

SRIWAHYUNI JULKIFLI. 04391611083. PENGARUH PEMBERIAN MULSA ALAMI DAN BERBAGAI JENIS PUPUK KANDANG TERHADAP PERTUMBUHAN DAN PRODUKSI TANAMAN CAISIM (*Brassica juncea* L.) PADA INCEPTISOL TERNATE

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RINGKASAN

Inceptisol Ternate adalah tanah yang memiliki C-organik, N-total, P-tanah dan KTK tanah yang rendah, oleh sebab itu harus di barengi dengan tindakan pemupukan. Tujuan penelitian ini, untuk mengetahui pengaruh pemberian mulsa alami dan berbagai jenis pupuk kandang terhadap pertumbuhan dan produksi tanaman caisim di Inceptisol Ternate. Rancangan percobaan pada penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan perlakuan pemberian mulsa dan jenis pupuk kandang, yang terdiri atas dua faktor, yaitu faktor pertama pemberian mulsa dan faktor kedua, yaitu pemberian jenis pupuk kandang, dimana M0 = tanpa mulsa, M1 = serasah pala 20 ton ha⁻¹, M2 = serasah cengkeh 20 ton ha⁻¹, sedangkan P0 = tanpa control, P1 = pupuk kandang sapi 20 ton ha⁻¹, P2 = pupuk kandang kambing 20 ton ha⁻¹, masing-masing diulang 3 kali. Teknik analisa data menggunakan Analisis Of Varian, apabila terdapat pengaruh nyata dari perlakuan maka dilanjutkan dengan uji beda nyata BNJ α 5%. Perlakuan pemberian mulsa dan jenis pupuk kandang 20 ton ha⁻¹ memberikan pengaruh yang berbeda nyata dengan perlakuan lainnya pada umur 10 HST, 20 HST dan 30 HST, sedangkan pada jumlah daun umur 10 HST, 20 HST dan 30 HST memberikan pengaruh yang sangat nyata. Begitu juga pada luas daun, berat basah/produksi memberikan pengaruh yang sangat nyata. Akan tetapi pada pH tanah memberikan pengaruh yang tidak berbeda nyata. Pemberian mulsa dan jenis pupuk kandang 20 ton ha⁻¹ dapat menyediakan hara bagi pertumbuhan tanaman caisim. Produksi tertinggi dicapai pada perlakuan mulsa dan jenis pupuk kandang 20 ton ha⁻¹ yakni 30,150 ton ha⁻¹.

Kata kunci: Mulsa, Jenis pupuk kandang, Caisim.

SRIWAHYUNI JULKIFLI. 04391611083. THE EFFECT OF NATURAL mulch and various types of manures on the growth and production of Caisim (*Brassica juncea L.*) in INCEPTISOL TERNATE

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SUMMARY

Ternate Inceptisols are soils that have low C-organic, N-total, P-soil and soil CEC, therefore fertilization must be carried out together. The purpose of this study was to determine the effect of natural mulch and various types of manure on the growth and production of caisim plants in Inceptisol Ternate. The experimental design in this study used a Randomized Block Design (RAK) with the treatment of mulching and the type of manure, which consisted of two factors, namely the first factor was mulching and the second factor, namely the type of manure, where M0 = without mulch, M1 = nutmeg litter 20 tons ha⁻¹, M2 = clove litter 20 tons ha⁻¹, while P0 = without control, P1 = cow manure 20 tons ha⁻¹, P2 = goat manure 20 tons ha⁻¹, each repeated 3 times. The data analysis technique uses the Analysis of Variance, if there is a significant effect of the treatment then it is continued with the BNJ 5% real difference test. The treatment of giving mulch and the type of manure 20 tons ha⁻¹ gave a significantly different effect with other treatments at the age of 10 DAP, 20 DAP and 30 DAP, while the number of leaves at 10 DAP, 20 DAP and 30 DAP gave a very significant effect. Likewise for leaf area, wet weight/production has a very significant effect. However, the soil pH has no significant effect. The application of mulch and type of manure 20 tons ha⁻¹ can provide nutrients for the growth of caisim plants. The highest production was achieved in the treatment of mulch and type of manure 20 tons ha⁻¹, namely 30,150 tons ha⁻¹.

Keywords: Mulch, Types of manure, Caisim.