

**PENGARUH JENIS PELARUT DAN LAMA MASERASI EKSTRAK DAUN
PEPAYA TERHADAP MORTALITAS DAN PERKEMBANGAN
ULAT GRAYAK (*Spodoptera litura* F.)**

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ABSTRACT

Armyworms are an important leaf-eating pest. This pest is polyphagous. Vegetable pesticides are pesticides derived from plants, one of the plants that can be used as pesticides is the papaya plant (*Carica papaya* L.). The study aims to determine the effect of solvent type and maceration time in extracting papaya leaves and determine its effect on armyworm pests (*S. litura*). The research was conducted at the Plant Protection Laboratory, Faculty of Agriculture, National Development University "Veteran" Yogyakarta in November 2023 - January 2024. The study used a factorial Completely Randomized Design (CRD) with two factors and one control, the first factor is the type of solvent ethanol and methanol. The second factor is the length of maceration (3, 5, and 7 days). To test between treatment and control using orthogonal contrast test. Parameters observed included papaya leaf yield, larval mortality, larval mortality time, percentage of larvae into pupae, larval time into pupae, percentage of larvae into imago, pupae time into imago, effectiveness, and feeding power. Observational data were analyzed with variance analysis (ANOVA) at the 5% level, then the data were further tested with Duncan Multiple Range Test (DMRT) at the 5% level. The results showed that the use of methanol solvent with a maceration time of 7 days was able to increase yield, larval mortality, and effectiveness, as well as suppress the formation of pupae and larval feeding power. The use of methanol solvent with 3 days maceration is effective in suppressing the development of pupae into imago.

Kata kunci: *Spodoptera litura* F, papaya leaf extract, maceration, ethanol, methanol