ABSTRAK

PENGARUH PEMBERIAN PUPUK ORGANIK EKSTRAK KOTORAN AYAM, EKSTRAK KASCING, URIN KELINCI DAN AIR LERI SERTA PUPUK ANORGANIK UREA, KCL DAN SP-36 TERHADAP PERTUMBUHAN DAN PRODUKSI TANAMAN JAGUNG MANIS (*Zea mays saccharata* Sturt)

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Jagung manis (*Zea mays saccharata* Sturt) merupakan bahan baku yang mempunyai nilai ekonomi tinggi dan merupakan salah satu bahan baku yang banyak diminati oleh masyarakat Indonesia. Kondisi budidaya jagung manis sesuai dengan kondisi iklim dan tanah di wilayah Indonesia, sehingga jagung manis sangat cocok dibudidayakan di dataran Indonesia. Penelitian ini dilakukan untuk mengetahui dosis terbaik pupuk organik (ekstrak kotoran ayam, kascing, urine kelinci, air cucian beras) serta pupuk anorganik (Urea, KCl, SP-36) terhadap pertumbuhan dan produksi tanaman jagung manis. Penelitian ini dilaksanakan pada bulan Januari sampai April 2024 di Kota Sepang Jaya, Kecamatan Labuhan Ratu, Kota Bandar Lampung. Penelitian ini menggunakan rancangan acak kelompok (RAK) dengan 7 macam perlakuan dan 4 ulangan yaitu Kontrol (tanpa pupuk organik dan anorganik), (urea 150 kg/ha, SP36 150 kg/ha, KCl 100 kg/ha, rekomendasi 100%), (ekstrak pukan ayam 5%, ekstrak kascing 5%, urin kelinci), (ekstrak pukan ayam 5%, ekstrak kascing 5%, air leri, rekomendasi 50% pupuk anorganik), (ekstrak pukan ayam 5%, ekstrak kascing 5%, urine kelinci, rekomendasi 50% pupuk anorganik), (ekstrak pukan ayam 10%, air leri, rekomendasi 50% pupuk anorganik), (ekstrak pukan ayam 10%, urin kelinci, rekomendasi 50% pupuk anorganik). Data hasil penelitian dianalisis dengan analisis ragam dan hasil uji homogenitas menggunakan uji Tukey dan Beda Nyata Jujur (BNJ) pada taraf 5%.

Kata kunci: air leri, jagung manis, kascing, pukan ayam, pupuk anorganik, pupuk organik cair, urin kelinci.

ABSTRACT

THE EFFECT OF APPLYING ORGANIC FERTILIZERS DERIVED FROM CHICKEN MANURE EXTRACT, VERMICOMPOST EXTRACT, RABBIT URINE, AND RICE WASHING WATER, AS WELL AS INORGANIC FERTILIZERS (UREA, KCL, AND SP-36), ON THE GROWTH AND YIELD OF SWEET CORN PLANTS (*Zea mays saccharata* Sturt)

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Sweet corn (*Zea mays saccharata* Sturt) is a raw material with high economic value and is one of the commodities widely favored by Indonesian communities. The cultivation conditions of sweet corn are well suited to Indonesia's climate and soil, making it highly suitable for cultivation across the country. This study aimed to determine the best dosage of organic fertilizers (chicken manure extract, vermicompost extract, rabbit urine, and rice washing water) and inorganic fertilizers (urea, KCl, and SP36) on the growth and yield of sweet corn. The research was conducted from January to April 2024 in Sepang Jaya Village, Labuhan Ratu District, Bandar Lampung City. The experiment used a Randomized Block Design arranged in a 7 × 4 factorial with seven treatments and four replications, consisting of: control (without organic and inorganic fertilizers); inorganic fertilizer recommendation (urea 150 kg ha^{-1}, SP36 150 kg ha^{-1}, KCl 100 kg ha^{-1}, 100% recommendation); (5% chicken manure extract + 5% vermicompost extract + rabbit urine); (5% chicken manure extract + 5% vermicompost extract + rice washing water + 50% inorganic fertilizer recommendation); (5% chicken manure extract + 5% vermicompost extract + rabbit urine + 50% inorganic fertilizer recommendation); (10% chicken manure extract + rice washing water + 50% inorganic fertilizer recommendation); and (10% chicken manure extract + rabbit urine + 50% inorganic fertilizer recommendation). The data were analyzed using analysis of variance (ANOVA), followed by Bartlett's test for homogenety and Honestly Significant Difference (HSD) test at the 5% significance level.

Keywords: chicken manure, inorganic fertilizer, liquid organic fertilizer, rabbit urine, rice washing water, sweet corn, vermicompost.