

Adzrotul Ariqoh Ula. 190311100082. Respon Pertumbuhan dan Kandungan Serat Tanaman Kailan (*Brassica oleraceae* L.) Terhadap Pemberian Pupuk Kascing dan Biourin Kambing. Dibimbing oleh: Ir. Sinar Suryawati, M.Si. dan Dr. Ir. H. Achmad Arsyadmunir, MS.

ABSTRAK

Tanaman Kailan (*Brassica oleraceae* L.) termasuk tanaman sayuran berumur pendek yang memiliki kandungan vitamin A, vitamin B1, vitamin B2, vitamin C, kalori, protein, lemak, karbohidrat, serat pangan, mineral Ca, P, Fe, dan air. Salah satu upaya untuk meningkatkan pertumbuhan tanaman kailan yaitu dengan pemberian pupuk organik. Tujuan penelitian ini untuk mengetahui pertumbuhan dan kandungan serat pangan daun tanaman kailan akibat pemberian pupuk kascing dan biourin kambing. Rancangan penelitian yang digunakan yaitu rancangan acak lengkap dengan 3 kali ulangan yang terdiri dari 9 perlakuan kombinasi antara dosis pupuk kascing (0, 16, dan 32 g/polybag) dan biourin kambing (0, 100, dan 200 ml/polybag). Data hasil pengamatan dianalisis menggunakan *Analysis of Variance* dan uji Beda Nyata Jarak Duncan taraf 5%. Hasil penelitian menunjukkan perlakuan kombinasi pupuk kascing dan biourin kambing berpengaruh nyata terhadap seluruh parameter pengamatan pada umur 40 HST. Perlakuan kombinasi pupuk kascing 32 g/polybag dan biourin kambing 200 ml/polybag menghasilkan rata-rata tertinggi pada seluruh parameter pengamatan yaitu tinggi tanaman, jumlah daun, luas daun, diameter batang, total bobot basah dan bobot kering per tanaman, serta kandungan serat pangan (1,93 g/100 g daun).

Kata Kunci : Kailan (*Brassica oleraceae* L.), Kascing, Biourin Kambing

Adzrotul Ariqoh Ula. 190311100082. Growth and Fiber Content Response of Kailan Plant (*Brassica oleraceae* L.) to The Application of Vermicompost Fertilizer and Goat Biourin. Supervised by: Ir. Sinar Suryawati, M.Si. and Dr. Ir. H. Achmad Arsyadmunir, MS.

ABSTRACT

Kailan plant (*Brassica oleraceae* L.) is a short-lived vegetable plant which contains vitamin A, vitamin B1, vitamin B2, vitamin C, calories, protein, fat, carbohydrates, dietary fiber, minerals Ca, P, Fe, and water. One of the efforts to increase the growth of kailan plants is by applying organic fertilizers. The purpose of this study was to determine the growth and content of dietary fiber in the leaves of the kailan plant due to the application of vermicompost fertilizer and goat biourin. The research design used was a completely randomized design with 3 replications consisting of 9 treatments combining doses of vermicompost fertilizer (0, 16, and 32 g/polybag) and goat biourin (0, 100, and 200 ml/polybag). Observational data were analyzed using Analysis of Variance and Duncan's Distance Significant Difference test at 5% level. The results showed that the combination treatment of vermicompost fertilizer and goat biourin had a significant effect on all observed parameters at the age of 40 HST. The combined treatment of vermicompost fertilizer 32 g/polybag and goat biourin 200 ml/polybag produced the highest averages for all observation parameters such as plant height, number of leaves, leaf area, stem diameter, total wet weight and dry weight per plant, and dietary fiber content (1,93 g/100 g leaf).

Keywords: Kailan (*Brassica oleraceae* L.), Vermicompost, Goat Biourin