

**THE EFFECTIVENESS OF SOME BOTANICAL PESTICIDES FOR THE
CONTROL OF THE RICE BETTER PEST (*Sitophilus oryzae*)**

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ABSTRACT

Sitophilus oryzae is one of the rice main pests. Control of *S. oryzae* is usually carried out using chemical pesticides, in contrast leaving a negative impact on the environment furthermore consumed by humans excessively. It is necessary to find a solution by utilizing natural ingredients such as the use of botanical pesticides. This study aimed to determine several types of plants that are effectively used to suppress the development of *S. oryzae* in rice and their impacts on rice after their application. The research was arranged in a Completely Randomized Design (CRD) one factor with 8 treatments + 1 control: 20g chopped of pandanus leaves, lemongrass, soursop leaf, kaffir lime leaf, 20g powder of pandanus leaf, lemongrass, soursop leaf, 20g kaffir lime leaf and control without treatment, each treatment was repeated 3 times. The data of the observations were analyzed using *analysis of variance* (ANOVA) and if there was a significant effect, then continued using DMRT (*Duncan's Multiple Range Test*) with a level of 5%. The result showed that kaffir lime leaf powder gave the best result among other treatments in all parameters including effectiveness of botanical pesticides with 28% , mortality of *S. oryzae* with 26 *S. oryzae*, rate of death of *S. oryzae* with 1,84 *S. oryzae*/day, population of *S. oryzae* with 52,33 *S. oryzae*, weight loss of rice with 0,33%, consumer preference test with 3,8 for color and 3,3 for scent and botanical pesticides repellency with 76%.

Keywords: botanical pesticide, repellency, *Sitophilus oryzae*, consumer preference.