

**APPLICATION OF THE ENTOMOPATHOGENIC FUNGUS
Metarhizium sp. TO CONTROL THE PEST WALANG SANGIT
(*Leptocorisa oratorius*) ON RICE PLANTS**

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ABSTRACT

*Rice is a major food commodity in Indonesia, but its productivity often declines due to attacks by the brown planthopper (*Leptocorisa oratorius*). Pest control commonly practiced by farmers is still dominated by the use of chemical pesticides, which are effective quickly but have the potential to cause negative impacts on the environment. Therefore, more environmentally friendly pest control alternatives are needed, one of which is through the use of the biological agent *Metarhizium* sp. This study aims to compare the effects of *Metarhizium* sp. and chemical pesticides (Spontan with the active ingredient dimehipo) on the weight of milled dry grain (GKG) in rice plants. The study was conducted on rice cultivation land with two treatments, namely the application of *Metarhizium* sp. and the chemical pesticide. GWG observations were made by weighing the grain per sample after drying. The data were analyzed using the Independent Sample T-test at a significance level of 5%. The results showed that the chemical pesticide treatment produced an average WDG value of 24.25 ± 3.25 g, while the *Metarhizium* sp. treatment produced 22.15 ± 3.74 g. Statistically, the two treatments did not show a significant difference ($P > 0.05$). Thus, the application of *Metarhizium* sp. has the potential to be used as an environmentally friendly pest control alternative without significantly reducing rice production.*

Keywords: Metarhizium sp, rice, brown planthopper