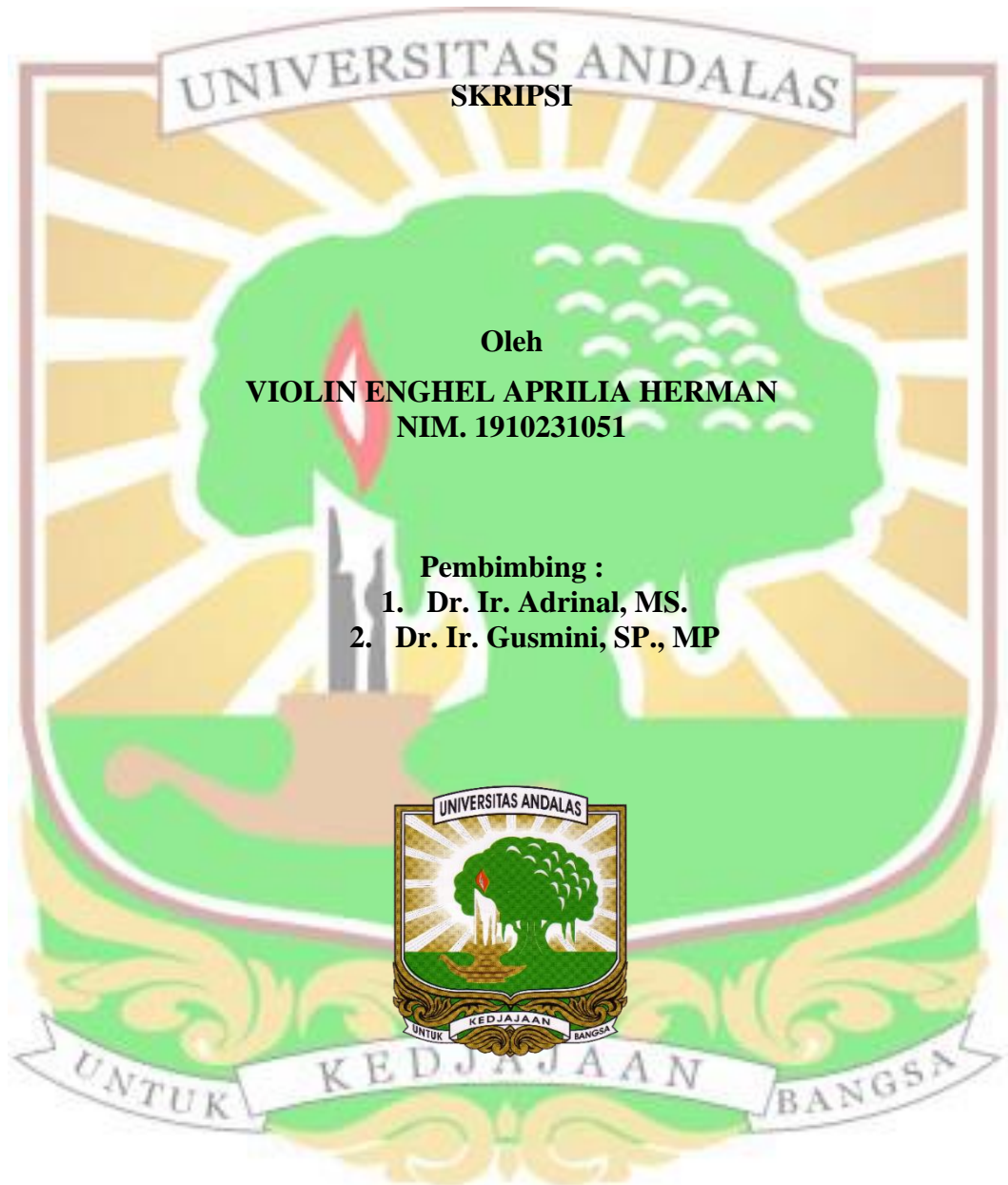


**KAJIAN PEMBERIAN TERRA PRETA BIOCHAR SEKAM
PADI (TETADI) TERHADAP SIFAT FISIKA TANAH SAWAH,
PERTUMBUHAN DAN HASIL TANAMAN PADI
PADA METODE SRI (*System of Rice Intensification*)**



