EFFECT OF APPLICATION Metarhizium anisopliae Metsch. Sorokin ON POPULATION AND MORTALITY OF URETTE PESTS SUGAR CANE PLANT (Lepidiota stigma F.) IN GRATI VILLAGE SUMBERSUKO DISTRICT, DISTRICT LUMAJANG

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ABSTRACT

The ureth pest (Lepidiota stigma F.) is one of the pests of sugar cane plants which can cause up to 50% damage. Metarhizium anisopliae Metsch. Sorokin is an entomopathogenic fungus which is included in the biological agents that can be used for biological control of sugarcane weevil pests. This research was carried out from April to June 2023 and took place on the Grati Village Sugarcane Farm owned by PG Jatiroto, Lumajang Regency. The aim of this research is to determine the effect of applying Metarhizium anisopliae Metsch. Sorokin on the population and mortality of sugar cane pests in Grati Village, Sumbersuko District, Lumajang Regency. This research used an Independent T-Test which consisted of 2 treatments with 30 samples in each treatment and used an application method by sowing directly on the soil around the roots where the sugar cane pests live. The parameters in this research are population, mortality, and physical changes of sugarcane worm pests. The results showed that the biological agent Metarhizium anisopliae Metsch. Sorokin had a significant effect on the population and mortality of sugar cane pests with a mortality percentage reaching 67.5% in the 4th observation.

Keywords: L. Stigma F., M. anisopliae, application method, population, mortality