

## ABSTRAK

**Fitri Laelastuti. 2020. Pengaruh Pupuk Kascing dan MOL Bonggol Pisang Terhadap Pertumbuhan dan Hasil Tanaman Buncis Tegak (*Phaseolus vulgaris L.*) Varietas Balitsa 1. Dibawah bimbingan Suryaman Birnadi dan Adjat Sudrajat.**

Produktivitas tanaman buncis tegak yang belum stabil menyebabkan perlu dilakukannya peningkatan produktivitas hasil salah satunya dengan cara pemupukan. Pupuk kascing dapat berperan sebagai bahan organik dan MOL bonggol pisang dapat berperan sebagai dekomposer senyawa organik sehingga mudah diserap oleh tanaman. Tujuan penelitian ini yaitu untuk mempelajari bagaimana pengaruh interaksi antara pupuk kascing dan MOL bonggol pisang dan untuk mengetahui dosis pupuk kascing dan MOL bonggol pisang yang optimum terhadap pertumbuhan dan hasil tanaman buncis tegak varietas Balitsa 1. Penelitian dilaksanakan dari bulan April hingga Juni 2020 di Desa Cimincrang, Gedebage. Metode penelitian yang digunakan yaitu Rancangan Acak Kelompok (RAK) faktorial 2 faktor dengan 3 kali ulangan. Faktor pertama yaitu kascing (k): 0 t ha<sup>-1</sup> (k<sub>0</sub>); 5 t ha<sup>-1</sup> (k<sub>1</sub>); 10 t ha<sup>-1</sup> (k<sub>2</sub>); 15 t ha<sup>-1</sup> (k<sub>3</sub>). Faktor kedua yaitu MOL bonggol pisang (m): 0 ml tanaman<sup>-1</sup> (m<sub>0</sub>); = 40 ml tanaman<sup>-1</sup> (m<sub>1</sub>); 80 ml tanaman<sup>-1</sup> (m<sub>2</sub>). Hasil penelitian menunjukkan bahwa terdapat interaksi antara pupuk kascing dengan MOL bonggol pisang terhadap pertumbuhan dan hasil tanaman buncis tegak varietas Balitsa 1 dan dosis pupuk kascing 10 t ha<sup>-1</sup> dengan MOL bonggol pisang 40 ml tanaman<sup>-1</sup> berpengaruh terhadap bobot kering brangkasan, jumlah polong, bobot segar polong, dan berat kering polong tanaman buncis tegak varietas Balitsa 1.

Kata kunci: Buncis tegak, Dosis, Kascing, MOL bonggol pisang.

## ABSTRACT

**Fitri Laelastuti. 2020. Effect of vermicompost fertilizer and LMO of banana weevil on the growth and yield of Upright Beans (*Phaseolus vulgaris L.*) Balitsa 1 Varieties. Supervised by Suryaman Birnadi and Adjat Sudrajat.**

The unstable upright bean productivity causes the need to increase yield productivity, one of which is fertilization. The vermicompost fertilizer can act as organic material and LMO of banana weevil can act as a decomposer of organic compounds so that it is easily absorbed by plants. The purpose of this research was to study the effect of the interaction between vermicompost fertilizer and LMO of banana weevil and to determine the optimum dose of vermicompost fertilizer and LMO of banana weevil on growth and yield of Upright Beans Balitsa 1 variety. The research was conducted from April to June 2020 in Cimincrang Village, Gedebage. The research method used was Randomized Block Design (RBD) factorial 2 factors with 3 replications. The first factor is vermicompost (k): (k): 0 t ha<sup>-1</sup> (k<sub>0</sub>); 5 t ha<sup>-1</sup> (k<sub>1</sub>); 10 t ha<sup>-1</sup> (k<sub>2</sub>); 15 t ha<sup>-1</sup> (k<sub>3</sub>). The second factor was the LMO of banana weevil (m): 0 ml plant<sup>-1</sup> (m<sub>0</sub>); = 40 ml plant<sup>-1</sup> (m<sub>1</sub>); 80 ml plant<sup>-1</sup> (m<sub>2</sub>). The results showed that there was an interaction between the application of vermicompost fertilizers and LMO of banana weevil on the growth and yield of upright beans Balitsa 1 variety and dose of vermicompost fertilizer 10 t ha<sup>-1</sup> with LMO of banana weevil 40 ml plant<sup>-1</sup> has affected on the pod dry weight, number of pods, pod fresh weight, and stover dry weight of upright beans Balitsa 1 variety.

Keywords: Dose, LMO of banana weevil, Upright beans, Vermicompost.