

Penelitian ini berjudul penggunaan arang sekam terhadap pertumbuhan dan hasil bawang merah di Vertisol Bagor, Nganjuk. Tujuan dari penelitian ini adalah mengetahui pengaruh aplikasi arang sekam terhadap sifat fisik-kimia Vertisol, pertumbuhan dan hasil bawang merah. Penelitian dilaksanakan di 2 tempat yaitu di Desa Banaran Kulon, Kecamatan Bagor, Nganjuk dan di Rumah Kaca Fakultas Pertanian UGM. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap Kelompok (RAKL) non-faktorial yang terdiri 8 taraf yakni A0 (kontrol); A1 (2 ton/ha); A2 (3 ton/ha); A3 (4 ton/ha); A4 (5 ton/ha); A5 (10 ton/ha); A6 (15 ton/ha); A7 (20 ton/ha) sebanyak masing-masing 3 blok serta diuji lanjut menggunakan uji Tukey taraf nyata 5%. Hasil penelitian menunjukkan bahwa penambahan arang sekam memberikan pengaruh berbeda nyata terhadap pertumbuhan dan hasil bawang merah. Dosis arang sekam 5 ton/ha menjadi dosis terbaik dalam meningkatkan pertumbuhan dan hasil bawang merah yang didekati menggunakan parameter agronomi berupa tinggi tanaman 33,54 cm, jumlah daun 20,33 helai, bobot kering umbi 31,50 gram/rumpun, jumlah umbi 10,27/rumpun, tetapi tidak berpengaruh terhadap diameter umbi.

Kata kunci: Vertisol, bawang merah, arang sekam

Abstract

The research entitled “ The Effect of The Use of Rice Husk Charcoal on The Growth and Yield of Shallot in Vertisol Bagor, Nganjuk”. The purpose of this study research was the effect of the application of rice husk charcoal in improving the physical-chemical properties of the soil, as well as increasing the growth and yield of shallot in Vertisol-Bagor, Nganjuk. The research location was conducted in 2 places, in the village of Banaran Kulon, Bagor District, Nganjuk and in the Greenhouse of Agriculture Faculty UGM. The research design being a non- factorial Complete Randomized Group Design (RCBD) consisting of 8 levels namely A0 (control); A1 (2 tons / ha); A2 (3 tons / ha); A3 (4 tons / ha); A4 (5 tons / ha); A5 (10 tons / ha); A6 (15 tons / ha); A7 (20 tons / ha) of 3 blocks each and further tested using a Tukey test of 5% significance level. The results showed that the addition of husk charcoal had a significantly different effect on the growth and yield of shallots. Dose of 5 tons/ha of husk charcoal is the best dose to increase growth and yield of shallots which are approached using agronomic parameters such as plant height 33.54 cm, number of leaves 20.33 strands, tuber dry weight 31.50 grams / clump, the number of tubers 10.27 / clump, but does not affect the tuber diameter.

Keywords: Vertisol, shallot, rice husk charcoal