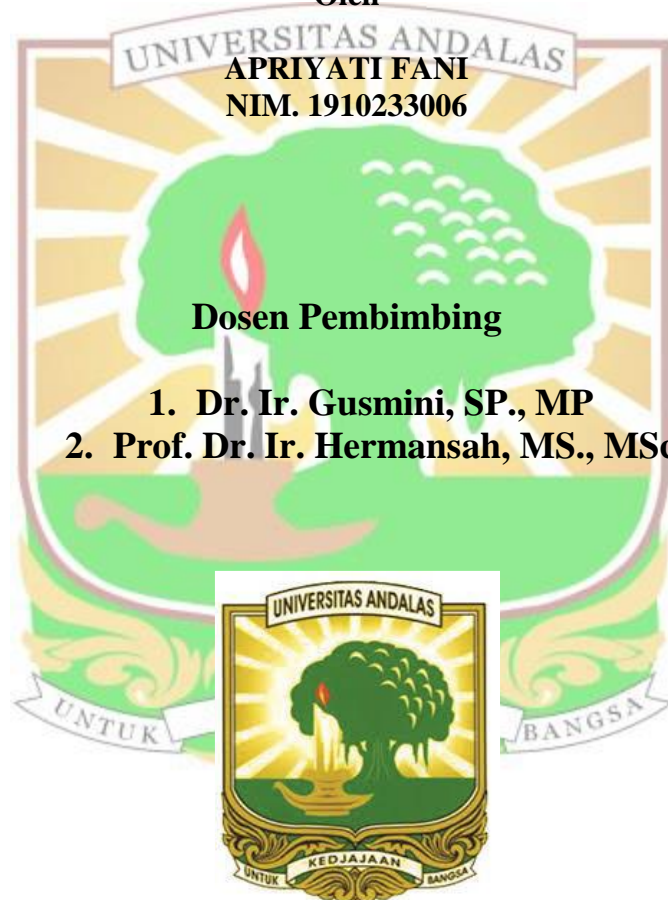


**PERBAIKAN SIFAT KIMIA TANAH PSAMMENT MELALUI
APLIKASI BIOKANAT TERHADAP PERTUMBUHAN DAN
HASIL TANAMAN JAGUNG (*Zea Mays.L*)**

SKRIPSI

Oleh



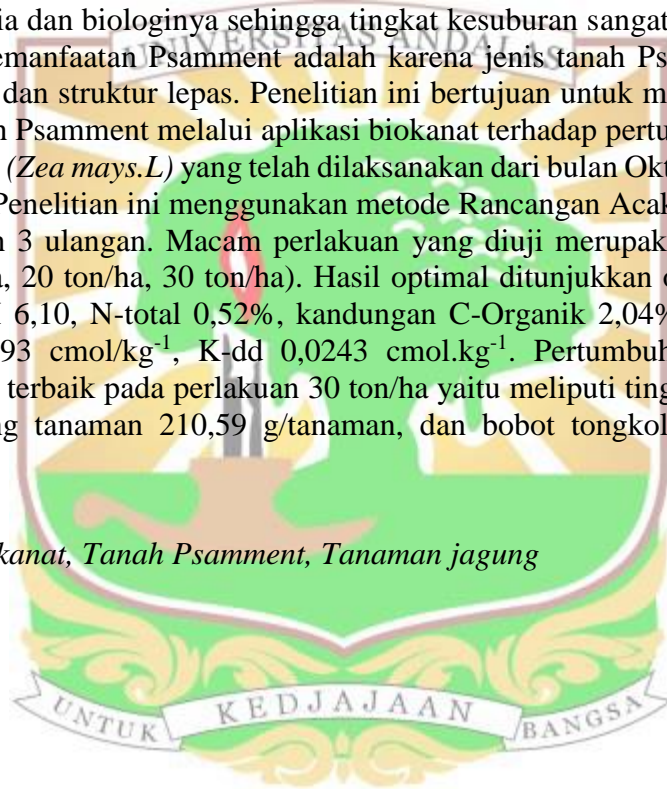
**FAKULTAS PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2023**

PERBAIKAN SIFAT KIMIA TANAH PSAMMENT MELALUI APLIKASI BIOKANAT TERHADAP PERTUMBUHAN DAN HASIL TANAMAN JAGUNG (*Zea mays.L*)

