

INTISARI

PENGUJIAN LIMA PUPUK ORGANIK CAIR KOMERSIAL DAN PUPUK NPK PADA JAGUNG (*Zea mays L.*)

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Berbagai produk pupuk organik cair yang beredar di masyarakat memiliki kandungan bahan yang berbeda. Diperlukan penelitian untuk menguji efektivitas berbagai produk pupuk organik cair. Uji efektivitas dilakukan untuk mengetahui pengaruh berbagai produk pupuk terhadap pertumbuhan dan hasil jagung. Selain itu, penelitian juga dilakukan untuk mendapatkan macam pupuk organik cair yang sesuai untuk tanaman jagung serta mengetahui efisiensi pemupukan anorganik yang dikombinasikan dengan pupuk organik cair. Penelitian dilaksanakan pada bulan Mei-September tahun 2014 di Kebun Pendidikan, Penelitian, dan Pengembangan Pertanian (KP4) UGM. Penelitian menggunakan rancangan acak kelompok lengkap dua faktor. Faktor pertama adalah macam pupuk organik cair yaitu BMN, BMF, NS, BN, dan BST. Faktor kedua adalah takaran pupuk anorganik yang terdiri atas 0%, 35%, dan 75% dari rekomendasi dinas pertanian. Kontrol merupakan takaran pupuk anorganik 100%. Data hasil pengamatan berupa variabel pertumbuhan dan komponen hasil dianalisis varian dengan taraf kepercayaan 95%. Perbedaan signifikan dilanjutkan dengan uji HSD dengan taraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa macam pupuk organik cair memberikan pengaruh yang sama terhadap pertumbuhan dan hasil jagung. Takaran pupuk anorganik 75% dan 100% rekomendasi nyata memberikan pertumbuhan jagung yang lebih baik. Takaran pupuk anorganik 35%, 75%, dan 100% rekomendasi nyata memberikan produktivitas jagung yang lebih banyak. Pupuk organik cair tidak dapat meningkatkan pertumbuhan dan hasil jagung. Pupuk organik cair dapat menghemat penggunaan pupuk anorganik sebesar 25%.

Kata kunci: pupuk organik cair, jagung, efisiensi pemupukan

ABSTRACT

THE TEST OF FIVE COMERCIAL LIQUID ORGANIC FERTILIZER AND NPK FERTILIZER ON MAIZE (*Zea mays L.*)

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Various of organic liquid fertilizer products in the society have different ingredients. Research is needed to test the effectiveness of various liquid organic fertilizer products. Effectiveness test conducted to determine the effect of various fertilizer products on the growth and yield of maize. In addition, research is also conducted to get the kind of liquid organic fertilizer that is suitable for maize crops and determine the efficiency of inorganic fertilizer combined with organic liquid fertilizer. Fieldworks had been conducted since May to September 2014 in Training, Research, and Development (KP4) Gadjah Mada University. Fieldworks research was arranged by randomized complete block design two factors. The first factor is a kind of liquid organic fertilizer that BMN, BMF, NS, BN, and BST. The second factor is the dosage of inorganic fertilizers consisting of 0%, 35%, and 75% of the agriculture department recommendations. Control is 100% inorganic fertilizers. Inorganic fertilizer recommendation are urea 300 kg/ha, SP-36 100 kg/ha, and KCl 75 kg/ha Data from the observations in the form of variable growth and yield components were analyzed by analysis of variance with a confidence level of 95%. Significant differences continued with HSD test with the same level of confidence.

The results showed that the kind of liquid organic fertilizer having the same effect on the growth and yield of maize. Inorganic fertilizer rate of 75% and 100% recommendation real provide better maize growth. Inorganic fertilizer rate of 35%, 75%, and 100% real recommendation providing more maize productivity. Liquid organic fertilizer can not increase the growth and yield of maize. Liquid organic fertilizer can save the use of inorganic fertilizer about 25%.

Keywords : efficiency fertilization, maize, organic liquid fertilizer.