

PENGARUH PUPUK ORGANIK DAN NPK TERHADAP PERTUMBUHAN DAN HASIL TOMAT PADA INCEPTISOL

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INTISARI

Pengembangan tanaman tomat pada tanah inceptisol mempunyai prospek yang cukup baik, apabila disertai dengan usaha pengelolaan yang tepat. Penelitian ini bertujuan untuk mengetahui pengaruh beberapa perlakuan pupuk terhadap meningkatkan pertumbuhan dan hasil tomat di tanah inceptisol. Penelitian ini di laksanakan di Ketingan, Tirtoadi, Sleman Mlati, Yogyakarta pada bulan Maret sampai Juli 2020 pada ketinggian tempat 100 – 499 di atas permukaan laut. Penelitian ini merupakan percobaan dua faktor yaitu pupuk organik dan NPK yang menggunakan desain Rancangan Acak Kelompok Lengkap (RAKL) dengan tiga ulangan dan tiga perlakuan. Perlakuan terdiri P1 = urea 70 g + SP-36 90 g + KCL 30 g, P2 = kompos 1 kg, P3 = urea 70 g + SP-36 90 g + KCL 30 g + kompos 1 kg. Sehingga mendapatkan 9 unit percobaan, tiap unit terdapat 6 tanaman dan diambil 3 tanaman sebagai sampel. Variabel yang diamati adalah tinggi tanaman, jumlah daun, jumlah bunga, jumlah buah pertanaman sampel, bobot buah per-sampel, dan bobot buah per-petak. Hasil penelitian menunjukkan bahwa pemupukan kombinasi urea, SP-36, KCL dan kompos memberikan pengaruh nyata dan pengaruh paling baik terhadap pertumbuhan dan hasil tomat pada tanah inceptisol.

Kata kunci : *Inceptisol, pupuk, tomat.*

THE EFFECT OF ORGANIC AND NPK FERTILIZERS ON GROWTH AND YIELD OF TOMATO ON INCEPTISOL

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ABSTRACT

The development of tomato plants on inceptisol soil has a pretty good prospect, if accompanied by proper management efforts. This study aims to find out the effectiveness of several fertilizer treatments on increasing growth and yield of tomatoes in inceptisol soil. This research was conducted in Ketingan, Tirtoadi, Sleman Mlati, Yogyakarta from March to July 2020 at an altitude of 100 - 499 above sea level. This research is a two-factor experiment, namely organic and NPK fertilizers using a Randomized Completely Block Design (RCBD) with three replications and three treatments. The treatments consisted of P1 = 70 g of urea + 90 g of SP-36 + 30 g of KCL, P2 = 1 kg of compost, P3 = 70 g of urea + 90 g of SP-36 + 30 g of KCL + 1 kg of compost. And get nine experimental units, each unit has 6 plants and taken three plants as samples. The variables observed were plant height, number of leaves, number of flowers, number of fruit per-sample, fruit weight per-sample, and fruit weight per-plot. The results showed that fertilization with a combination of urea, SP-36, KCL and compost had the most significant different and significant effect on the growth and yield of tomatoes on inceptisol soil.

Keywords : *Inceptisol, fertilizer, tomato*