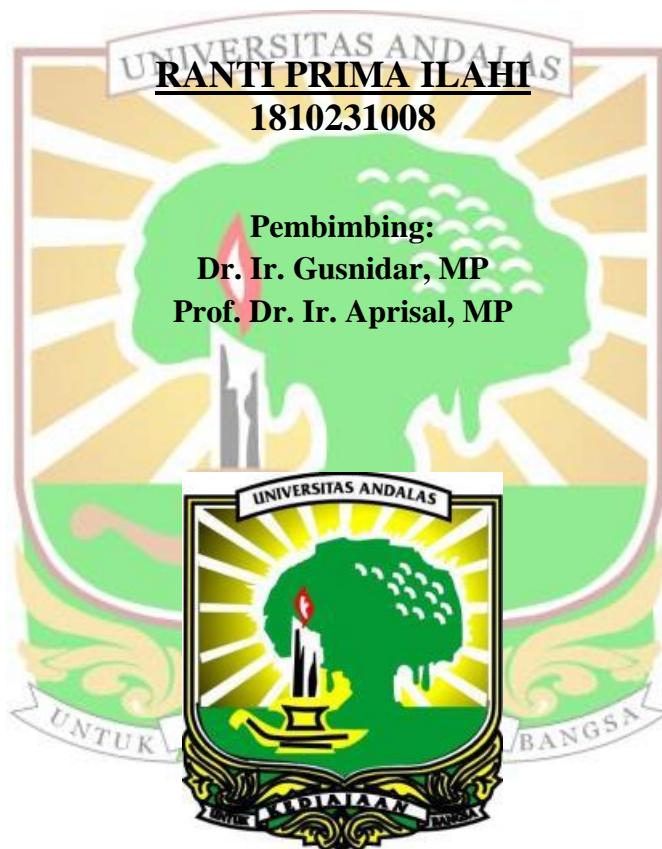


**UJI HARA BEBERAPA PUPUK KOMPOS DAN
PENGARUHNYA TERHADAP CIRI KIMIA ULTISOL**

SKRIPSI

OLEH:



**PROGRAM STUDI ILMU TANAH
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ABSTRAK

Pemanfaatan kompos merupakan salah satu upaya yang dapat dilakukan dalam memperbaiki sifat kimia Ultisol. Kajian mengenai uji hara beberapa kompos dan pengaruhnya terhadap ciri kimia Ultisol telah dilaksanakan dari bulan April sampai dengan Agustus 2022. Penelitian ini bertujuan untuk mengetahui dan mempelajari hara beberapa pupuk kompos dan pengaruhnya terhadap beberapa ciri kimia Ultisol. Penelitian ini dilakukan menggunakan rancangan acak lengkap (RAL) yang terdiri dari 6 perlakuan dan 3 ulangan, sehingga terdapat 18 unit percobaan. Perlakuan yang digunakan terdiri dari 1 kontrol dan 5 macam kompos dengan bahan yang berbeda diantaranya yaitu Pupuk kompos (PK) A, PK B, PK C, PK D, dan PK E. Masing-masing kompos memiliki bahan tambahan, dan dekomposer yang berbeda-beda sehingga kualitas, kuantitas, serta pengaruhnya terhadap tanah juga berbeda. Masing-masing kompos diaplikasikan ke dalam tanah dengan dosis 5 ton/ha atau sama dengan 5g/2kg tanah. Parameter yang dianalisis yaitu C-Organik, pH, N-Total, P-Tersedia, K-dd, Ca-dd, Mg-dd, Al-dd, KTK, C/N, P-Total, K-Total, Ca-Total, Mg-Total, dan kadar air. Hasil penelitian menunjukkan bahwa uji hara Kompos D berupa, kadar air, pH, jumlah hara ($N+P_2O_5+K_2O_5$), C-Organik, dan ratio C/N sudah memenuhi SNI 7763/2018. Hasil penelitian menunjukkan Kompos A dan B berpengaruh terhadap peningkatan C-Organik tanah, Kompos C berpengaruh terhadap peningkatan N-Total tanah, Kompos D berpengaruh terhadap peningkatan pH tanah, P-Tersedia, K-dd, Ca-dd, Mg-dd, dan Kompos E berpengaruh terhadap peningkatan KTK tanah. Berdasarkan hasil uji tersebut maka hara kompos terbaik diperoleh dari bahan dasar kotoran ayam, abu sekam, dolomit, asam humat.

Kata kunci: *Ciri kimia tanah, Kompos, Uji hara, Ultisol*

NUTRITION ASSEMENT OF SOME TYPES OF COMPOSET AND THEIR EFFECTS ON THE CHEMICAL CHARACTERISTICS OF ULTISOL

ABSTRACT

Utilization of compost is by One effort that can improve the chemical properties of Ultisol. A research on the nutrient assessment of several types of compost and their effects on the chemical characteristics of Ultisols was carried out from April to August 2022. This field experiment was aimed to determine and study the nutrient content of several types of compost and their effects on several chemical characteristics of Ultisols. This study experiment consisted of 6 treatments (control, Compost (PK) A, PK B, PK C, PK D, and PK E) with 3 replicates. The experimental units (18 units) were allocated based on Completely Randomized Design (CRD). Each compost contained different additives, and different decomposers, so that the quality, quantity, as well as their effects on soil were also different. The compost was applied 5 tons/ha to the soil or equal to 5g/2kg soil. The parameters analyzed were organic-C, pH, total-N, P-available, K-exchangeable, Ca-exchangeable, Mg-exchangeable, Al-exchangeable, CEC, C/N, total-P, total-K, total-Ca, total-Mg, and water content. The results showed that the characteristics of compost D, especially the water content, pH, total nutrients ($N+P_2O_5+K_2O_5$), organic-C, and C/N ratio fulfilled the criteria of SNI 7763/2018. The Compost A and B could increase soil organic-C. The compost C was able to increase soil total-N, compost D increased soil pH, P-available, K-exchangeable, Ca-exchangeable, Mg-exchangeable, and Compost E increased soil CEC. Based on the data resulted, the best compost was obtained from the basic materials derived from chicken manure, rice husk ash, dolomite, and humic acid.

Keywords: Compost, Nutrient assessment, Soil chemical characteristics, Ultisol