RESPON PERTUMBUHAN DAN HASIL TANAMAN TOMAT (*Solanum lycopersicum L.*) DENGAN PEMBERIAN KONSENTRASI PUPUK ORGANIK CAIR KULIT PISANG DAN DOSIS PUPUK UREA

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ABSTRAK

Tanaman tomat merupakan komoditas hortikultura penting. Permasalahan yang kerap ditemui dalam budidaya tomat adalah kualitas tanah buruk dan rendahnya unsur hara. Salah satu upaya meningkatkan hasil adalah memperbaiki teknik budidayanya melalui pemupukan. POC kulit pisang dan urea dapat menjadi solusi, kalium dan fosfor pada POC kulit pisang serta nitrogen pupuk urea memenuhi kebutuhan makro tanaman. Penelitian ini bertujuan mengetahui konsentrasi POC kulit pisang dan dosis pupuk urea terbaik untuk pertumbuhan dan hasil tanaman tomat. Metode penelitian menggunakan percobaan lapangan yang disusun dengan Rancangan Acak Lengkap (RAL). Faktor pertama adalah konsentrasi POC kulit pisang (100 mL/L, 150 mL/L, 200 mL/L) dan faktor kedua adalah dosis pupuk urea (200 kg/ha, 300 kg/ha, 400 kg/ha). Data hasil penelitian dianalisis menggunakan Sidik Ragam, serta dilakukan uji lanjut menggunakan Uji Jarak Berganda Duncan dengan taraf 5%. Hasil peneitian tersebut menunjukkan pemberian POC kulit pisang dengan konsentrasi 100 mL/L memberikan hasil yang lebih baik pada paremeter jumlah buah per tanaman serta pemberian dosis pupuk urea 300 kg/ha memberikan hasil yang paling baik pada parameter bobot kering tajuk.

Kata kunci: Tomat, POC Kulit Pisang, Pupuk Urea

RESPON OF GROWTH AND YIELD OF TOMATOES PLANT (*Solanum lycopersicum L.*) TO THE CONCENTRATION OF LIQUID ORGANIC FERTILIZER FROM BANANA PEEL AND DOSAGE OF UREA FERTILIZER

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ABSTRACT

Tomato plants were an important horticultural commodity. Problems that were often encountered in tomato cultivation were poor soil quality and low nutrient content. One effort to increase yield was improving cultivation techniques through fertilization. Banana peel liquid organic fertilizer and urea could be a solution, as potassium and phosphorus in banana peel liquid organic fertilizer as well as nitrogen from urea fertilizer met the macronutrient requirements of plants. This study aimed to determine the best concentration of banana peel liquid organic fertilizer and the best dose of urea fertilizer for the growth and yield of tomato plants. The research method used a field experiment arranged in a Completely Randomized Design (CRD). The first factor was the concentration of banana peel liquid organic fertilizer (100 mL/L, 150 mL/L, and 200 mL/L) and the second factor was the dose of urea fertilizer (200 kg/ha, 300 kg/ha, and 400 kg/ha). The research data were analyzed using analysis of variance, and a further test was conducted using Duncan's Multiple Range Test at the 5% level. The results showed that the application of banana peel liquid organic fertilizer at a concentration of 100 mL/L gave better results on the parameter of number of fruits per plant, and the application of urea fertilizer at a dose of 300 kg/ha gave the best results on the parameter of shoot dry weight.

Keywords: Tomato, Liquid Organic Fertilizer from Banana Peels, Urea Fertilizer