

Intisari

Spodoptera exigua merupakan salah satu hama yang menyerang bawang merah. Salah satu pengendalian yang dapat dilakukan adalah dengan meningkatkan ketahanan tanaman dengan pengaplikasian pupuk, seperti vermikompos. Penelitian ini bertujuan untuk mengetahui pengaruh vermikompos terhadap tanaman bawang merah serta pertumbuhan dan perkembangan dan bobot pakan *Spodoptera exigua*. Penelitian dilakukan di Laboratorium Entomologi Dasar dan Sub Laboratorium Ilmu Tanaman Laboratorium Manajemen dan Produksi Tanaman, Fakultas Pertanian, Universitas Gadjah Mada, Yogyakarta. Berdasarkan hasil penelitian, perlakuan pupuk berpengaruh nyata terhadap bobot segar daun, namun tidak berpengaruh nyata terhadap lama hidup dan bobot pakan *Spodoptera exigua* serta bobot segar dan kering total, bobot kering daun, kandungan air total, lebar bukaan dan densitas stomata, kandungan klorofil (a, b, dan total), pH tanah, tinggi tanaman, dan jumlah daun.

Kata kunci: *Spodoptera exigua*, vermikompos, bawang merah.

Abstract

Spodoptera exigua is one of the pests on shallot. One of the methods that we can apply to control the pest is to increase the plant resistance by applying fertilizers, such as vermicompost. This research aims to determine the effect of vermicompost on shallots, growth, and development of *Spodoptera exigua*, as well as their feed weight. This research held at Laboratory of Crop Pest, Room Invertebrate and Laboratory of Plant Production Management, Room Plant Science, Faculty of Agriculture, Universitas Gadjah Mada. According to the result, the fertilizers have a significant effect to leaves fresh weight. However, the fertilizers treatment did not have a significant effect on the growth and feed weight of *Spodoptera exigua*, shallot leaves dry weight, plant fresh and dry weight, total water content, stomatal opening width and density, chlorophyll content (a, b, and total), soil pH, plant height, and the number of leaves.

Keywords: *Spodoptera exigua*, vermicompost, shallot.