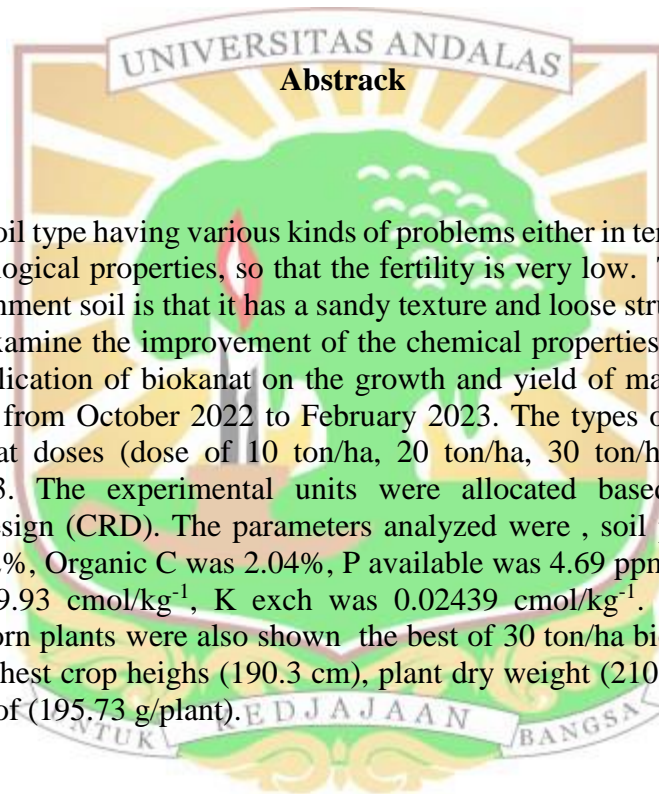
Abstrak

Tanah Psamment merupakan tanah dengan berbagai macam permasalahan baik dari sifat fisika, kimia dan biologinya sehingga tingkat kesuburan sangat rendah. Kendala utama dalam pemanfaatan Psamment adalah karena jenis tanah Psamment memiliki tekstur berpasir dan struktur lepas. Penelitian ini bertujuan untuk mengkaji perbaikan sifat kimia tanah Psamment melalui aplikasi biokanat terhadap pertumbuhan dan hasil tanaman Jagung (*Zea mays.L*) yang telah dilaksanakan dari bulan Oktober 2022 sampai Februari 2023. Penelitian ini menggunakan metode Rancangan Acak Lengkap dengan 4 perlakuan dan 3 ulangan. Macam perlakuan yang diuji merupakan dosis biokanat (dosis 10 ton/ha, 20 ton/ha, 30 ton/ha). Hasil optimal ditunjukkan oleh perlakuan 30 ton/ha yaitu pH 6,10, N-total 0,52%, kandungan C-Organik 2,04%, P-tersedia 4,69 ppm, KTK 19,93 cmol/kg^{-1} , K-dd 0,0243 cmol.kg^{-1} . Pertumbuhan dan produksi tanaman jagung terbaik pada perlakuan 30 ton/ha yaitu meliputi tinggi tanaman 190,3 cm, berat kering tanaman 210,59 g/tanaman, dan bobot tongkol tanaman 195,73 g/tanaman.

Kata kunci: *Biokanat, Tanah Psamment, Tanaman jagung*



**IMPROVEMENT OF THE CHEMICAL PROPERTIES OF PSAMMENT
SOIL THROUGH THE APPLICATION OF BIOKANAT ON THE GROWTH
AND YIELD OF MAIZE (*Zea Mays. L*)**



Abstrack

Psamment is a soil type having various kinds of problems either in terms of its physical, chemical or biological properties, so that the fertility is very low. The main obstacle in utilizing Psamment soil is that it has a sandy texture and loose structure. This study was aimed to examine the improvement of the chemical properties of psamment soil through the application of biokanat on the growth and yield of maize. This research was carried out from October 2022 to February 2023. The types of treatment tested were, 3 biokanat doses (dose of 10 ton/ha, 20 ton/ha, 30 ton/ha), and each was replicated by 3. The experimental units were allocated based on Completely Randomized Design (CRD). The parameters analyzed were , soil pH was 6.10 unit, total N was 0.52%, Organic C was 2.04%, P available was 4.69 ppm, cation exchange capacity was 19.93 cmol/kg⁻¹, K exch was 0.02439 cmol/kg⁻¹. The growth and production of corn plants were also shown the best of 30 ton/ha biokanat application they had the highest crop heights (190.3 cm), plant dry weight (210.59 g/plant), and a robot cob plant of (195.73 g/plant).

Keyword: Biokanat, Psamment soil, corn crop