EFFECT OF LIQUID SMOKE HUSK INSECTICIDE AGAINST RICE BUG (*Leptocorisa oratorius* F.) IN RICE PLANT

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ABSTRACT

In terms of controlling pests, farmers tend to prefer chemical control using synthetic insecticides which have a high toxic content and have an bad impact on the environment, therefore other control alternatives are needed, one of which is liquid smoke. This research was to determine the effectiveness of the application of rice husk liquid smoke against rice bug (Leptocorisa oratorius F.) on rice plants. This research was conducted from June to September 2021, at rice fields of Balung Lor Village, Jember Regency. This research used a completely randomized design for laboratory tests with 6 concentration levels (0 ml/100 ml aquadest, 5 ml/100 ml/100 ml aquadest, 10 ml/100 ml aquadest, 15 ml/100 ml aquadest, 20 ml/100 ml aquadest and 25 ml/100 ml aquadest), and non-parametric design by comparing 2 plots of land for field tests. Data analysis used ANOVA that followed by 5% BNT. The results showed that there was a significant difference in the pest mortality variable and no significant difference in the population variable, attack intensity and dry grain weight between rice husk liquid smoke plots with a concentration of 10% and alphamethrin synthetic insecticide plots. Significantly different results on pest mortality were indicated by obtaining an optimal concentration of 10% which had a mortality value of 0.80 with an efficacy of 80%. While the results were not significantly different on pest populations and attack intensity, rice husk liquid smoke had the same effectiveness as alphamethrin in suppressing the population rate and intensity of pest attacks.

Keywords : *Efectiveness, Rice bug, Rice husk liquid smoke, Alphamethrin*