLNPV is a selective and environmentally friendly biopesticide. This study aims to assess the Variety and abundance of arthropods, harvested pod weight, and the number of pods every clump of edamame soybean. This study was conducted in July-September 2020 in Balung Lor village, Jember. This research method was carried out in an area of 100 m² of edamame soybean cultivation by comparing the Variety and abundance of arthropods before and after the application of SINPV on edamame soybeans which included the number of orders, classes, number of families, and number of species and looking for the simpson dominance index with processing data using Microsoft excel. The result of this study shows that before the application of SINPV the number of orders 12, 16 families and 20 species. 373 herbivores, 108 predators, and 30 pollinators. With H' Index 2.3 and C' Index 0.21. After the application of SINPV 12 orders, 16 families, and 20 species. With index H' 2.5 and Index C' 0.12.

Keywords: Arthropoda Variety, Edamame Soybean, SINPV.