ABSTRACT

This study aims to evaluate feeding inhibitory activity, killing power, and mortality. This research was conducted at the Laboratory of Plant Pests and Diseases, Faculty of Agriculture, Malikussaleh University, and Chemical Engineering Laboratory, Lhokseumawe State Polytechnic. This study used a non-factorial completely randomized design with 3 replications. The factors observed were different concentrations of *Elephantopus scaber* leaf extract against rice powder weevil imago and rice flour beetle, namely 0.5%, 1%, 2%, 4%, and 8% (b/v). The results showed that *Elephantopus scaber* plants have insecticidal properties against *S. oryzae* and *T. castaneum*. Antifeedant test showed that *Elephantopus scaber* leaf extract caused 91.79% feeding inhibition activity of rice powder weevil and 92.27% feeding inhibition activity of rice flour weevil 5 hours after application. The food rejection test showed that the rejection activity on rice powder weevil imago was 86.67% while on rice flour weevil imago was 100% after 7 days of application. To test the toxicity of rice powder weevil by 96.67% and on rice flour weevil by 96.67%.

Keywords: insecticidal activity, plant extracts, rice, *Sitophilus oryzae*, *Tribolium castaneum*.