

ABSTRACT

The purpose of the study was to determine the effectiveness of using vegetable insecticides from 5 types of plant powders as much as 2 g/100 g of rice grain against the mortality of *S. oryzae* pests. The research lasted for ten days conducted in May 2024 which was carried out at the Laboratory of Pests and Plant Diseases, Faculty of Agriculture, Malukussaleh University. The experimental design used was a completely randomized design consisting of six treatments with three replications. Treatments include Betel leaf powder, Neem leaf powder, Tapak Liman leaf powder, Guava leaf powder, Jatropha leaf powder and Control. 150 *S. oryza* insect imago were infested into 100 g of rice grain per treatment, then applied using vegetable insecticide powder. The parameters observed were the mortality of *S. oryzae* imago starting from 1 day after application until 10 days after application. The results showed that the activity of vegetable insecticides from betel leaf powder 80%, neem leaves 100%, tapak liman leaves 63%, guava leaves 73% and jatropha leaves 90% caused mortality of *S. oryzae* imago on rice grain in storage.

Keyword: insecticidal activity, mortality, *Sitophilus oryzae*, rice grain.