

**PERANAN BIOCHAR BAMBU DALAM
MEMPERBAIKI DISTRIBUSI PORI TANAH PSAMMENT**

SKRIPSI



**FAKULTAS PERTANIAN
UNIVERSITAS ANDALAS
PADANG
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Oleh:



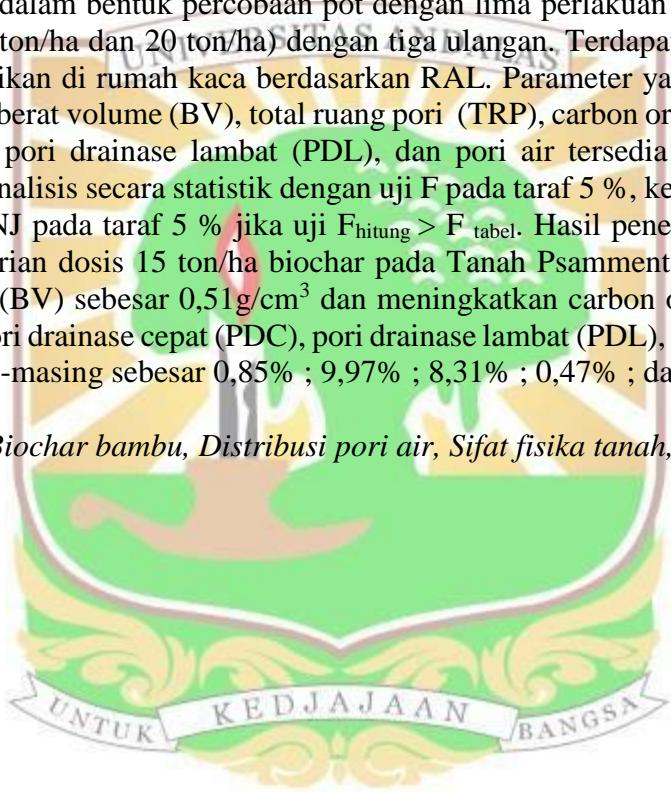
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Abstrak

Penelitian ini merupakan kajian tentang Peranan *Biochar* Bambu dalam Memperbaiki Distribusi Pori Tanah Psamment yang dilakukan di rumah kaca dalam bentuk percobaan pot. Tujuan dari penelitian ini adalah untuk mengetahui kemampuan *biochar* bambu dalam meningkatkan distribusi pori pada Tanah Psamment di nagari Ketaping. Penelitian ini dalam bentuk percobaan pot dengan lima perlakuan (0 ton/ha, 5 ton/ha, 10 ton/ha, 15 ton/ha dan 20 ton/ha) dengan tiga ulangan. Terdapat 15 unit percobaan yang dialokasikan di rumah kaca berdasarkan RAL. Parameter yang dianalisa adalah tekstur tanah, berat volume (BV), total ruang pori (TRP), carbon organik, pori drainase cepat (PDC), pori drainase lambat (PDL), dan pori air tersedia (PAT). Data yang dihasilkan dianalisis secara statistik dengan uji F pada taraf 5 %, kemudian dilanjutkan dengan uji BNJ pada taraf 5 % jika $F_{hitung} > F_{tabel}$. Hasil penelitian menunjukkan bahwa pemberian dosis 15 ton/ha biochar pada Tanah Psamment dapat menurunkan berat volume (BV) sebesar $0,51\text{g/cm}^3$ dan meningkatkan carbon organik, total ruang pori (TRP), pori drainase cepat (PDC), pori drainase lambat (PDL), dan pori air tersedia (PAT) masing-masing sebesar 0,85% ; 9,97% ; 8,31% ; 0,47% ; dan 0,37%.

Kata kunci : Biochar bambu, Distribusi pori air, Sifat fisika tanah, Tanah Psamment



THE ROLE OF BAMBOO BIOCHAR IN IMPROVING SOIL PORE DISTRIBUTION OF PSAMMENT

Abstract

This research was a study on the Role of Bamboo Biochar in Improving Soil Pore Distribution which was carried out in a greenhouse in the form of a pot experiment. The purpose of this study was to determine the ability of bamboo biochar to improve the pore distribution of the Psamment in Ketaping. The research was in the form of a pot experiment having five treatments (0 tons/ha, 5 tons/ha, 10 tons/ha, 15 tons/ha and 20 tons/ha) with three replicates. There were 15 experimental units allocated in a greenhouse based on CRD. Parameters analyzed were soil texture, bulk density (BD), total soil pore (TSP), organic-carbon, fast drainage pore (FDP), slow drainage pore (SDP), and available water pore (AWP). Data Resulted were statistically analyzed using F-test at 5 % level and then continued using HSD test at 5 % level if $F_{\text{test}} > F_{\text{table}}$. The result showed that the application of 15 tons/ha of biochar on Psamment reduced bulk density (BD) by 0.51 g/cm^3 and increased organic carbon, total soil space (TSP), fast drainage pore (FDP), slow drainage pore (SDP), and available water pore (AWP) each of 0.85% ; 9.97% ; 8.31% ; 0.47% ; and 0.37%.

Key words : Bamboo biochar, Psamment, Soil physical properties, Water pore distribution.

