

THE APPLICATION OF A TRAPS LIGHT AGAINST THE DIVERSITY OF ARTHROPODS IN OF POTATO PLANS

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ABSTRACT

This study aims to determine the effect of the color of yellow light traps and white light traps on the diversity of arthropods found in two potato cultivation areas with plot 1, namely yellow light traps and plot 2, color light traps. white, the distance between plot 1 and plot 2 is 1 km which includes Herbivorous, Dekomposer, Polinator insects. Observational sampling was carried out in the middle of the potato crop cultivation area by purposive sampling method. This research was conducted from September 2021 to December 2021. This research activity was carried out in Jampit Village, Ijen District, Bondowoso Regency. The reference parameters for field observations were based on the number of trapped arthropods, the Shannon-Weiner diversity index test, the Simpson dominance index and observed yields of 10% of 200 plants in each plot. Further test of data analysis in the field using non-parametric Mann Whitney analysis. The results showed that there was a significant difference between the average number of arthropod insectstrapped in yellow light traps (176 individuals) and white light traps (99 individuals). The effectiveness of the two light traps light traps on the attraction of arthropod insects trapped in yellow light traps is more effective against arthropod insects. The average tuber weight in plots with yellow light traps was 728.5 gram. The average tuber weight in plots with white light traps was 581.5 gram. This figure is significantly different according to the further test of Mann Whitney.

Keywords: *Arthropoda; Ligh Trap; Potato*