

PERSISTENSI PESTISIDA EKSTRAK TEMBAKAU DALAM PENGENDALIAN *Plutella xylostella* PADA DAUN KUBIS

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ABSTRAK

Serangan hama dapat menurunkan hasil kubis. Pestisida ekstrak daun tembakau kering dapat digunakan untuk mengendalikan hama. Tujuan dilakukan penelitian untuk mengetahui persistensi ekstrak daun tembakau kering terhadap pengendalian larva *Plutella xylostella* pada daun kubis. Penelitian satu faktor disusun menurut Rancangan Acak Lengkap (RAL) dengan perlakuan K0 (Tanpa perlakuan), K+ (Deltamethrin), K1 (Daun kobis di celup pada 0 hari sebelum pemberian pakan), K2 (Daun kobis di celup pada 2 hari sebelum pemberian pakan), K3 (Daun kobis di celup pada 4 hari sebelum pemberian pakan), K4 (Daun kobis di celup pada 6 hari sebelum pemberian pakan) dan 4 kali ulangan. Jumlah larva *Plutella xylostella* yang diuji dalam toples sebanyak 10 ekor. Penelitian dilaksanakan di Laboratorium Proteksi Tanaman Fakultas Pertanian UPN “Veteran” Yogyakarta pada bulan Agustus sampai dengan bulan Oktober 2025. Pengamatan yang dilakukan meliputi mortalitas hama, daya makan hama, perubahan tingkah laku hama, persentase larva menjadi pupa, persentase pupa menjadi imago, efektifitas pestisida. Data dianalisis keragamannya dengan menggunakan analysis of varian (5%) dilanjutkan dengan Duncan's Multiple Range Test (5%). Hasil penelitian menunjukkan aplikasi ekstrak daun tembakau kering yang di celup 0, 2, 4, dan 6 hari sebelum diberi pakan tidak menunjukkan adanya beda nyata antar perlakuan pada pengamatan mortalitas, daya makan, persentase larva menjadi pupa, persentase pupa menjadi imago, dan efektivitas pestisida.

Kata Kunci : Persistensi, Pestisida Ekstrak Daun Tembakau, *Plutella xylostella*.

**PERSISTENCE OF TOBACCO EXTRACT LEAVES IN CONTROLLING
Plutella xylostella ON CABBAGE LEAVES**

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ABSTRACT

Pest attacks can reduce cabbage yield. Pesticides derived from dried tobacco leaf extract can be used to control these pests. This study aimed to determine the persistence of dried tobacco leaf extract in controlling larvae of *Plutella xylostella* on cabbage leaves. The experiment used a single-factor Completely Randomized Design (CRD) with the following treatments: K0 (no treatment), K+ (deltamethrin), K1 (cabbage leaves dipped 0 days before feeding), K2 (cabbage leaves dipped 2 days before feeding), K3 (cabbage leaves dipped 4 days before feeding), and K4 (cabbage leaves dipped 6 days before feeding), each with 4 replications. A total of 10 *Plutella xylostella* larvae were tested in each jar. The study was conducted at the Plant Protection Laboratory, Faculty of Agriculture, UPN “Veteran” Yogyakarta from August to October 2025. Observations included pest mortality, feeding rate, behavioral changes, percentage of larvae developing into pupae, percentage of pupae developing into imago, and pesticide effectiveness. Data were analyzed for variance using analysis of variance (5%) followed by Duncan’s Multiple Range Test (5%). The results showed that application of dried tobacco leaf extract with dipping times of 0, 2, 4, and 6 days before feeding did not show any difference among treatments in observations of mortality, feeding rate, percentage of larvae developing into pupae, percentage of pupae developing into imago, or pesticide effectiveness

Keywords : Extract from Tobacco Leaves, Persistence, *Plutella xylostella*