

NURDIANI AZIS. 04391611037. PENGARUH BAHAN ORGANIK TERHADAP C-ORGANIK TANAH DAN pH TANAH SERTA PRODUKSI BAWANG MERAH (*Allium ascalonicum* L.) DI TANAH INCEPTISOL

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RINGKASAN

Penggunaan Bahan organik sebagai pupuk merupakan salah satu alternatif untuk mengurangi penggunaan pupuk kimia dan untuk meningkatkan ketersediaan unsur hara di tanah. Bahan organik yang digunakan sebagai pupuk yakni kotoran kambing, kotoran sapi, kotoran ayam dan kotoran kuda. Pada penelitian ini bertujuan untuk mengetahui pengaruh pemberian berbagai pupuk kandang terhadap pertumbuhan dan hasil tanaman bawang merah (*Allium ascalonicum* L.). Penelitian ini dilaksanakan di Kelurahan Ngade Kecamatan Ternate Selatan yang berlangsung dari bulan November 2021-Januari 2022. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) yang terdiri dari 5 perlakuan serta diulangi sebanyak 4 kali sehingga terdapat 20 unit percobaan dengan perlakuan sebagai N0 (tanpa pupuk), N1 (pupuk kandang ayam 1 kg), N2 (pupuk kandang sapi 1 kg), N3 (pupuk kandang kambing 1 kg), dan N4 (pupuk kandang kuda 1 kg). Parameter yang diamati yaitu tinggi tanaman, jumlah daun, jumlah umbi, berat umbi segar, berat kering, pH tanah dan C-Organik. Data yang di peroleh dianalisis menggunakan ANOVA dan dilanjutkan dengan uji BNT dengan taraf α 0,05 jika terdapat perlakuan yang berbeda nyata. Hasil penelitian menunjukkan bahwa ada pengaruh berbagai media tanam terhadap produksi tanaman bawang merah (*Allium ascalonicum* L.), dimana pengaruh terbaik terdapat pada perlakuan N3 (pupuk kandang kambing). Berpengaruh terhadap C-Organik tanah, pH tanah, tinggi tanaman, jumlah daun, jumlah umbi, berat segar dan berat kering.

Kata Kunci : Pengaruh Pupuk kandang, pH Tanah, C-Organik tanah.

NURDIANI AZIS. 04391611037. EFFECT OF ORGANIC MATERIALS ON SOIL C-ORGANIC AND SOIL pH AND PRODUCTION OF ONION (*Allium ascalonicum* L.) IN INCEPTISOL SOIL

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SUMMARY

The use of organic matter as fertilizer is an alternative to reduce the use of chemical fertilizers and to increase the availability of nutrients in the soil. Organic materials used as fertilizer are goat manure, cow manure, chicken manure and horse manure. This study aims to determine the effect of various manures on the growth and yield of shallot (*Allium ascalonicum* L.). This research was carried out in Ngade Village, South Ternate District which took place from November 2021-January 2022. This study used a Randomized Block Design (RAK) which consisted of 5 treatments and was repeated 4 times so that there were 20 experimental units with treatment as N0 (without fertilizer), N1 (1 kg chicken manure), N2 (1 kg cow manure), N3 (1 kg of goat manure) and N4 (1 kg of horse manure). Parameters observed were plant height, number of leaves, number of tubers, weight of fresh tubers, dry weight, soil pH and C-Organic. The data obtained were analyzed using ANOVA and continued with the BNT test with a level of 0.05 if there were significantly different treatments. The results showed that there was an effect of various growing media on the production of shallot (*Allium ascalonicum* L.), where the best effect was found in the N3 treatment (goat manure). Influence on C-Organic soil, soil pH, plant height, number of leaves, number of tubers, fresh weight and dry weight. The data obtained were analyzed using ANOVA and continued with the BNT test with a level of 0.05 if there were significantly different treatments. The results showed that there was an effect of various growing media on the production of shallot (*Allium ascalonicum* L.), where the best effect was found in the N3 treatment (goat manure). Influence on C-Organic soil, soil pH, plant height, number of leaves, number of tubers, fresh weight and dry weight. The data obtained were analyzed using ANOVA and continued with the BNT test with a level of 0.05 if there were significantly different treatments. The results showed that there was an effect of various growing media on the production of shallot (*Allium ascalonicum* L.), where the best effect was found in the N3 treatment (goat manure). Influence on C-Organic soil, soil pH, plant height, number of leaves, number of tubers, fresh weight and dry weight.

Keywords : Effect of Manure, Soil pH, C-Organic Soil.