

***The Effectiveness of Mixed Bioinsecticide Against Stink Bug Pests
(Leptocorisa oratorius F.) on Rice Plants (Oryza sativa L.)***

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ABSTRACT

Leptocorisa oratorius F pest attacks can reduce crop yields by up to 50%. Farmers are more dominant in using synthetic pesticides as a control solution that can cause pests to become toxic and less environmentally friendly. There needs to be an alternative way of controlling pests such as the application of a bioinsecticide mixture of neem leaves, soursop leaves and garlic. This research was conducted from October 2022 to January 2023 in the plant protection laboratory and on rice cultivation land at the Jember State Polytechnic. This study consisted of 2 stages, namely mortality and toxicity tests to determine the concentration to be used in the field. Mortality and toxicity tests used 6 treatment levels, namely concentrations of 0%, 7%, 12%, 17%, 22% and 27%. The second steps of the study was a field test by comparing the two treatments with maceration treatments for 24 hours, between the bioinsecticide treatment of a mixture of neem leaves, soursop leaves and garlic with cypermethrin treatment. The results of the mortality test and the toxicity test of a mixture of neem, soursop and garlic bioinsecticides against the rice bug pest were LC₉₅ 61%. The population of rice bugs with the application of mixed bioinsecticides showed a higher pest population than cypermethrin. However, the attack intensity at 74 HST showed a significant difference where the cypermethrin treatment had a higher attack intensity than the bioinsecticide. On the yield parameters of dry paddy rice weight showed the results of the mixed bioinsecticide treatment showed significantly different results which were significantly lower with the cypermethrin treatment.

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