

**PERBEDAAN EFIKASI EKSTRAK BEBERAPA JENIS DAUN
TANAMAN TERHADAP MORTALITAS LARVA *Plutella xylostella* L.
PADA TANAMAN KUBIS (*Brassica oleracea* var. *capitata*) DI
LABORATORIUM**

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Abstrak

Tanaman kubis merupakan salah satu komoditi hortikultura yang mengalami penurunan tingkat produktivitas disebabkan oleh serangan hama ulat daun (*Plutella xylostella* L.). Penelitian ini bertujuan untuk mengetahui: (1) Waktu tercepat kematian larva *P. xylostella* L. dengan pemberian beberapa jenis ekstrak daun tanaman pada tanaman kubis (*Brassica oleracea* var. *capitata*). (2) Persentase mortalitas larva *P. xylostella* L. dengan pemberian beberapa jenis ekstrak daun tanaman pada tanaman kubis (*Brassica oleracea* var. *capitata*). Penelitian ini merupakan penelitian *experimenta research* dengan Rancangan Acak Lengkap (RAL) yang terdiri dari 4 perlakuan dalam 5 kali ulangan dengan konsentrasi ekstrak 10%. Adapun perlakuan dalam penelitian ini antara lain, A (Kontrol), B (Ekstrak Kenikir), C (Ekstrak Mimba), D (Ekstrak Pepaya). Hasil penelitian menunjukkan bahwa: (1) Pemberian beberapa jenis ekstrak daun tanaman mengakibatkan perbedaan waktu tercepat kematian larva *P. xylostella* L. pada pengamatan 24 JSA (Jam Setelah Aplikasi) diperoleh rerata kematian pada tertinggi yaitu perlakuan D sebesar $5,80 \pm 0,837$ ekor larva dan rerata terendah terdapat pada perlakuan A sebesar $0,00 \pm 0,000$ ekor larva. (2) Hasil analisis pemberian perlakuan terhadap persentase mortalitas larva menunjukkan bahwa terjadi perbedaan persentase mortalitas larva *P. xylostella* L. pada tanaman kubis dengan perlakuan D lebih tinggi yaitu 78% dibandingkan dengan perlakuan A 2%, perlakuan B 36%, dan perlakuan C sebesar 58%. Berdasarkan hasil penelitian ini, dapat diketahui bahwa terdapat perbedaan kecepatan kematian dan presentase mortalitas larva *P. xylostella* L. pada tanaman kubis.

Kata Kunci : Kenikir, mimba, pepaya, waktu tercepat, dan mortalitas

**DIFFERENCES IN THE EFFICIENCY OF SEVERAL TYPES OF PLANT
LEAVES ON LARVA MORTALITY *Plutella xylostella* L. IN CABBAGE
(*Brassica oleracea* var. capitata) IN THE LABORATORY**

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ABSTRACT

One of these obstacles is the attack of caterpillars (*Plutella xylostella* L.). This study aims to determine: (1) The fastest time of death of *Plutella xylostella* L. larvae by administering several types of plant leaf extracts on cabbage plants (*Brassica oleracea* var. capitata). (2) Percentage of mortality of *P. xylostella* L. larvae with the administration of several types of plant leaf extracts on cabbage (*Brassica oleracea* var. capitata). This study is an experimental research with a completely randomized design (CRD) consisting of 4 treatments in 5 replications with an extract concentration of 10%. The treatments in this study were, A (Control), B (Mischievous Extract), C (Neem Extract), D (Papaya Extract). The results showed that: (1) Administration of several types of plant leaf extracts resulted in differences in the fastest time of death of *P. xylostella* L. larvae at 24 JSA observations (Hours After Application) the highest average mortality was found in treatment D of 5.80 ± 0.837 larvae and the lowest average was found in Treatment A was 0.00 ± 0.000 larvae. (2) The results of the analysis of the treatment on the percentage of larval mortality showed that there was a difference in the percentage of mortality of *P. xylostella* L. larvae in cabbage plants with treatment D which was higher at 78% compared to treatment A 2%, treatment B 36%, and treatment C by 58%. Based on the results of this study, it can be seen that there are differences in mortality rate and mortality percentage of *P. xylostella* L. larvae in cabbage plants.

Keywords: Mischievous, neem, papaya, fastest time, and mortality