

INTISARI

Penelitian ini bertujuan mengetahui pengaruh pupuk P dan K, biochar sekam padi, serta pupuk kandang ayam terhadap penyerapan P dan K serta pertumbuhan bawang merah di Entisol Samas. Penelitian dilaksanakan mulai dari bulan Maret sampai dengan Oktober 2023 di lahan Srigading, Samas, Bantul dan Laboratorium Departemen Tanah, Fakultas Pertanian, Universitas Gadjah Mada. Penelitian ini disusun dalam Rancangan Acak Lengkap (RAL) non faktorial dengan 11 perlakuan dan 3 ulangan. Perlakuan yang diberikan, terdiri dari pupuk P (P) 300 kg/ha, pupuk K (K) 200 kg/ha, biochar sekam padi (B) 20 ton/ha, dan pupuk kandang ayam (A) 20 ton/ha. Data yang dihasilkan dianalisis menggunakan analisis sidik ragam (*Analysis of Variance*), kemudian uji lanjut DMRT dengan taraf 5%. Berdasarkan penelitian yang telah dilaksanakan didapatkan hasil bahwa pupuk P dan K, biochar sekam padi, serta pupuk kandang ayam memberikan pengaruh yang berbeda nyata terhadap serapan dan rasio serapan P tajuk. Penambahan pupuk P dan K, biochar sekam padi, serta pupuk kandang ayam memberikan pengaruh beda nyata terhadap berat kering tajuk. Namun, penambahan pupuk P dan K, biochar sekam padi, serta pupuk kandang ayam memberikan pengaruh tidak berbeda nyata terhadap serapan P umbi + akar, serapan K tajuk, dan serapan umbi + akar. Selain itu, penambahan pupuk P dan K, biochar sekam padi, serta pupuk kandang ayam juga memberikan pengaruh tidak berbeda nyata terhadap berat segar tajuk, berat segar umbi + akar, dan berat kering umbi + akar.

Kata kunci: *pupuk P, pupuk K, biochar sekam padi, pupuk kandang ayam, Entisol*

ABSTRACT

This research aims to determine the effect of P and K fertilizer, rice husk biochar, and chicken manure on P and K absorption and shallot growth in Entisol Samas. Research was carried out from March to October 2023 on land in Srigading, Samas, Bantul and the Laboratory of the Soil Department, Faculty of Agriculture, Gadjah Mada University. This research was structured in a non-factorial Completely Randomized Design (CRD) with 11 treatments and 3 replications. The treatment given consisted of P fertilizer (P) 300 kg/ha, K fertilizer (K) 200 kg/ha, rice husk biochar (B) 20 tons/ha, and chicken manure (A) 20 tons/ha. The resulting data was analyzed using analysis of variance, then a further DMRT test with a level of 5%. Based on research that has been carried out, the results show that P and K fertilizers, rice husk biochar, and chicken manure have significantly different effects on shoot P uptake and uptake ratios. The addition of P and K fertilizer, rice husk biochar, and chicken manure had a significant effect on shoot dry weight. However, the addition of P and K fertilizer, rice husk biochar, and chicken manure did not have a significantly different effect on tuber + root P uptake, shoot K uptake, and tuber + root uptake. Apart from that, the addition of P and K fertilizer, rice husk biochar, and chicken manure also had no significantly different effect on shoot fresh weight, tuber + root fresh weight, and tuber + root dry weight.

Keywords: *P fertilizer, K fertilizer, rice husk biochar, chicken manure, Entisol*