

NURMAN AHMAD. 04311511040. PENGARUH PEMBERIAN KOMPOS LIMBAH PERTANIAN TERHADAP PERTUMBUHAN DAN HASIL TANAMAN MENTIMUN (*Cucumis sativus* L.)

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RINGKASAN

Mentimun (*Cucumis sativus* L.) menjadi salah satu pilihan komoditas hortikultura untuk kegiatan usaha tani. Mentimun merupakan salah satu jenis sayuran buah yang sangat potensial dikembangkan untuk memenuhi kebutuhan masyarakat yang semakin meningkat pada tahun-tahun mendatang. Dengan melihat potensi pada buah mentimun, maka pengembangan mentimun memiliki peluang bisnis yang sangat cerah, namun Produksi mentimun di Indonesia selama 5 tahun mengalami penurunan, Hal tersebut dikarenakan dalam kegiatan budidaya di lapangan masih memiliki banyak kendala dan harga jual yang tergolong rendah. Kendala dalam kegiatan budidaya yang dialami oleh petani yaitu mulai dari pengadaan benih, pemeliharaan tanaman, penanganan panen dan pascapanen, serta rendahnya produktivitas lahan. Usaha meningkatkan hasil tanaman mentimun dapat dilakukan dengan cara pemupukan. Pemupukan dilakukan untuk memenuhi kebutuhan hara yang berkurang. Limbah pertanian adalah sisa dari proses produksi pertanian, limbah pertanian antara lain dapat berupa jerami tanaman pangan, limbah tanaman perkebunan, dan kotoran ternak. Tujuan dari penelitian ini untuk mengetahui bagaimana pengaruh kompos limbah pertanian terhadap pertumbuhan dan hasil tanaman mentimun (*Cucumis sativus* L.). Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan 5 perlakuan dan 3 kelompok hingga di peroleh 15 unit percobaan yaitu B₀ tanpa perlakuan (kontrol), B₁= 6 kg tanah + 4 kg kompos, B₂= 5 kg tanah + 5 kg kompos, B₃= 4 kg tanah + 6 kg kompos, B₄= 3 kg tanah + 7 kg kompo. Hasil analisis sidik ragam menunjukkan bahwa perlakuan pemberian kompos limbah pertanian pada variabel tinggi tanaman mentimun berpengaruh nyata pada perlakuan B₄= 3 kg tanah + 7 kg kompos. Hasil analisis sidik ragam menunjukkan bahwa perlakuan pemberian kompos limbah pertanian pada variabel tinggi tanaman mentimun berpengaruh nyata pada perlakuan B₄= 3 kg tanah + 7 kg kompos. Hasil analisis sidik ragam menunjukkan bahwa perlakuan pemberian kompos limbah pertanian pada jumlah buah tanaman mentimun pada perlakuan B₄= 3 kg tanah + 7 kg kompos. Hasil analisis sidik ragam menunjukkan bahwa perlakuan pemberian kompos limbah pertanian pada variable panjang buah tanaman mentimun berpengaruh nyata pada perlakuan B₄= 3 kg tanah + 7 kg kompos. Hasil analisis sidik ragam menunjukkan bahwa perlakuan pemberian kompos limbah pertanian pada variable diameter buah tanaman mentimun berpengaruh nyata pada perlakuan B₄= 3 kg tanah + 7 kg kompos. Hasil analisis sidik ragam menunjukkan bahwa perlakuan pemberian kompos limbah pertanian pada variable bobot buah tanaman mentimun berpengaruh nyata pada perlakuan B₄= 3 kg tanah + 7 kg kompos.

Kata kunci : Tanaman mentimun, kompos limbah pertanian

NURMAN AHMAD. 04311511040. THE EFFECTS OF AGRICULTURAL WASTE COMPOSTING ON THE GROWTH AND PRODUCT OF CUCUBER (*Cucumis sativus* L.)

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SUMMARY

Cucumber (*Cucumis sativus* L.) is one of the horticultural commodities of choice for farming activities. Cucumber is one type of fruit vegetable that has the potential to be developed to meet the increasing needs of the community in the coming years. By looking at the potential of cucumbers, the development of cucumbers has a very bright business opportunity, but the production of cucumbers in Indonesia for 5 years has decreased. This is because the cultivation activities in the field still have many obstacles and the selling price is relatively low. Obstacles in cultivation activities experienced by farmers are starting from seed procurement, plant maintenance, harvest and post-harvest handling, and low land productivity. Efforts to increase the yield of cucumber plants can be done by means of fertilization. Fertilization is done to meet the reduced nutrient requirements. Agricultural waste is the residue from the agricultural production process, agricultural waste can be in the form of food crop straw, plantation crop waste, and livestock manure. The purpose of this study was to determine how the effect of agricultural waste compost on the growth and yield of cucumber (*Cucumis sativus* L.). This study used a Randomized Block Design (RAK) with 5 treatments and 3 groups until 15 experimental units were obtained, namely B0 without treatment (control), B1 = 6 kg soil + 4 kg compost, B2 = 5 kg soil + 5 kg compost, B3 = 4 kg of soil + 6 kg of compost, B4 = 3 kg of soil + 7 kg of compost. The results of the analysis of variance showed that the treatment of agricultural waste compost on the variable height of cucumber plants had a significant effect on the treatment of B4 = 3 kg of soil + 7 kg of compost. The results of the analysis of variance showed that the treatment of agricultural waste compost on the variable height of cucumber plants had a significant effect on the treatment of B4 = 3 kg of soil + 7 kg of compost. The results of analysis of variance showed that the treatment of giving agricultural waste compost to the variable height of cucumber plants had a significant effect on the treatment of B4 = 3 kg of soil + 7 kg of compost. The results of analysis of variance showed that the treatment of giving agricultural waste compost on the number of cucumber plants with treatment B4 = 3 kg of soil + 7 kg of compost. The results of analysis of variance showed that the treatment of agricultural waste compost on the variable length of cucumber fruit had a significant effect on the treatment of B4 = 3 kg of soil + 7 kg of compost. The results of analysis of variance showed that the treatment of agricultural waste compost on the variable diameter of cucumber fruit had a significant effect on the treatment of B4 = 3 kg of soil + 7 kg of compost. The results of the analysis of variance showed that the treatment of agricultural waste compost on the cucumber fruit weight variable had a significant effect on the treatment of B4 = 3 kg of soil + 7 kg of compost.

Keywords: Cucumber plant, agricultural waste compost