

**THE EFFECT OF FRAGRANT PANDAN LEAF POWDER AND
SOURSOP LEAF POWDER ON *Tribolium castaneum* POPULATION AND
THE QUALITY OF WHEAT FLOUR IN STORAGE**

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ABSTRACT

Tribolium castaneum is warehouse pest that can attack agricultural commodities in storage, causing decrease quality. Control of *T. castaneum* currently still uses synthetic insecticides which have negative impact on the environment. Environmentally friendly alternative control can be done using vegetable insecticides from fragrant pandan and soursop plants. This research aims to determine the effect applying fragrant pandan leaf and soursop leaf powder in suppressing the development of *T. castaneum* in wheat flour. Research was carried out at the Plant Protection Laboratory, Faculty of Agriculture, National Development University "Veteran" Yogyakarta from March to May 2024. The method used one-factor Completely Randomized Design (CRD) consisting of 7 treatments with 3 replications. This treatment consisted of a control, 5 g fragrant pandan leaf powder, 10 g fragrant pandan leaf powder, 15 g fragrant pandan leaf powder, 5 g soursop leaf powder, 10 g soursop leaf powder, and 15 g soursop leaf powder. The data were analyzed using ANOVA 5% level and tested further with DMRT 5% significance level. The results showed that treatment 10 g and 15 g soursop leaf powder had best effect in suppressing the *T. castaneum* population and maintaining the quality of wheat flour.

Keywords : *Tribolium castaneum*, fragrant pandan leaves, soursop leaves