

ABSTRAK

Rizal Nurul Hidayat. 2020. Pengaruh Campuran Pupuk Guano Kelelawar Dan Kompos Isi Rumen Sapi Terhadap Pertumbuhan Dan Hasil Tanaman Buncis (*Phaseolus vulgaris*) Varietas Balitsa 2. Di bawah bimbingan Ahmad Taofik dan Budy Frasetya Taufik Qurrohman.

Buncis merupakan salah satu sayuran buah yang banyak diminati oleh masyarakat karena menjadi salah satu sumber protein. Penurunan produksi buncis disebabkan oleh berkurangnya luas lahan dan semakin turunnya kualitas tanah. Salah satu cara untuk mengatasi permasalahan tersebut adalah meningkatkan kesuburan tanah dengan melakukan perbaikan kualitas tanah menggunakan pupuk organik. Penelitian ini dilaksanakan pada bulan Februari sampai April di Lahan Kampus II Universitas Islam Negeri Sunan Gunung Djati Bandung. Menggunakan Rancangan Acak Kelompok (RAK) satu faktor yaitu campuran pupuk guano kelelawar dan kompos isi rumen sapi yang terdiri dari 6 taraf perlakuan yaitu: (A= 10 t ha⁻¹ pupuk guano kelelawar, B= 25 t ha⁻¹ kompos isi rumen sapi, C= 10 t ha⁻¹ pupuk guano kelelawar + 10 t ha⁻¹ kompos isi rumen sapi, D= 10 t ha⁻¹ pupuk guano kelelawar + 25 t ha⁻¹ kompos isi rumen sapi, E= 25 t ha⁻¹ pupuk guano kelelawar + 10 t ha⁻¹ kompos isi rumen sapi, dan F= 25 t ha⁻¹ pupuk guano kelelawar + 25 t ha⁻¹ kompos isi rumen sapi) dengan empat kali ulangan. Hasil penelitian menunjukkan bahwa campuran pupuk guano kelelawar dan kompos isi rumen sapi berpengaruh terhadap parameter tinggi tanaman pada umur 21 HST, awal muncul bunga dan luas daun pada campuran dosis 25t ha⁻¹ pupuk guano kelelawar + 25 t ha⁻¹ kompos isi rumen sapi, namun tidak berpengaruh terhadap tinggi tanaman pada umur 7 HST, 14 HST, 28 HST, jumlah bunga, jumlah polong pertanaman, bobot segar polong pertanaman, bobot kering polong pertanaman, bobot kering brangkasan, nisbah pupus akar, dan indeks panen.

Kata kunci: *Buncis, Lahan, Kualitas Tanah, Pupuk Guano Kelelawar, Kompos Isi Rumen Sapi.*

ABSTRACT

Rizal Nurul Hidayat. 2020. The Effect a Mixture of Bat Guano Fertilizer and Compost The Contents of Cow's Rumen on The Growth and Yield of Plants Beans (*Phaseolus vulgaris*) Varieties Balitsa 2. Supervised by Ahmad Tofik and Budy Frasetya Taufik Qurrohman.

Beans are among the fruits of society's high demand because being one of the sources of protein decline in beans production is caused by a decline in land quality and a deeper loss in soil quality the wrong way to address the problem is to increase the soil fertility by making soil improvement using organic fertilizer. The study is performed in February through April on the campus II Islamic University of Sunan Gunung Djati Bandung. Using the random group design (RAK) is a mixture of guano fertilizer and compost the contents of cow's rumen compound of 6 levels of treatment (A= 10 t ha⁻¹ bat guano fertilizer, B= 25 t ha⁻¹ compost the contents of cow's rumen, C= 10 t ha⁻¹ bat guano fertilizer + 10 t ha⁻¹ compost the contents of cow's rumen, D= 10 t ha⁻¹ bat guano fertilizer + 25 t ha⁻¹ compost the contents of cow's rumen, E= 25 t ha⁻¹ bat guano fertilizer + 25 t ha⁻¹ compost the contents of cow's rumen, and F= 25 t ha⁻¹ bat guano fertilizer + 25 t ha⁻¹ compost the contents of cow's rumen) with four exams. Research shows that a mixture of bat guano fertilizer and compost the contents of cow's rumen affecting high plant parameters at the age of 21 HST, initial blossoming of flowers and widespread leaves, at a blend dose of 25 t ha⁻¹ bat guano fertilizer + 25 t ha⁻¹ compost the contents of cow's rumen, however it does not affect at 7 HST, 14 HST, 28 HST, number of flowers, number of pods, fresh weight of field pods, dry weight of field pods, brastronaut dry weights, root nisbah and harvest index.

Key words: *beans, land, soil quality, bat guano fertilizer, compost the contents of cow's.*