

EFFICACY TESTING OF BIOLOGICAL AGENTS *Metarhizium* sp. WITH DIFFERENT APPLICATION METHODS AGAINST ON MORTALITY OF SUGARCANE PLANT URET PEST (*Lepidiota stigma* F.)

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ABSTRACT

*The uret pest of sugarcane (*Lepidiota stigma* F.) is one of the important pests that can reduce sugarcane production as a root destroying pest. There are several ways to control pests, one of which is by using the biological agent *Metarhizium* sp. This research was conducted in June-August 2023 at the Plant Protection Laboratory, Agricultural Production Department, Jember State Polytechnic. The purpose of this research was to determine the effectiveness of the *Metarhizium* sp application method on mortality of the uret pest of sugarcane plants. This research used a nonfactory randomized block design (RBD) consisting of 4 treatments with 6 replications, namely control, feed method, contact method, and combination method (contact and feed). The experimental data were analyzed using ANOVA, if the results showed a significant effect, then a 5% level LSD further test was carried out, while to determine LT50 using probit analysis. The parameters used are mortality, physical changes, and LT50. The results of the research showed that the biological agent *Metarhizium* sp had a very significant effect on the mortality of sugarcane pests with the fastest LT50 value of 220 hours in the combination treatment of contact and feed methods.*

*Keywords : *L. stigma* F, *Metarhizium* sp, application method, mortality*