

ABSTRAK

Penelitian ini dilakukan untuk mengetahui pengaruh imbangan arang sekam dan pupuk kandang sapi terhadap perubahan sifat kimia tanah pasir pantai, produktivitas tanaman dan serapan NPK tanaman kacang tanah. Penelitian dilakukan di lahan pasir pantai Samas Bantul pada Januari-Juni 2021. Rancangan penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL) kombinasi dosis arang sekam (AS) dan pupuk kandang sapi (PK) yaitu kontrol, AS 0 ton/ha + PK 20 ton/ha, AS 2 ton/ha + PK 18 ton/ha, AS 4 ton/ha + PK 16 ton/ha, AS 6 ton/ha + PK 14 ton/ha, AS 8 ton/ha + PK 12 ton/ha, AS 10 ton/ha + PK 10 ton/ha, AS 12 ton/ha + PK 12 ton/ha, AS 14 ton/ha + PK 6 ton/ha, AS 16 ton/ha + PK 4 ton/ha, AS 18 ton/ha + AS 2 ton/ha, AS 20 ton/ha + PK 0 ton/ha. Hasil penelitian menunjukkan penambahan dosis arang sekam dan pupuk kandang sapi menurunkan pH tanah, meningkatkan C-organik; P-tersedia; K-tersedia tanah. Perlakuan AS 18 ton/ha + PK 2 ton/ha memberikan produktivitas tanaman tertinggi sebesar 3,11 ton/ha. Perlakuan AS 0 ton/ha + PK 20 ton/ha memberikan serapan N dan K tertinggi, sedangkan serapan P tertinggi pada perlakuan AS 16 ton/ha + PK 4 ton/ha.

Kata kunci: pupuk kandang sapi, arang sekam, pasir pantai, kacang tanah.

ABSTRACT

The research was conducted to determine the effects of the balance of rice husk charcoal and cow manure on changes in soil sand chemical properties, plant productivity and NPK uptake of peanuts. The research done on the sandy land of Samas Beach, Bantul in January-June 2021. The research design used a Completely Randomized Block Design (RCBD) a combination of doses of rice husk charcoal (AS) and cow manure (PK), namely control, AS 0 tons/ha + PK 20 tons/ha, AS 2 tons/ha + PK 18 tons/ha, AS 4 tons/ha + PK 16 tons/ha, AS 6 tons/ha + PK 14 tons/ha, AS 8 tons/ha + PK 12 tons/ha, AS 10 tons/ha + PK 10 tons/ha, AS 12 tons/ha + PK 12 tons/ha, AS 14 tons/ha + PK 6 tons/ha, AS 16 tons/ha + PK 4 tons/ha, AS 18 tons/ha + AS 2 tons/ha, AS 20 tons/ha + PK 0 tons/ha. The result shows that by increasing the dose rice husk charcoal and cow manure it will decreased the soil pH, organic C; P-available; K-available land. Treatment of AS 18 ton/ha + PK 2 ton/ha gave the highest plant productivity of 3,11 ton/ha. Treatment of AS 0 tons/ha + PK 20 tons/ha gave the highest effect on N and K uptake, while the highest P uptake was treated with AS 16 tons/ha + PK 4 tons/ha.

Keywords: cow manure, husk charcoal, beach sand, peanuts.