

**PENGARUH PEMBERIAN PUPUK GUANO DAN PUPUK KCl TERHADAP  
PERTUMBUHAN DAN PRODUKSI TANAMAN UBI JALAR  
(*Ipomoea batatas L.*)**

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**ABSTRACT**

This research was carried out in the experimental garden of the Faculty of Agriculture, University of Baturaja from June 2022 to October 2022. This experiment was conducted using a factorial randomized block design, with two treatment factors. The first treatment was using Guano Manure (G) which consisted of four levels. The second factor was using inorganic fertilizer KCl (K) consisting of three levels. which was repeated 3 times, until there were 12 treatment combinations and 36 experimental units were obtained. Each mound has four sample plants. treatment of organic guano fertilizer namely G0 = No treatment/control; G1 = 15 tonnes/ha (2.7 kg/bundle); G2 = 20 ton/ha (3.6 kg/mound) G3 = 25 ton/ha (4.5 kg/mound) and inorganic fertilizer/KCl consisting of K1 = 50 kg/ha (9 gram/mound); K2 = 100 kg/ha (18 gram/mound); K3 = 150 kg/ha (27 gram/bundle). The changes observed were plant length (M), plant wet weight (g), plant dry weight (g), number of tubers planted and tuber weight planted (g). Based on the results of the analysis of variance (F-test) of all observed changes, it showed that the interaction between guano fertilizer and KCl fertilizer had a significant effect on plant length (M) and had no significant effect on plant fresh weight (g), plant dry weight (g), the weight of the tubers planted (g) and the number of tubers planted (tubers). In the treatment of guano fertilizer application on the growth and yield of sweet potato production, it had a significant effect on each change. In the KCl fertilizer treatment, the K1 treatment was the best treatment for the production of sweet potato tubers which had the highest average number of tubers (3.17 tubers) and the heaviest tuber weight (753.13 g). guano fertilizer and 50 kg of KCl (G2K3) fertilizer was the best combination for the growth and production of sweet potato plants, with the heaviest average fresh weight (1126.67 g), the highest average number of tubers (4.00 tubers) and the heaviest average tuber weight (1193.33 g).

**ABSTRAK**

Penelitian ini dilaksanakan di kebun percobaan Fakultas Pertanian Universitas Baturaja pada bulan Juni 2022 sampai Oktober 2022. Percobaan ini dilakukan dengan menggunakan Rancangan Acak Kelompok Faktorial, dengan dua faktor perlakuan. Perlakuan pertama dengan menggunakan Pupuk kandang Guano (G) yang terdiri dari empat taraf. Faktor kedua menggunakan pupuk anorganik KCl (K) terdiri dari tiga taraf. yang diulangi sebanyak 3 kali, hingga terdapat 12 kombinasi perlakuan dan diperoleh 36 unit percobaan. Setiap guludan terdapat empat tanaman contoh. perlakuan pupuk organik guano yaitu G0 = Tanpa perlakuan/kontrol; G1 = 15 ton/ha (2,7 kg/guludan); G2 = 20 ton/ha ( 3,6 kg/guludan)G3 = 25 ton/ha ( 4,5 kg/guludan) dan pupuk anorganik/KCl terdiri dari K1 = 50 kg/ha (9 gram/guludan); K2 = 100 kg/ha (18 gram/guludan); K3 = 150 kg/ha (27 gram/guludan). Perubahan yang diamati ialah panjang tanaman (M), bobot basah tanaman (g), bobot kering tanaman (g), jumlah umbi pertanaman dan bobot umbi pertanaman(g). Berdasarkan hasil analisis ragam (Uji-F) dari semua perubahan yang diamati menunjukkan bahwa

interaksi antara pemberian pupuk guano dan pupuk KCl berpengaruh nyata pada panjang tanaman (M) dan berpengaruh tidak nyata terhadap berat basah tanaman (gr), berat kering tanaman (g), berat umbi pertanaman (g) dan jumlah umbi pertanaman (umbi). Pada perlakuan pemberian pupuk guano terhadap pertumbuhan dan hasil produksi tanaman ubi jalar, berpengaruh nyata pada setiap perubah. Pada Perlakuan pemberian pupuk KCl, perlakuan K1 merupakan perlakuan terbaik untuk produksi umbi tanaman ubi jalar yang memiliki rerata jumlah umbi terbanyak (3,17 umbi) dan bobot umbi terberat (753,13 g). Berdasarkan hasil penelitian disimpulkan bahwa kombinasi 20 ton/ha pupuk guano dan 50 kg pupuk KCl (G2K3) merupakan kombinasi yang terbaik untuk pertumbuhan dan produksi tanaman ubi jalar, dengan rerata bobot basah terberat(1126,67 g), rerata jumlah umbi terbanyak (4,00 umbi) dan rerata bobot umbi terberat (1193,33 g).

**Kata Kunci:** *pupuk guano dan KCl, budidaya tanaman ubi jalar*