

Badrut Tamam. (190311100075). Pengaruh Pemberian Pupuk Kandang Kambing Dan Pupuk Organik Cair Terhadap Pertumbuhan Dan Hasil Tanaman Cabai Rawit (*Capsicum frutescens* L.). Dibimbing Oleh : Ir. Achmad Djunaedy, M.P. dan Ir. Suhartono, M.P.

ABSTRAK

Cabai rawit (*Capsicum frutescens* L.) merupakan salah satu jenis tanaman hortikultura penting di Indonesia. Cabai rawit dapat tumbuh baik di dataran tinggi maupun rendah. Cabai rawit memiliki kandungan kapsaisin sehingga rasa buahnya pedas. Meningkatnya produksi cabai tersebut diimbangi dengan meningkatnya kebutuhan cabai masyarakat. Pemberian pupuk kandang kambing diyakini mampu meningkatkan hasil produksi cabai rawit. Selain itu pemberian pupuk organik cair NASA juga mampu mempercepat pertumbuhan generatif tanaman. Tujuan penelitian ini dapat mengetahui pengaruh pemberian pupuk kandang kambing dan pupuk organik cair NASA serta ada atau tidaknya interaksi terhadap pertumbuhan dan hasil tanaman cabai rawit. Penelitian ini dilaksanakan pada *Green House* Agroekoteknologi Universitas Trunojoyo Madura pada bulan Februari hingga Juni 2023. Rancangan penelitian yang digunakan yaitu Rancangan Acak Lengkap (RAL) Faktorial. Faktor pertama yaitu pupuk kandang kambing meliputi 0 g/polybag (K1), 250 g/polybag (K2), dan 500 g/polybag (K3). Kemudian faktor kedua yaitu pupuk organik cair NASA meliputi 0 ml/polybag (P1), 6 ml/polybag (P2), dan 12 ml/polybag (P3). Analisis data yang digunakan yaitu analisis variansi (ANOVA) taraf 5% dan apabila terdapat pengaruh nyata maka dilakukan uji lanjut dengan DMRT pada taraf 5%. Hasil penelitian menunjukkan terdapat interaksi dari kombinasi perlakuan pada parameter saat muncul bunga. Pemberian pupuk kandang kambing berpengaruh nyata terhadap semua parameter pengamatan dan perlakuan K3 menjadi perlakuan yang terbaik. Perlakuan pupuk organik cair NASA berpengaruh nyata terhadap parameter tinggi tanaman, saat muncul bunga, jumlah buah pertanaman, dan berat buah pertanaman. Pada perlakuan P3 mendapat rata-rata tertinggi daripada perlakuan yang lainnya.

Kata kunci : Cabai rawit, pupuk kandang kambing, pupuk organik cair NASA

Badrut Tamam. (190311100075). The effect of goat manure and liquid organic fertilizer on the growth and yield of cayenne pepper (*Capsicum frutescens* L.). Supervisor by: Ir. Achmad Djunaedy, M.P. and Ir. Suhartono, M.P.

ABSTRACT

Cayenne pepper (*Capsicum frutescens* L.) is an important horticultural crop in Indonesia. Cayenne pepper can grow both in the highlands and lowlands. Cayenne pepper contains capsaicin, which makes the fruit taste spicy. The increase in chili production was offset by the increase in the community's need for chili. Giving goat manure is believed to be able to increase the production of cayenne pepper. Besides that, the provision of NASA liquid organic fertilizer is also able to accelerate the generative growth of plants. The purpose of this study was to determine the effect of giving goat manure and NASA liquid organic fertilizer and whether or not there was an interaction on the growth and yield of cayenne pepper plants. This research was conducted at the Green House of Agroecotechnology, University of Trunojoyo Madura from February to June 2023. The research design used was a Factorial Completely Randomized Design (CRD). The first factor was goat manure which included 0 g/polybag (K1), 250 g/polybag (K2), and 500 g/polybag (K3). Then the second factor, namely NASA liquid organic fertilizer, includes 0 ml/polybag (P1), 6 ml/polybag (P2), and 12 ml/polybag (P3). The data analysis used was analysis of variance (ANOVA) at the 5% level and if there was a significant effect, a follow-up test was carried out with DMRT at the 5% level. The results showed that there was an interaction between the treatment combinations on the parameters when flowers appeared. The application of goat manure had a significant effect on all parameters of observation and K3 treatment became the best treatment. The treatment of NASA's liquid organic fertilizer had a significant effect on the parameters of plant height, when flowers appeared, the number of fruit plants, and the weight of fruit plants. In treatment P3 got the highest average than the other treatments.

Keywords : Cayenne pepper, goat manure, NASA liquid organic fertilizer.