

ABSTRAK

PENGARUH PENGGUNAAN PUPUK ORGANIK KASCING DAN *PLANT GROWTH PROMOTING RIZOBACTERIA (Bion up)* TERHADAP MORFOLOGI RUMPUT PAKCHONG

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Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan pupuk organik kascing dan *plant growth promoting rizobacteria (Bion up)* terhadap morfologi rumput pakchong. Penelitian ini dilaksanakan pada Desember 2023--Febuari 2024 bertempat di rumah kaca, Desa Sri Busono, Kabupaten Lampung Tengah, Provinsi Lampung. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola faktorial yang terdiri atas pupuk kascing dan Bion up. Faktor pupuk kascing terdiri dari 4 taraf perlakuan yaitu P0 (tanpa pupuk kascing), P1 (pupuk kascing 10 ton/ha), P2 (pupuk kascing 20 ton/ha), P3 (pupuk kascing 30 ton/ha) dan faktor *Plant Growth Promoting Rizobakteria (Bion up)* terdiri dari 4 taraf perlakuan yaitu K0 (tanpa *Bion up*), K1 (10 ml *Bion up*), K2 (20 ml *Bion up*), K3 (30 ml *Bion up*). Data yang diperoleh dianalisis menggunakan Sidik Ragam (*Analysis of Variance*) dan dilanjutkan dengan uji BNT (Beda Nyata Terkecil). Hasil penelitian terdapat interaksi antara perlakuan pupuk organik kascing dan *plant growth promoting rizobakteria (Bion up)* terhadap tinggi rumput pakchong. Namun, tidak terdapat interaksi ($P > 0,05$) antara perlakuan pupuk organik kascing dan *plant growth promoting rizobakteria (Bion up)* terhadap jumlah daun, rasio daun dan batang, luas permukaan rumput pakchong. Pemberian pupuk organik kascing dengan dosis yang berbeda berpengaruh nyata terhadap tinggi tanaman, jumlah daun dan luas permukaan daun, tetapi tidak berpengaruh nyata terhadap rasio daun dan batang. Pemberian *plant growth promoting rizobakteria (Bion up)* dengan dosis yang berbeda tidak berpengaruh nyata terhadap jumlah daun, rasio daun dan batang, luas permukaan daun, tetapi berpengaruh nyata terhadap tinggi tanaman.

Kata kunci: Morfologi, Pupuk Kascing, Pupuk Bion up, dan Rumput Pakchong

ABSTRACT

THE EFFECT OF USING ORGANIC CASCING FERTILIZER AND PLANT GROWTH PROMOTING RIZOBACTERIA (Bion up) ON PAKCHONG GRASS MORPHOLOGY

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This research aims to determine the effect of using vermicompost organic fertilizer and plant growth promoting rhizobacteria (Bion up) on the morphology of pakcong grass. This research was carried out in December 2023--February 2024 in a greenhouse, Sri Busono Village, Central Lampung Regency, Lampung Province. This research used a completely randomized design (CRD) with a factorial pattern consisting of vermicompost fertilizer and Bion up. The vermicompost fertilizer factor consists of 4 treatment levels, namely P0 (without vermicompost), P1 (10 tonnes/ha vermicompost), P2 (20 tonnes/ha vermicompost), P3 (30 tonnes/ha vermicompost) and the Plant Growth Promoting factor. Rhizobacteria (Bion up) consists of 4 treatment levels, namely K0 (without Bion up), K1 (10 ml Bion up), K2 (20 ml Bion up), K3 (30 ml Bion up). The data obtained was analyzed using Ragam Analysis (Analysis of Variance) and continued with the Least Significant Difference (BNT) test. The research results showed an interaction between vermicompost organic fertilizer treatment and plant growth promoting rhizobacteria (Bion up) on the height of pakchong grass. However, there was no interaction ($P>0.05$) between vermicompost organic fertilizer treatment and plant growth promoting rhizobacteria (Bion up) on the number of leaves, leaf to stem ratio, surface area of pakchong grass. Providing vermicompost organic fertilizer at different doses had a significant effect on plant height, number of leaves and leaf surface area, but had no significant effect on the ratio of leaves to stems. Giving plant growth promoting rhizobacteria (Bion up) at different doses did not have a significant effect on the number of leaves, leaf to stem ratio, leaf surface area, but had a significant effect on plant height.

Key words: Organic vermicompost and Bion up fertilizer, morphology, pakchong grass.