

ABSTRAK

Melisa. 2019. Aplikasi Pupuk Kandang Ayam berdasarkan Persentase Bobot Tanah terhadap Pertumbuhan dan Hasil Tanaman Pakcoy (*Brassica rapa* L.) Varietas Nauli F1. Dibawah bimbingan Yati Setiati Rachmawati dan Ryan Widiyanto.

Permintaan pakcoy saat ini semakin meningkat, sejalan dengan tingkat kesadaran masyarakat tentang kesehatan. Kondisi ini berdampak pada menurunnya hasil produksi. Salah satu faktor yang mempengaruhi terjadinya penurunan produksi tanaman pakcoy adalah karena banyaknya alih fungsi lahan dan tingkat kesuburan tanah yang mulai menurun. Kondisi ini tentu mendorong penerapan teknik budidaya alternatif seperti penanaman di lahan terbatas menggunakan polybag dengan penambahan bahan organik dalam meningkatkan produksi tanaman pakcoy. Penelitian ini dilaksanakan di Lahan Kampus II Universitas Islam Negeri Sunan Gunung Djati Bandung dengan menggunakan Rancangan Acak Kelompok (RAK) terdiri dari 4 perlakuan dan diulang sebanyak 5 kali, setiap unit percobaan menggunakan 3 unit tanaman sehingga diperoleh total 60 unit tanaman. Rancangan perlakuan yang diberikan yaitu P0 = kontrol; P1 = 1%; P2 = 3%; dan P3 = 5% dari bobot tanah yang berukuran 5 kg. Parameter yang diamati meliputi tinggi tanaman, jumlah daun, luas daun, bobot segar tanaman, bobot kering tanaman, nisbah pupus akar, dan indeks panen. Data dianalisis menggunakan sidik ragam (ANOVA) pada taraf 5% dan dilanjutkan dengan Uji Duncan apabila berpengaruh nyata. Hasil penelitian ini menunjukkan bahwa pemberian pupuk kandang ayam tidak berpengaruh nyata terhadap tinggi tanaman, jumlah daun, luas daun, dan bobot kering tanaman. Perlakuan berpengaruh nyata terhadap bobot segar tanaman, nisbah pupus akar, dan indeks panen. Perlakuan P3 dengan pemberian pupuk kandang ayam sebesar 5% dari bobot tanah menghasilkan bobot segar tanaman (316,1 g), nisbah pupus akar (10,9), dan indeks panen (0,91 g) tertinggi.

Kata kunci : Pakcoy, pupuk kandang ayam, bobot tanah, perlakuan.

ABSTRACT

Melisa. 2019. Application of Chicken Manure Based on Soil Weight Percentage on the Growth and Yield of Pakcoy (*Brassica rapa* L.) Variety Nauli F1. Supervised by Yati Setiati Rachmawati and Ryan Widiyanto.

Demand for pakcoy is currently rising, in line with increasing public health awareness. However, production yields have declined. Factors contributing to this decline include extensive land-use conversion and diminishing soil fertility. These conditions have prompted the adoption of alternative cultivation techniques—such as growing crops in polybags on limited land with added organic matter—to boost pakcoy production. This study was conducted at the Campus II grounds of the State Islamic University (UIN) Sunan Gunung Djati Bandung using a Randomized Block Design (RBD) comprising four treatments replicated five times; with three plants per experimental unit, the study involved a total of 60 plants. The treatments applied were P0 (control), P1 (1%), P2 (3%), and P3 (5%) of the soil weight (based on 5 kg of soil). Parameters observed included plant height, number of leaves, leaf area, fresh plant weight, dry plant weight, shoot-to-root ratio, and harvest index. Data were analyzed using Analysis of Variance (ANOVA) at the 5% significance level, followed by Duncan's test where significant effects were found. The results indicated that the application of chicken manure did not significantly affect plant height, number of leaves, leaf area, or dry plant weight. However, the treatments significantly affected fresh plant weight, shoot-to-root ratio, and harvest index. Treatment P3 (application of chicken manure at 5% of soil weight) yielded the highest values for fresh plant weight (316.1 g), shoot-to-root ratio (10.9), and harvest index (0.91 g).

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Keywords: Pakcoy, chicken manure, soil weight, treatment.