ABSTRACT

MUNADI, this research is entitled **" The Effect of Different Application Doses of *Beauveria bassiana* in Controlling Rice Bug (Leptocorisa acuta) on Rice Plants"** Advisor I. Nanik Lutfiyah, S.Si., M.Si. and II. Agus Fahmi, S.P., M.Si.

Rice (Oryza sativa L.) is a major carbohydrate source for a significant portion of the global population, including Indonesia, where nearly 95% of the population consumes rice as a staple food. The demand for rice continues to rise with the increasing population. One of the major challenges in rice cultivation is pest infestation, particularly the rice bug (Leptocorisa acuta), which can cause substantial damage to crops. This study aimed to evaluate the effect of different doses of the biological agent *Beauveria bassiana* in controlling the rice bug population in rice plants. The research was conducted at the UPT Plant Protection and Horticulture Mojokerto, from January to December 2023. A Completely Randomized Design (CRD) was used, with four treatment groups of *Beauveria bassiana* concentrations: P0 (no treatment), P1 (9 ml/L), P2 (12 ml/L), and P3 (15 ml/L), each repeated four times, resulting in 16 experimental units. The results showed that the application of *Beauveria bassiana* effectively reduced the rice bug population. Mortality started at 5 days after application (DAA) for P2 and P3, while mortality for P1 occurred at 6 DAA. The fastest mortality was observed in P3 (15 ml/L), followed by P2 (12 ml/L), and P1 (9 ml/L), while no mortality was observed in P0. Infected rice bugs showed signs of mummification, with their bodies hardening and being covered with white fungal mycelium. Based on the findings, the optimal dose for controlling rice bugs was 15 ml/L. Further field studies are recommended to assess the effectiveness of *Beauveria bassiana* in controlling pest populations under varying environmental conditions.

.**Key words** : *Rice, Beauveria bassiana, Leptocorisa acuta*