

**VARIASI KONSENTRASI EKSTRAK DAUN PEGAGAN (*Centella asiatica* L. urban) MENGAKIBATKAN PERBEDAAN MORTALITAS DAN GEJALA KEMATIAN HAMA ULAT BAWANG (*Spodoptera exigua* Hubner) PADA TANAMAN BAWANG MERAH (*Allium ascalonicum* L.)**

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**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui (1) perbedaan mortalitas hama ulat bawang (*Spodoptera exigua* Hubner) pada tanaman bawang merah (*Allium ascalonicum* L.) setelah aplikasi ekstrak daun pegagan (*Centella asiatica* L. urban), (2) konsentrasi ekstrak daun pegagan yang paling efektif, (3) perbedaan gejala kematian hama ulat bawang (*Spodoptera exigua* Hubner). Penelitian ini merupakan eksperimen sungguhan (true experimental) dengan Rancangan Acak Lengkap (RAL) 6 perlakuan dan 5 ulangan sehingga didapatkan 30 unit percobaan. Perlakuan yang dilakukan yaitu A (konsentrasi 0%), B (konsentrasi 5%), C (konsentrasi 10%), D (konsentrasi 15%), E (konsentrasi 20%), F (konsentrasi 25%). Subyek dalam penelitian ini adalah 150 larva *Spodoptera exigua* Hubner instar 3 dengan setiap unit percobaan menggunakan 5 larva. Penelitian ini dianalisis dengan menggunakan uji Hipotesis *Kruskall-Wallis* dan uji lanjut *Mann-Whitney* pada taraf signifikansi 5%. Hasil penelitian menunjukkan bahwa: (1) pemberian variasi konsentrasi ekstrak daun pegagan dengan rerata persentase mortalitas pada konsentrasi 0%, 5%, 10%, 15%, 20% dan 25% berturut-turut adalah 4%; 12%; 32%; 44%, 60% dan 76% %. (2) Hasil uji lanjut *Mann-Whitney* menunjukkan bahwa konsentrasi 10% ekstrak daun pegagan sudah efektif dan mampu mengakibatkan perbedaan persentase mortalitas dengan rerata 32% (3) Gejala kematian yang ditimbulkan adalah warna larva menjadi coklat kehitaman, perubahan perilaku larva, dan perubahan bentuk. Berdasarkan hasil penelitian tersebut, variasi konsentrasi ekstrak daun pegagan mengakibatkan perbedaan mortalitas dan gejala kematian, serta konsentrasi 10% merupakan konsentrasi yang sudah efektif mengakibatkan mortalitas.

Kata kunci: Daun Pegagan, *Spodoptera exigua* Hubner, Mortalitas, Gejala kematian

**VARIATIONS IN CONCENTRATION OF PEGAGAN (*Centella asiatica* L.  
urban) CAUSE DIFFERENCES IN MORTALITY AND DEATH  
SYMPTOMS RATE OF ONION PESTS (*Spodoptera exigua* Hubner) IN  
SHALLOT (*Allium ascalonicum* L.)**

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**ABSTRACT**

This study aims to determine (1) the differences in the mortality of onion caterpillar pests (*Spodoptera exigua* Hubner) on shallots (*Allium ascalonicum* L.) after application of *Centella asiatica* L. Urban leaf extract, (2) concentration of *Centella asiatica* L. Urban effective, (3) differences in death symptoms of onion caterpillar pests (*Spodoptera exigua* Hubner). This study was a true experiment using a completely randomized design (CRD) with 6 treatments and 5 replications so that 30 experimental units were obtained. The treatments were A (0% concentration), B (5% concentration), C (10% concentration), D (15% concentration), E (20% concentration), F (25% concentration). The subjects in this study were 150 larvae of *Spodoptera exigua* Hubner instar 3 with each experimental unit using 5 larvae. This study were analyzed using the *Kruskall-Wallis* hypothesis test and followed by the *Mann-Whitney* at a significance level of 5%. The results showed that: (1) giving variations in the concentration of pegagan leaf extract with an average percentage of mortality at concentrations of 0%, 5%, 10%, 15%, 20% and 25% were 4% respectively; 12%; 32%; 44%, 60% and 76%%. (2) The results of the *Mann-Whitney* showed that a concentration of 10% pegagan leaf extract was effective and was able to cause a difference in the percentage of mortality with an average of 32% (3) The symptoms of death caused were the color of the larvae turning blackish brown, changes in larval behavior, and changes in shape. Based on the results, variations in concentrations of pegagan leaf extract resulted in differences in mortality and death symptoms, and a concentration of 10% was a concentration that was effective in causing mortality.

*Keywords: Pegagan leaf, Spodoptera exigua* Hubner, Mortality, Death symptoms