EFFECTIVENESS OF LIQUID SMOKE INSECTICIDE MIXED FROM PALM MIDRIB-LEAF WASTE AND COCONUT SHELL ON WALANG SANGIT PEST (Leptocorisa oratorius F.) IN RICE (Oryza sativa)

Supervised by Rudi Wardana. S.Pd., M.Si.

Ayunia Istiqomah
Food Plant Production Technology Study Program
Department of Agricultural Production

ABSTRACT

In terms of pest control, farmers tend to prefer chemical control using synthetic insecticides which have a high toxic content and hurt the environment, therefore other control alternatives are needed, one of which is liquid smoke. This study aimsto determine the effectiveness of applying liquid smoke of a mixture of fronds andcoconut shells against rice bugs (Leptocorisa oratorius F.) on rice plants. This research was conducted from October 2022 to January 2023, taking place in the ricefields of the Jember State Polytechnic. This study used a completely randomized design for laboratory tests with 6 concentration levels, namely control (aquades), 7% (7 ml/100 ml), 12% (12 ml/100 ml), 17% (17 ml/100 ml), 22 % (22 ml/100 ml),27% (27 ml/100 ml), and non-parametric design by comparing 2 plots of land for field trials. Data analysis used ANOVA followed by a Mann-Whitney test. The results showed that there were no significant differences in population variables, the intensity of attacks, and yields of paddy dry grain weight of 46.68g and 42.46g,rice bernass 62.73g and 60.42g. The results of pest toxicity were shown by the results obtained in liquid smoke LC50 of 12% and LC95 of 47%.

Keywords: Effectiveness, Stink bug, liquid smoke of frond and shell mixture, Cypermethrin