

***EFFECT APPLICATION OF *Metarhizium sp.* AND BIOPESTICIDA  
OF PALM OIL EMPTY FRUIT ON MORTALITY AND POPULATION URET  
PESTS IN SUGARCANE FIELDS OF GRATI VILLAGE LUMAJANG***

*Supervised by Anni Nuraisyah, S.TP., M.Si*

*Study Program of Cultivation of Crops Plantation  
Department of Agricultural Production, Jember State Polytechnic  
e-mail : [ayu200521@gmail.com](mailto:ayu200521@gmail.com)*

**ABSTRACT**

*The uret pest (*lepidiota stigma F.*) is one type of pest that causes a decrease in sugarcane crop production. There are several ways to control sugarcane uret pests effectively, economically, and ecologically, namely with biological agents using *Metarhizium sp* and palm empty fruit bunch (TKKS) liquid smoke biopesticides. This research was conducted from April to June 2023 in sugarcane fields in Grati Village, Sukorambi District, Lumajang Regency, East Java Province. The purpose of this study was to determine the effect of the application of *Metarhizium sp.* and TKKS biopesticides on mortality and population of uret pests in sugarcane fields in Grati Village, Lumajang. This study used a Non-Factorial Randomized Group Design (RAK) consisting of 3 treatments with 10 replicates including the control treatment, *Metarhizium sp*, and palm empty fruit bunch liquid smoke biopesticide (TKKS). Data from the study were analyzed using ANOVA, if the results showed a real effect then continued with the BNT further test at the 5% level. The parameters used were mortality, population, and physical changes in sugarcane uret pests. The results showed that the application of *Metarhizium sp* had a very significant effect on the mortality of sugarcane uret with the highest mortality value of 92.67%. The application of palm empty fruit bunch biopesticide had a very significant effect on uret mortality of 78%.*

***Keywords:*** *sugarcane uret pests, *Metarhizium sp*, biopesticide TKKS*