

INTISARI

Entisol memiliki tingkat kesuburan yang sedang hingga rendah dan kandungan bahan organik yang tergolong rendah. Bawang merah merupakan salah satu tanaman hortikultura yang berpotensi ditanam pada lahan berpasir. Penelitian ini dilakukan untuk mengetahui pengaruh pemberian beberapa kombinasi kompos, arang, Pupuk Organik Cair (POC), dan mikroba terhadap sifat kimia tanah, pertumbuhan dan hasil tanaman, serta serapan NPK pada tanaman bawang merah. Penelitian ini dilaksanakan di Rumah Kaca, Tirtomulyo, Kecamatan Kretek, Kabupaten Bantul, serta diuji di laboratorium Fakultas Pertanian, Universitas Gadjah Mada. Media tanam diambil dari lahan pasir pantai Bugel, Kulon Progo. Rancangan penelitian yang digunakan yaitu Rancangan Acak Lengkap (RAL) nonfaktorial dengan 17 perlakuan dan 3 ulangan sehingga total 51 sampel. Hasil penelitian menunjukkan penambahan kombinasi kompos, arang sekam padi, POC, dan mikroba memberikan pengaruh paling baik terhadap sifat kimia tanah Entisol seperti daya hantar listrik (DHL), C-organik, N-total, P-tersedia, K-tersedia dan Mg-tersedia. Perlakuan KAC memberikan hasil paling baik untuk meningkatkan bobot segar dan bobot kering umbi bawang merah, serta kadar, serapan, dan efisiensi serapan hara N, P dan K tanaman bawang merah dengan serapan hara N sebesar 27.22 mg/tanaman, serapan hara P sebesar 78.92 mg/tanaman, dan serapan hara K sebesar 124.51 mg/tanaman.

Kata kunci : bawang merah, kompos, arang sekam padi, pupuk organik cair, mikroba

ABSTRACT

Entisol has a moderate to low fertility level and relatively low organic matter content. Onion are one of the horticultural crops that have the potential to be planted on sandy land. This research was conducted to determine the effect of providing several combinations of compost, charcoal, Liquid Organic Fertilizer (POC), and microbes on chemical properties of the soil, plant growth and yield, as well as NPK uptake in onion plants. This research was carried out at the Greenhouse, Tirtomulyo, Kretek District, Bantul Regency, and tested in the laboratory of the Faculty of Agriculture, Gadjah Mada University. The planting medium was taken from the sand of Bugel beach, Kulon Progo. The research design used was a non-factorial Completely Randomized Design (CRD) with 17 treatments and 3 replications so that a total of 51 samples. The research results showed that the addition of a combination of compost, rice husk charcoal, liquid organic fertilizer and microbes had the best influence on the chemical properties of Entisol such as electrical conductivity (DHL), C-organic, N-total, P-available, K-available and Mg-available. KAC treatment provides the best results for increasing the fresh and dry weight of onions bulbs, as well as the content, absorption and efficiency absorption of NPK of onions plants with N nutrient absorption of 27.22 mg/plant, P nutrient absorption of 78.92 mg/plant, and K nutrient absorption of 124.51 mg/plant.

Key words: onion, compost, rice husk charcoal, liquid organic fertilizer, microbes