ABSTRAK

Azizah Rumaisha. 2021. Pengaruh Kombinasi Pupuk Urea dan Pupuk Kandang Ayam terhadap Pertumbuhan dan Hasil Tanaman Buncis Tegak (*Phaseolus vulgaris* L.) Di bawah bimbingan Muhammad Subandi dan Esty Puri Utami.

Tanaman buncis tegak memiliki keunggulan seperti dapat ditanam tanpa lanjaran, berbunga serempak serta produksinya tinggi, namun tanaman buncis diketahui memiliki tingkat fiksasi N yang rendah, sehingga memerlukan pupuk N dalam jumlah yang cukup banyak. Pupuk urea merupakan salah satu sumber N pupuk yang banyak digunakan untuk budidaya tanaman buncis, namun sifat pupuk urea yang mudah tercuci menyebabkan pemberian pupuk urea kurang maksimal. Pupuk organik selain dapat menambah unsur hara, diketahui dapat menahan pupuk dari pencucian. Tujuan dari penelitian ini untuk mengetahui interaksi antara pemberian pupuk urea dan pupuk kandang ayam terhadap pertumbuhan dan hasil tanaman buncis tegak. Penelitian dilaksanakan pada bulan Februari hingga bulan April, 2020 di Kelurahan Kujangsari, Kecamatan Bandung Kidul, Kota Bandung, Provinsi Jawa Barat. Metode yang digunakan yaitu Rancangan Acak Kelompok Faktorial 2 faktor. Faktor pertama yaitu pupuk urea sebanyak 4 taraf, 75 kg ha^{-1}, 150 kg ha^{-1}, 225 kg ha^{-1} dan 300 kg ha^{-1}. Faktor kedua yaitu pupuk kandang ayam sebanyak 4 taraf, 5 t ha^{-1}, 10 t ha^{-1}, 15 t ha^{-1} dan 20 t ha^{-1}. Hasil penelitian menunjukan tidak terjadi interaksi antara pupuk urea dan pupuk kandang ayam, pupuk urea sebanyak 150 kg ha^{-1} (a2) dan pupuk kandang ayam 5 t ha^{-1} pada penelitian ini sudah dapat digunakan sebagai anjuran aplikasi karena memiliki kecenderungan yang sama dengan dosis pupuk aplikasi yang lebih tinggi.

Kata Kunci: Pupuk urea, Pupuk kandang ayam, Buncis tegak.

ABSTRACT

Azizah Rumaisha. 2021. The Effect of Urea and Chicken Manure on Growth and Yield of Erected Bean (*Phaseolus vulgaris* L.). Under the guidances of Muhammad Subandi and Esty Puri Utami.

Erected bean plants have superiority such as being able to be planted without stake, flowering simultaneously, and producing high yields. Nevertheless, erected beans are known to have a low level of N fixation, hence requiring a large amount of N fertilizer. Urea fertilizer is one of the sources of N fertilizer that is widely used for the cultivation of erected beans, however, the characteristic of urea fertilizer is easily leached causes the application of urea fertilizer to be less than adequate. Besides being able to add nutrients, organic manure is known to be able to keep fertilizers from leaching. The purpose of this study was to determine the interaction between the application of urea and chicken manure on the growth and yield of common beans. The research was conducted from February to April 2020 in Kujangsari Village, Bandung Kidul District, Bandung, West Java. The method used was a factorial randomized block design with 2 treatments. The first treatment is urea fertilizer as much as 4 levels, 75 kg ha^{-1}, 150 kg ha^{-1}, 225 kg ha^{-1}, and 300 kg ha^{-1}. The second treatment is chicken manure as much as 4 levels, 5 t ha^{-1}, 10 t ha^{-1}, 15 t ha^{-1}, and 20 t ha^{-1}. The results revealed there was no interaction between urea fertilizer and chicken manure, 150 kg ha^{-1} of urea fertilizer and 5 t ha^{-1} of chicken manure in this study can be used as application recommendations because they have the same tendency with doses higher fertilizer application.

Keywords: Urea, Chicken manure, Erected beans