INTISARI

PENGARUH MACAM PUPUK ORGANIK CAIR DAN DOSIS PUPUK ANORGANIK TERHADAP PERTUMBUHAN DAN HASIL JAGUNG (*Zea mays* L.)

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Tujuan dari penelitian ini adalah mendapatkan kombinasi anatara macam pupuk organik cair dengan dosis pupuk anorganik yang mampu mendukung pertumbuhan dan hasil jagung terbaik. Penelitian dilaksanakan pada bulan April-Juli 2018 di Kebun Pusat Inovasi Agroteknogi (PIAT) UGM. Penelitian menggunakan rancangan acak kelompok lengkap untuk menguji 5 macam pupuk organik cair serta dosis pupuk anorganik yang terdiri atas 0, 35, dan 75 % dari rekomendasi Dinas Pertanian. Kontrol merupakan dosis pupuk anorganik 100 %, yaitu urea 300 kg/ha, SP-36 100 kg/ha, dan KCl 75 kg/ha. Data pertumbuhan, komponen hasil, dan hasil dianalisis varian menurut kaidah rancangan acak kelompok lengkap dilanjutkan dengan uji HSD dengan taraf kepercayaan masing-masing 95 %. Hasil penelitian menunjukkan bahwa macam pupuk organik cair memberikan pengaruh yang sama terhadap pertumbuhan dan hasil jagung tetapi tidak dapat meningkatkan pertumbuhan dan hasil jagung. Dosis pupuk anorganik 75 dan 100 % rekomendasi nyata meningkatkan pertumbuhan tanaman sebesar 25 % dan meningkatkan produktivitas sebesar 50 % jika dibandingkan tanpa pupuk anorganik. Pupuk organik cair dapat menghemat penggunaan pupuk anorganik sebesar 25 % terhadap pertumbuhan dan hasil jagung. Pemberian dosis pupuk anorganik rekomendasi Dinas Pertanian belum mampu mengoptimalkan potesnial hasil jagung.

Kata kunci: jagung, pupuk organik cair, pupuk anorganik, produktivitas

ABSTRACT

THE EFFECT KINDS OF ORGANIC LIQIUD FERTILIZER AND DOSAGE OF INORGANIC FERTILIZER ON GROWTH AND YIELD OF MAIZE (*Zea mays* L.)

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This research aims to get combination between type of organic liquid fertilizer with dosage of inorganic fertilizer that can support best growth and corn yield. This research was conducted from April to July 2018 at Kebun Pusat Inovasi Agroteknologi (PIAT) Universitas Gadjah Mada. This research was randomized completly block design to test 5 type of organic fertilizer and the dosage of inorganic fertilizer i.e. 0, 35, 75, and 100 % recommendation as control (urea 300 kg/ha, SP-36 100 kg/ha, and KCl 75 kg/ha), which were arranged in randomized completly block design with three blocks as replications. The data of growth and yield component was varian analyzed based on Completely Randomized Block Design proceed with HSD test with each alfa 95 %. The result of this research show that type of organic liquid fertilizer gives the same influence to the growth and corn yield but cannot increased growth and corn yield. The dosage of inorganic fertilizer 75 and 100 % can increased plant growth amount to 25 % and increased productivity amount to 50 % if compared without anorganic fertilizer. Organic Liquid Fertilizer can saves anorganic fertilizer usage amount to 25 % for growth and corn yield. The recomendation of inorganic fertilizer dosage from Dinas Pertanian still cannot optimize the potential of maize yield.

Key words: maize, organic fertilizer, inorganic fertilizer, productivity