SKRIPSI

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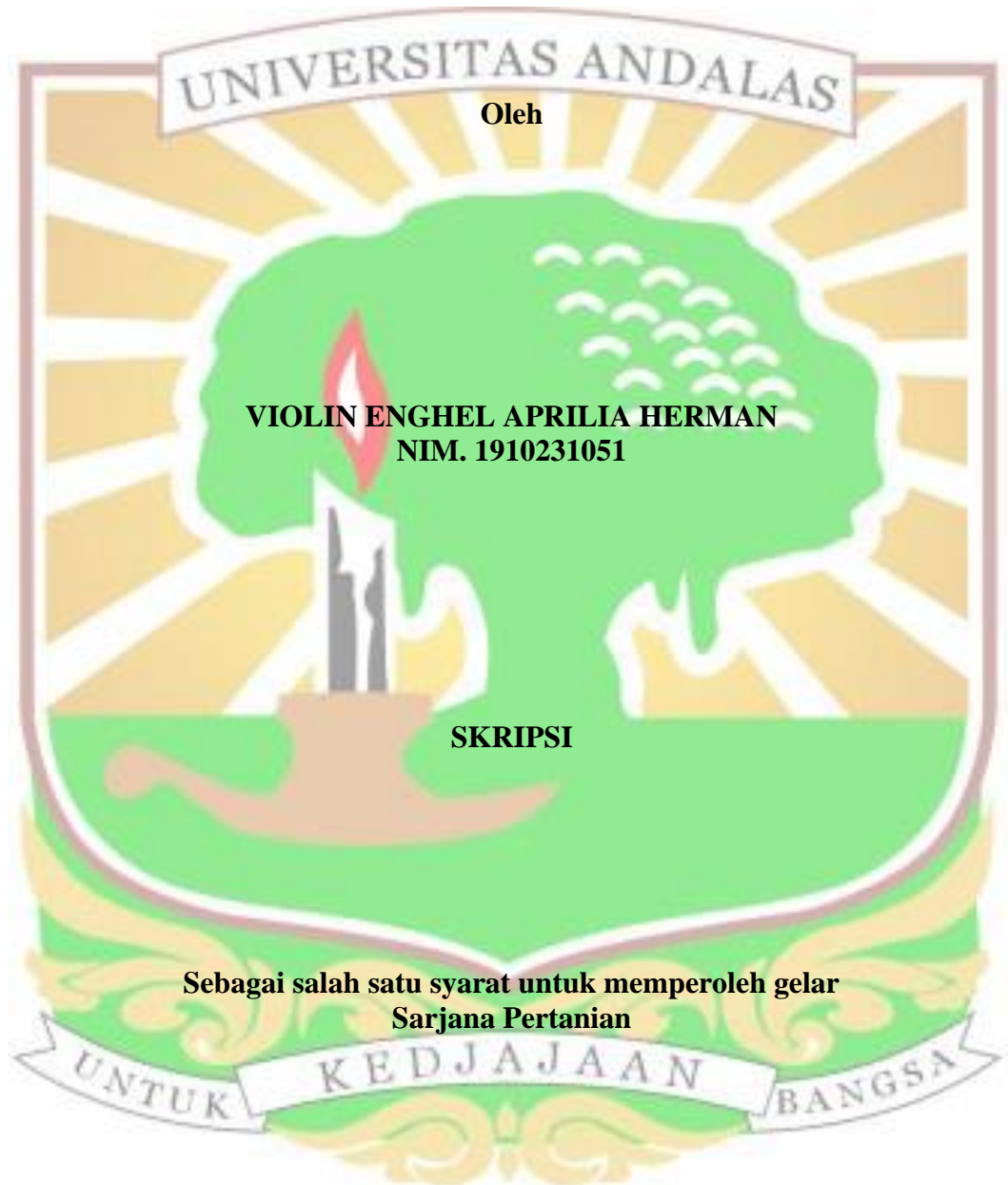
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