RESPON PERTUMBUHAN DAN HASIL TANAMAN BAWANG MERAH (*Allium ascalonicum* L.) TERHADAP DOSIS PUPUK NPK 16:16:16 DAN KONSENTRASI PUPUK HAYATI

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ABSTRAK

Bawang merah (*Allium ascalonicum* L.) merupakan komoditas penting di Indonesia yang digunakan sebagai bumbu masakan, obat tradisional, serta sumber pendapatan dan lapangan kerja yang berkontribusi pada perekonomian daerah. Penelitian ini bertujuan mengkaji pengaruh serta mendapatkan dosis pupuk NPK 16:16:16 dan konsentrasi pupuk hayati paling baik terhadap pertumbuhan dan hasil bawang merah. Penelitian telah dilaksanakan di Demangan, Maguwoharjo, Kapanewon Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta dengan ketinggian tempat 114 mdpl dan memiliki jenis tanah regosol. Metode yang digunakan yaitu percobaan lapangan berupa Rancangan Acak Kelompok Lengkap (RAKL) faktorial dengan dua faktor. Faktor pertama yaitu aplikasi pupuk NPK 16:16:16 dengan tiga taraf, yaitu 1, 1,5, dan 2 g/tanaman. Faktor kedua yaitu aplikasi pupuk hayati dengan tiga taraf, yaitu 5, 10, dan 15 ml/liter. Kontrol berupa pemberian NPK dengan dosis 600 kg/ha tanpa pupuk hayati. Data dianalisis dengan Sidik Ragam (ANOVA) taraf 5%, dilanjutkan Uji *Duncan Multiple Range Test* (DMRT) taraf 5% dan Kontras Orthogonal. Hasil penelitian menunjukkan terdapat interaksi antara NPK 16:16:16 dan pupuk hayati terhadap bobot segar umbi per petak dan bobot segar umbi per hektar. Terdapat beda nyata antara perlakuan dan kontrol pada parameter tinggi tanaman dan jumlah daun. Pemberian NPK 16:16:16 dosis 1 g/tanaman memberikan hasil paling baik pada parameter jumlah umbi per rumpun dan bobot segar umbi per rumpun. Pemberian pupuk hayati konsentrasi 15 ml/liter memberikan hasil optimal pada tinggi tanaman 27 dan 36 HST.

Kata kunci : bawang merah, pupuk NPK 16:16:16, pupuk hayati

GROWTH AND YIELD RESPONSE OF SHALLOT (*Allium ascalonicum* L.) TO NPK 16:16:16 FERTILIZER DOSES AND BIODEFERT CONCENTRATIONS

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ABSTRACT

Shallots (Allium ascalonicum L.) are an important commodity in Indonesia used as a cooking spice, traditional medicine, as well as a source of income and employment that contributes to the regional economy. This study aims to examine the effect and obtain the best dose of NPK 16:16:16 fertilizer and the concentration of biofertilizer on the growth and yield of shallots. The study was conducted in Demangan, Maguwoharjo, Kapanewon Depok, Sleman Regency, Special Region of Yogyakarta with an altitude of 114 meters above sea level and has regosol soil type. The method used was a field experiment in the form of a factorial Randomized Complete Block Design (RAKL) with two factors. The first factor was the application of NPK 16:16:16 fertilizer with three levels, namely 1, 1.5, and 2 g/plant. The second factor was the application of biofertilizer with three levels, namely 5, 10, and 15 ml/liter. The control was the provision of NPK with a dose of 600 kg/ha without biofertilizer. Data were analyzed using Analysis of Variance (ANOVA) at 5% level, followed by Duncan Multiple Range Test (DMRT) at 5% level and Orthogonal Contrast. The results showed an interaction between NPK 16:16:16 and biofertilizer on fresh tuber weight per plot and fresh tuber weight per hectare. There was a significant difference between the treatment and control in plant height and leaf number parameters. Application of NPK 16:16:16 at a dose of 1 g/plant gave the best results in the parameters of the number of tubers per clump and fresh tuber weight per clump. Application of biofertilizer at a concentration of 15 ml/liter gave optimal results at plant heights of 27 and 36 days after planting.

Keywords: shallots, NPK 16:16:16 fertilizer, biological fertilizer