ABSTRAK

Muhamad Ariq Farhan Pratama. 2022. Pengaruh Penambahan Media Organik dan Interval Pemberian POC Paitan (*Thithonia diversifolia* L.) Terhadap Sifat Fisik Tanah Pertumbuhan dan Hasil Tanaman Buncis Tegak (*Phaseolus vulgaris* L.) Varietas Kenya. Dibawah bimbingan Muhammad Subandi dan Yati Setiati Rachmawati.

Buncis tegak (*Phaseolus vulgaris* L.) Varietas Kenya merupakan komoditas hortikultura yang memiliki banyak manfaat, tetapi produksinya perlu ditingkatkan. Menurunnya produktivitas dapat ditingkatkan kembali dengan pemanfaatan lahan, penambahan media organik seperti arang sekam padi dan cocopeat serta mengurangi penggunaan pupuk anorganik dengan pemberian pupuk organik seperti memanfaatkan pupuk organik cair yang berasal dari tumbuhan paitan (*Thithonia diversifolia* L.). Tujuan dari penelitian ini yaitu untuk mengetahui pengaruh interaksi antara penambahan media organik dan interval pemberian pupuk organik cair paitan (*Thithonia diversifolia* L.) terhadap pertumbuhan dan hasil tanaman buncis tegak varietas Kenya dan dapat menentukan media organik dan interval pemberian pupuk organik cair paitan yang efektif untuk pertumbuhan dan hasil tanaman buncis tegak varietas Kenya. Penelitian ini dilakukan pada bulan Juli 2022 hingga bulan Januari 2023. Metode yang digunakan pada penelitian ini yaitu Rancangan Acak Kelompok dengan 2 perlakuan dan 3 ulangan. Perlakuan pertama yaitu: Penambahan media organik = Tanpa media organik (m_1); Arang sekam padi 6 t ha^{-1} (m_2); Cocopeat 10 t ha^{-1} (m_3). Perlakuan kedua yaitu: Interval pemberian pupuk organik cair = Tanpa POC (p_0); 5 hari sekali (p_1); 10 hari sekali (p_2); 15 hari sekali (p_3). Hasil penelitian menunjukkan bahwa tidak terdapat interaksi pada penambahan media organik dan interval pemberian POC paitan terhadap parameter sifat fisik tanah, pertumbuhan dan hasil. Penambahan media organik dan pemberian pupuk organik cair paitan juga belum memberikan hasil yang baik pada tanaman buncis tegak.

Kata Kunci: Arang Sekam Padi, Buncis Tegak, Cocopeat, Media Organik, Pupuk Organik Cair Paitan

ABSTRACT

Muhamad Ariq Farhan Pratama. 2022. Effect of Addition Organik Matter and Liquid Organik Fertilizer of Paitan (*Thithonia diversifolia* L.) Application Interval on Growth and Yield of Dwarf Beans (*Phaseolus vulgaris* L.) of Kenya Varieties. Supervised by Muhammad Subandi dan Yati Setiati Rachmawati.

Dwarf beans (*Phaseolus vulgaris* L.) Kenyan variety is a horticultural commodity that has many benefits, but its production needs to be increased. Decreased productivity can be increased again by land use, adding organic media such as rice husk charcoal and cocopeat and reducing the use of inorganic fertilizers by providing organic fertilizers such as using liquid organic fertilizer derived from paitan (*Thithonia diversifolia* L.) plants. The purpose of this study was to determine the effect of the interaction between the addition of organik matter and the interval of application of paitan liquid organik fertilizer (*Thithonia diversifolia* L.) on the growth and yield of upright bean plants of the Kenyan variety and to determine the organik matter and the interval of application of paitan liquid organik fertilizer which are effective for growth and yield of the Kenyan variety. The method used in this study was a randomized block design with 2 treatments and 3 replications. The first treatment is: Addition of organik matter = Without organik matter (m_1); Rice husk charcoal 6 t ha^{-1} (m_2); *Cocopeat* 10 t ha^{-1}. The second treatment is: Interval of liquid organik fertilizer = Without POC (p_0); Once every 5 days (p_1); once every 10 days (p_2); Once every 15 days (p_3). The results showed that there was no interaction between the addition of organik matter and the interval of giving paitan POC to parameters of soil physical properties, plant height, number of leaves, flowering time, root decay ratio, number of pods, fresh weight of pods and harvest index. The addition of organic matter and the application of paitan liquid organic fertilizer also did not give good results on upright bean plants.

Keywords: Cocopeat, Dwarf Beans Kenya Varieties, Husk Charcoal, Liquid Organik Fertilizer Paitan, Organic Matter