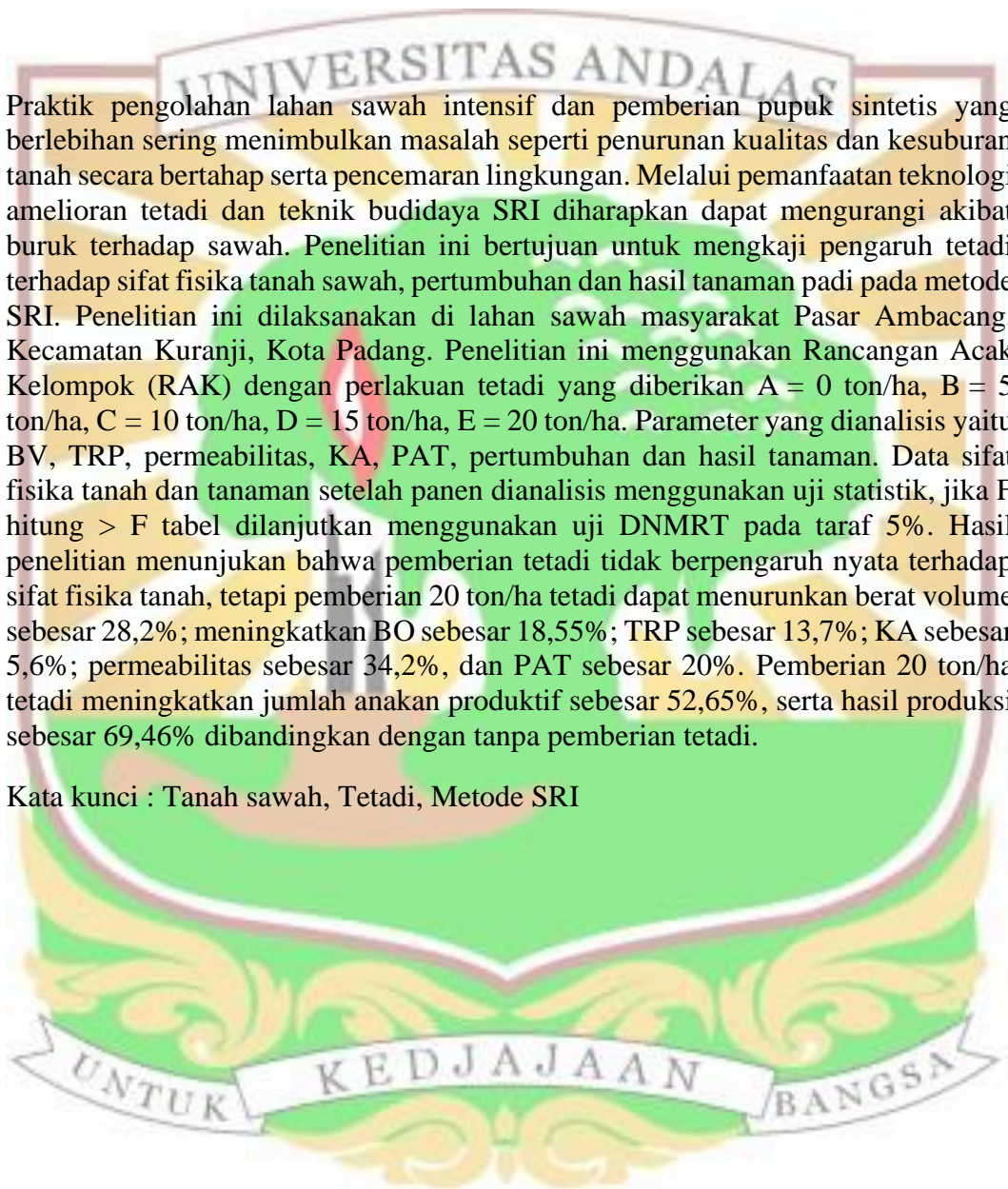
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ABSTRAK

