

ABSTRAK

Lusratu Purnama. 2018. Respon Pertumbuhan dan Hasil Tanaman Buncis (*Phaseolus vulgaris* L.) terhadap Kombinasi Pupuk Guano Kelelawar dengan Urea dibawah bimbingan Ahmad Taofik dan Yati Setiati.

Buncis merupakan salah satu jenis tanaman sayuran polong yang nilai produksinya masih rendah dikarenakan penurunan kualitas tanah. Pemberian guano kelelawar dengan urea yang tepat merupakan salah satu upaya untuk memenuhi kebutuhan hara buncis dan meningkatkan kualitas tanah. Penelitian ini bertujuan untuk mengetahui respon pertumbuhan dan hasil tanaman buncis (*Phaseolus vulgaris* L.) terhadap kombinasi dosis pupuk guano kelelawar dengan urea. Penelitian ini dilaksanakan pada bulan April sampai dengan Juli 2018 di Kp. Cikaledong Ds. Ciaro, Kec. Nagreg, Kab Bandung. Rancangan percobaan yang digunakan adalah Rancangan Acak Kelompok (RAK) sederhana yang terdiri dari 12 taraf kombinasi (A=6 t ha⁻¹ guano kelelawar + 50 kg ha⁻¹ urea, B=12 t ha⁻¹ guano kelelawar + 50 kg ha⁻¹ urea, C=18 t ha⁻¹ guano kelelawar + 50 kg ha⁻¹ urea, D=24 t ha⁻¹ guano kelelawar + 50 kg ha⁻¹ urea, E=6 t ha⁻¹ guano kelelawar + 100 kg ha⁻¹ urea, F=12 t ha⁻¹ guano kelelawar + 100 kg ha⁻¹ urea, G=18 t ha⁻¹ guano kelelawar + 100 kg ha⁻¹ urea; H=24 t ha⁻¹ guano kelelawar + 100 kg ha⁻¹ urea, I=6 t ha⁻¹ guano kelelawar + 150 kg ha⁻¹ urea, J=12 t ha⁻¹ guano kelelawar + 150 kg ha⁻¹ urea, K=18 t ha⁻¹ guano kelelawar + 150 kg ha⁻¹ urea, dan L = 24 t ha⁻¹ guano kelelawar + 150 kg ha⁻¹ urea) dengan 3 kali ulangan. Hasil penelitian menunjukkan bahwa pemberian guano kelelawar dengan urea tidak berpengaruh nyata terhadap parameter indeks panen, namun berpengaruh nyata pada kombinasi dosis 24 t ha⁻¹ pupuk guano kelelawar dengan 150 kg ha⁻¹ urea terhadap parameter tinggi tanaman, jumlah klorofil, nisbah pupus akar, awal muncul bunga, jumlah bunga, persentase bunga jadi polong, jumlah polong, bobot segar polong per tanaman, dan bobot kering polong per tanaman.

Kata kunci: Buncis, Guano Kelelawar, Urea.

ABSTRACT

Lusratu Purnama, 2018. Response of Growth and Result of Bean (*Phaseolus vulgaris* L.) to the Combination of Guano Bat Fertilizer with Urea. Supervised by Ahmad Taofik and Yati setiati.

Beans are type of leguminous vegetable crop whose production value is still low due to a decrease in soil quality. Proper administration of guano bats with urea is an effort to increase bean production and soil quality. This study aims to determine the response of growth and yield of beans (*Phaseolus vulgaris* L.) to a combination of guano bat fertilizer with urea. This research was carried out in April to July 2018 in Kp. Cikaledong Ds. Ciaro, Kec. Nagreg, Bandung Regency. The experiment design used simple Randomized Block Design (RBD) with 12 degrees of combination dosage (A = 6 t ha⁻¹ guano bat + 50 kg ha⁻¹ urea, B = 12 t ha⁻¹ guano bat + 50 kg ha⁻¹ urea, C = 18 t ha⁻¹ guano bat + 50 kg ha⁻¹ urea, D = 24 t ha⁻¹ guano bat + 50 kg ha⁻¹ urea, E = 6 t ha⁻¹ guano bat + 100 kg ha⁻¹ urea, F = 12 t ha⁻¹ guano bat + 100 kg ha⁻¹ urea, G = 18 t ha⁻¹ guano bat + 100 kg ha⁻¹ urea; H = 24 t ha⁻¹ guano bat + 100 kg ha⁻¹ urea, I = 6 t ha⁻¹ guano bat + 150 kg ha⁻¹ urea, J = 12 t ha⁻¹ guano bat + 150 kg ha⁻¹ urea, K = 18 t ha⁻¹ guano bat + 150 kg ha⁻¹ urea, and L = 24 t ha⁻¹ guano bat + 150 kg ha⁻¹ urea) with 3 replications. The results showed that the administration of guano bat with urea had no significant effect on harvest index parameters, but significantly affected the combination dose of 24 t ha⁻¹ guano bat fertilizer with 150 kg ha⁻¹ urea on the parameters of plant height, chlorophyll amount, root loss ratio, the beginning of the flower appears, the number of flowers, the percentage of flowers being pods, the number of pods, the fresh weight of pods each plant, and the dry weight of pods each plant.



Key words: Beans, Guano Bat, Urea.

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