

ABSTRACT

Rice that is produced in large quantities will be stored in warehouses, thereby allowing the risk of being attacked by pests. One of the causes of damage is attack by the pest *Sitophilus oryzae*. The damage caused by this pest is serious and is even considered the most detrimental pest to agricultural products. Efforts that can be made to eradicate pests are by using botanical insecticide. One of the plants that has the potential to control and suppress rice weevil populations is lemongrass (*Cymbopogon citratus*) and papaya (*Carica papaya* L.). This research aims to test the powder of lemongrass leaves and papaya leaves on the inhibition of feeding and mortality of *S. oryzae* pests. This research was carried out at the Plant Pest and Disease Laboratory, Agroecotechnology Study Program, Department of Agricultural Cultivation, Malikussaleh University. The research implementation time will be carried out from August to October 2023. The research used a Completely Randomized Design (CRD). The treatments used in this research were lemongrass leaf powder and papaya leaf powder as vegetable insecticides, each treatment was repeated 3 times to produce 30 experimental units. The results of the research showed that administering vegetable insecticides in the form of lemongrass leaf powder and papaya leaves had a significant effect on mortality and inhibition of *S. oryzae* pests. Papaya leaf powder has slightly higher toxicity than lemongrass leaf powder on *S. oryzae* imago. Lemongrass and papaya leaf powder have relatively low feeding inhibitory activity against *S. oryzae*. Application of lemongrass leaf and papaya leaf powder can be used to control *S. oryzae* pests in grain during storage.

Keywords: lemongrass leaves, mortality, papaya leaves, *S. oryzae* pest