

## **RESPON PERTUMBUHAN BIBIT TEBU ASAL *BUD CHIPS* TERHADAP VARIASI DOSIS PUPUK KANDANG AYAM DAN UREA**

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### **INTISARI**

Gula tebu sangat dibutuhkan sehingga kebutuhannya terus meningkat seiring dengan pertambahan jumlah penduduk. Penelitian ini bertujuan untuk mengetahui respon pertumbuhan vegetatif bibit tebu asal bud chips terhadap kombinasi pupuk kandang ayam dan pupuk urea yang terdiri dari tinggi tanaman, jumlah daun, jumlah anakan, luas daun, laju pertumbuhan, volume akar dan berat kering tanaman. Penelitian ini dilaksanakan pada bulan Maret 2018 hingga Juni 2018 di Desa Argorejo, Kecamatan Sedayu, Kabupaten Bantul, Yogyakarta. Penelitian ini menggunakan tanah vertisol yang disusun dalam rancangan acak lengkap percobaan faktorial  $4 \times 4$  dengan tiga ulangan. Faktor pertama dosis pupuk kandang ayam (F) yaitu :  $F_0 = 0 \text{ kg/ha}$ ,  $F_1 = 2154 \text{ kg/ha}$ ,  $F_2 = 3000 \text{ kg/ha}$ ,  $F_3 = 4000 \text{ kg/ha}$ , faktor kedua adalah pupuk urea (S) yaitu :  $S_0 = 0 \text{ kg/ha}$ , Urea  $S_1 = 114 \text{ kg/ha}$ ,  $S_2 = 175 \text{ kg/ha}$ ,  $S_3 = 226.5 \text{ kg/ha}$ . Hasil penelitian menunjukkan respon pertumbuhan bibit tebu asal bud chips terhadap variasi dosis pupuk kandang ayam dan urea tidak terjadi interaksi disetiap variabel pengamatan. Pemberian pupuk kandang ayam berpengaruh nyata terhadap tinggi tanaman, jumlah daun dan jumlah anakan dengan hasil tertinggi pada dosis 4000 kg/ha. Pupuk urea tidak berpengaruh nyata pada setiap variabel pengamatan.

Kata kunci : Tebu, Bud chips, pupuk kandang ayam, pupuk urea, bibit.

## **RESPONSE OF GROWTH OF SUGARCANE SEEDLING FROM BUD-CHIPS TO VARIATION OF CHICKEN MANURE AND UREA DOSAGE**

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### **ABSTRACT**

Sugar cane is very required so its needs continue to increase along with population growth. This study aims to determine the response of vegetative growth of sugarcane seedlings from bud chips to a combination of chicken manure and urea fertilizer consisting of plant height, number of leaves, number of tillers, leaf area, growth rate, root volume and dry weight of plants. This research was conducted in March 2018 to June 2018 in Argorejo Village, Sedayu District, Bantul Regency, Yogyakarta. This study used the vertisol which was arranged in a complete randomized design of 4 x 4 factorial experiments with three replications. The first factor was the dose of chicken manure (F), namely: F<sub>0</sub> = 0 kg/ha, F<sub>1</sub> = 2154 kg/ha, F<sub>2</sub> = 3000 kg/ha, F<sub>3</sub> = 4000 kg/ha, the second factor was urea fertilizer (S), namely: S<sub>0</sub> = 0 kg/ha, Urea S<sub>1</sub> = 114 kg/ha, S<sub>2</sub> = 175 kg/ha, S<sub>3</sub> = 226.5 kg/ha. The results showed the response of the growth of sugarcane seedlings from bud chips to various doses of chicken manure and urea did not occur in each observation variable. The application of chicken manure significantly affected plant height, number of leaves and number of tillers with the highest yield at a dose of 4000 kg/ha. The urea fertilizer has no significant effect on each observation variable.

Keywords: Sugar cane, Bud chips, chicken manure, urea fertilizer, seedling.