

Yuneldo Putra Arniko Ashari. (190311100062). Pengaruh Pupuk Kascing dan Pupuk NPK Terhadap Pertumbuhan dan Hasil Tanaman Terung Ungu (*Solanum melongena* L.) dibimbing oleh: Dr. Ir. Hj. Siti Fatimah, M.Si dan Dr. Catur Wasonowati, S.P., M.Si

ABSTRAK

Tanaman terung merupakan salah satu tanaman hortikultura yang banyak dibudidayakan oleh masyarakat Indonesia. Permintaan tanaman terung setiap tahunnya terus meningkat karena harganya yang ekonomis dan bergizi. Namun produksi tanaman terung di Indonesia masih belum terpenuhi. Salah satu upaya untuk meningkatkan pertumbuhan dan hasil adalah dilakukan pemupukan. Penelitian ini bertujuan untuk mengetahui (1) pengaruh pupuk kascing terhadap pertumbuhan dan hasil tanaman terung ungu, (2) pengaruh pupuk NPK terhadap pertumbuhan dan hasil tanaman terung ungu, (3) interaksi perlakuan pupuk kascing dan pupuk NPK terhadap pertumbuhan dan hasil terung ungu. Penelitian ini menggunakan RAL faktorial yang terdiri 2 faktor. Faktor pertama dosis pupuk kascing dan faktor kedua dosis pupuk NPK. Perlakuan pupuk kascing terdiri atas P0= tanpa pemberian pupuk (kontrol), P1= pemberian pupuk (5 ton/ha), P2= pemberian pupuk (10 ton/ha). Pupuk NPK terdiri atas N1= pemberian pupuk (200 kg/ha), N2= pemberian pupuk (400 kg/ha), N3= pemberian pupuk (600 kg/ha). Data dianalisis menggunakan ANOVA, jika terdapat perbedaan nyata dilanjutkan dengan *Duncan Multiple Range Test* (DMRT) taraf 5%. Hasil penelitian menunjukkan pupuk kascing berpengaruh nyata terhadap parameter tinggi tanaman, diameter batang, jumlah daun, umur muncul bunga, jumlah cabang, jumlah buah, bobot buah per tanaman, bobot basah dan bobot kering brangkasan dengan perlakuan terbaik adalah P2 (10 ton/ha). Pupuk NPK berpengaruh nyata terhadap parameter tinggi tanaman, diameter batang, jumlah daun, jumlah cabang, jumlah buah, diameter buah, bobot buah per tanaman, bobot basah dan bobot kering brangkasan dengan perlakuan terbaik N3 (600 kg/ha). Terdapat interaksi antara pupuk kascing dan pupuk NPK terhadap umur muncul bunga dan bobot buah per buah.

Kata kunci: Pupuk kascing, pupuk NPK, terung ungu

Yuneldo Putra Arniko Ashari. (190311100062). The Effect of Vermicompost Fertilizer and NPK Fertilizer on the Growth and Yield of Purple Eggplant (*Solanum melongena* L.) Supervised by: Dr. Ir. Hj. Siti Fatimah, M.Si and Dr. Catur Wasonowati, S.P., M.Si

ABSTRACT

Eggplant plant is one of the horticultural crops that is widely cultivated by Indonesian people. The demand for eggplant plants continues to increase every year because they are economical and nutritious. However, eggplant production in Indonesia is still not fulfilled. One of the efforts to increase growth and yield is fertilization. This study aims to determine (1) the effect of vermicompost fertilizer on the growth and yield of purple eggplant, (2) the effect of NPK fertilizer on the growth and yield of purple eggplant, (3) the interaction of castor and NPK fertilizer treatments on the growth and yield of purple eggplant. This research uses factorial RAL consisting of 2 factors. The first factor is the dose of vermicompost fertilizer and the second factor is the dose of NPK fertilizer. The vermicompost fertilizer treatment consisted of P0 = no fertilizer application (control), P1 = fertilizer application (5 tons/ha), P2 = fertilizer application (10 tons/ha). NPK fertilizer consists of N1= fertilizer application (200 kg/ha), N2= fertilizer application (400 kg/ha), N3= fertilizer application (600 kg/ha). Data were analyzed using ANOVA, if there was a significant difference it was continued with the Duncan Multiple Range Test (DMRT) at 5% level. The results showed that vermicompost fertilizer had a significant effect on the parameters of plant height, stem diameter, number of leaves, age at which flowers appeared, number of branches, number of fruits, fruit weight per plant, wet weight and dry weight with the best treatment being P2 (10 tonnes/ha). NPK fertilizer significantly affected the parameters of plant height, stem diameter, number of leaves, number of branches, number of fruits, fruit diameter, fruit weight per plant, fresh weight and dry weight with the best treatment N3 (600 kg/ha). There is an interaction between vermicompost fertilizer and NPK fertilizer on the age of flower emergence and fruit weight per fruit.

Keywords: NPK fertilizer, purple eggplant, vermicompost fertilizer