Praktik pengolahan lahan sawah intensif dan pemberian pupuk sintetis yang berlebihan sering menimbulkan masalah seperti penurunan kualitas dan kesuburan tanah secara bertahap serta pencemaran lingkungan. Melalui pemanfaatan teknologi amelioran tetadi dan teknik budidaya SRI diharapkan dapat mengurangi akibat buruk terhadap sawah. Penelitian ini bertujuan untuk mengkaji pengaruh tetadi terhadap sifat fisika tanah sawah, pertumbuhan dan hasil tanaman padi pada metode SRI. Penelitian ini dilaksanakan di lahan sawah masyarakat Pasar Ambacang, Kecamatan Kuranji, Kota Padang. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan perlakuan tetadi yang diberikan A = 0 ton/ha, B = 5 ton/ha, C = 10 ton/ha, D = 15 ton/ha, E = 20 ton/ha. Parameter yang dianalisis yaitu BV, TRP, permeabilitas, KA, PAT, pertumbuhan dan hasil tanaman. Data sifat fisika tanah dan tanaman setelah panen dianalisis menggunakan uji statistik, jika $F_{hitung} > F_{tabel}$ dilanjutkan menggunakan uji DNMRT pada taraf 5%. Hasil penelitian menunjukkan bahwa pemberian tetadi tidak berpengaruh nyata terhadap sifat fisika tanah, tetapi pemberian 20 ton/ha tetadi dapat menurunkan berat volume sebesar 28,2%; meningkatkan BO sebesar 18,55%; TRP sebesar 13,7%; KA sebesar 5,6%; permeabilitas sebesar 34,2%, dan PAT sebesar 20%. Pemberian 20 ton/ha tetadi meningkatkan jumlah anakan produktif sebesar 52,65%, serta hasil produksi sebesar 69,46% dibandingkan dengan tanpa pemberian tetadi.

Kata kunci : Tanah sawah, Tetadi, Metode SRI



STUDY ON THE EFFECT OF TEERA PRETA RICE HUSK BIOCHAR (TETADI) ON PHYSICAL PROPERTIES OF PADDY SOIL, GROWTH AND YIELD OF RICE ON SRI METHOD (*System of Rice Intensification*)

ABSTRACT

The practice of intensive rice field cultivation and the excessive application of synthetic fertilizers often lead to issues such as a gradual decline in soil quality and fertility, as well as environmental pollution. By employing tetadi as ameliorant technology and adopting SRI cultivation techniques, it is hoped that we can mitigate the negative effects on rice fields. This study was aimed to examine the effect of tetadi on physical properties of paddy soil, growth and rice yield on SRI method. The experiments were conducted in paddy fields in Pasar Ambacang, Kuranji, Kota Padang. The treatments were application of tetadi doses (A = 0 tons/ha, B = 5 tons/ha, C = 10 tons/ha, D = 15 tons/ha, E = 20 tons/ha). The experimental units were arranged based on Randomized Block Design (RBD). The parameters analyzed were BD, TSP, permeability, water content, plant available water, as well as plant growth and yield. The data were compared to the criteria of soil physical properties and plant data were statistically analysed for the variance. If the F calculated $> F$ table, the analyses were continued by using DNMR at 0.05 level of significance. The results showed that the treatments had an insignificant impact on soil physical properties. However, with the application of 20 tons of tetadi, there was a tendency for BD to decrease by 28.2%; increase SOM by 18,55%; TSP by 13,7%; water content by 5,6%; permeability by 34,2%, and plant available water by 20%. Application of 20 tons/ha tetadi increased number of productive seedling 52,65% as well as the yield by 69,46% compared to the treatment without tetadi application.

Keywords : Paddy soil, Tetadi, SRI method

