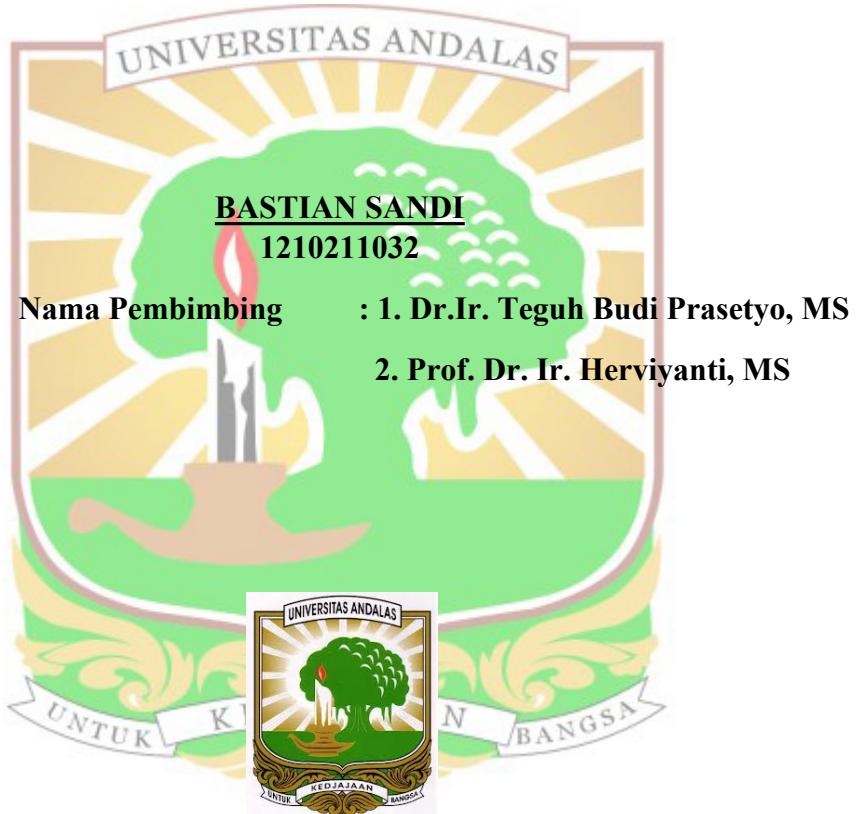


**PENGARUH PEMBERIAN ABU JANJANG KELAPA SAWIT
TERHADAP SIFAT KIMIA TANAH GAMBUT DAN
PERTUMBUHAN SERTA HASIL TANAMAN BAWANG
MERAH (*Allium ascalonicum L.*)**

SKRIPSI



**FAKULTAS PERTANIAN
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PENGARUH PEMBERIAN ABU JANJANG KELAPA SAWIT TERHADAP SIFAT KIMIA TANAH GAMBUT DAN PERTUMBUHAN SERTA HASIL TANAMAN BAWANG MERAH (*Allium ascalonicum L.*)

ABSTRAK

Penelitian ini bertujuan untuk mempelajari pengaruh pemberian abu janjang kelapa sawit terhadap perubahan sifat kimia yang terjadi pada tanah gambut serta mempelajari pengaruh dari pemberian abu janjang terhadap pertumbuhan dan produksi bawang merah. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari 5 perlakuan (0 ton/Ha; 2,5 ton/Ha; 5 ton/Ha; 7,5 ton/Ha dan 10 ton/Ha) dengan tiga ulangan. Pengamatan yang dilakukan pada penelitian ini terdiri dari pH H₂O, P-tersedia, KTK, serta basa-basa; serta pertumbuhan tanaman bawang merah meliputi tinggi tanaman, diameter umbi, bobot tanaman, serta bobot umbi. Data hasil pengamatan dianalisis dengan menggunakan uji F dan dilanjutkan DMRT pada taraf 5 %. Hasil penelitian menunjukkan bahwa takaran 7,5 ton/Ha dapat memperbaiki sifat kimia tanah gambut seperti pH (1,01 unit), P-tersedia (12,02 ppm), KTK (13,32 me/100 g) dan ketersediaan K-dd (0,15 me/100 g), Na-dd (0,09 me/100 g), Ca-dd (0,25 me/100 g) serta Mg-dd (0,16 me/100 g) dibandingkan dengan tanah tanpa perlakuan (0 ton/Ha) serta 2) pemberian AJKS pada takaran 7,5 ton/Ha dapat meningkatkan tinggi tanaman (23,75 cm), bobot tanaman bawang merah (bobot segar 34,63 g dan bobot kering 4,08 g), bobot umbi bawang merah (bobot segar 15,28 g dan bobot kering 2,31 g), dan diameter umbi bawang merah (1,72 cm) dibandingkan tanah tanpa perlakuan.

Kata kunci : Abu janjang kelapa sawit, gambut, bawang merah

THE EFFECT OF PALM OIL EMPTY BUNCH ASH ON CHEMICAL PROPERTIES OF PEAT SOILS AS WELL AS GROWTH AND YIELD OF ONION (*Allium ascalonicum L*)

ABSTRACT

This research was aimed to study the effect of oil palm bunch ash on chemical properties of peat soil and to study the effect of this ash on growth and yield of onion. The research was in form of pot experiment having 5 treatments (0 ton ash Ha^{-1} 2.5 ton ash Ha^{-1} 5 ton ash Ha^{-1} 7.5 ton ash Ha^{-1} 10 ton ash Ha^{-1}) and 3 replications which were pH H_2O , available phosphorus, CEC, and exchangeable cations; as well plant height, plant dry weight, weight and diameter of tubers. Data resulted were analyzed the variance using F-test at 5 % level of significance and then continued using Duncan New's Multiple Range test (DMRT) at 5 % level if F-test > F-table. The results showed that 7.5 ton ash Ha^{-1} was the optimum dose to improve chemical characteristics of peat soils. It increased pH H_2O by 1.01 unit, available phosphorus by 12.02 ppm, CEC by 13.32 Cmol kg^{-1} and exchangeable K by 0.15 Cmol kg^{-1} , Na by 0.09 Cmol kg^{-1} , Ca by 0.25 Cmol kg^{-1} , and Mg by 0.16 Cmol kg^{-1} compared to soil without treatment (0 ton ash Ha^{-1}). It also increased production of onion, especially plant height by 23.75 cm, plant fresh weight by 34.63 g and dry weight by 4.08 g, tuber fresh weight by 15.28 g and dry weight by 2.31 g, and diameter of tubers by 1.72 cm compared to soil without treatment.

Keywords : oil palm bunch ash, peat soils, onion