

**KAJIAN SIFAT FISIKA TANAH  
YANG DITANAMI GAMBIR (*Uncaria gambir Roxb.*)  
PADA BERBAGAI KEMIRINGAN LAHAN  
DI KENAGARIAN TALANG MAUR KECAMATAN MUNGKA  
KABUPATEN LIMA PULUH KOTA**

**SKRIPSI**

**OLEH:**



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**ABSTRAK**

Penelitian mengenai sifat fisika tanah pada berbagai kemiringan lahan yang ditanami gambir telah dilaksanakan di Kenagarian Talang Maur, Kecamatan Mungka, Kabupaten Lima Puluh Kota. Penelitian ini bertujuan untuk mengkaji sifat fisika tanah pada lahan yang ditanami gambir pada berbagai kemiringan lahan. Penelitian ini menggunakan metode survei, dengan pengambilan sampel tanah dilakukan secara purposive random sampling pada tiga kemiringan lahan yaitu agak curam (15-25%), curam(25-45%), dan sangat curam(>45%) pada kedalaman 0-20 cm dan 20-40 cm. Analisis sifat-sifat fisika tanah dilaksanakan di Laboratorium Fisika Tanah Fakultas Pertanian Universitas Andalas Padang. Hasil penelitian menunjukkan bahwa tekstur tanah adalah lempung berliat dan lempung liat berdebu pada lapisan 0-20 cm dan liat pada lapisan 20-40 cm. Bahan organik tanah tergolong sangat rendah (0,93-1,35%), berat volume tanah sedang-tinggi (1,01-1,16 g/cm<sup>3</sup>), total ruang pori tanah rendah-sedang(56,32-62,02%), permeabilitas sedang-agak cepat (2,59-7,78cm/jam), dan indeks stabilitas agregat tidak mantap sampai agak mantap (31,28-51,74%). Berdasarkan penelitian yang telah dilaksanakan di Kenagarian Talang Maur, Kecamatan Mungka, Kabupaten Lima Puluh Kota disarankan agar petani dapat meningkatkan sifat fisika tanah dengan meningkatkan input bahan organik tanah.

*Kata kunci : Fisika Tanah, Kemiringan Lahan, Gambir.*



**STUDY ON SOIL PHYSICAL PROPERTIES  
PLANTED BY GAMBIER (*Uncaria gambir. Roxb*) AT VARIOUS  
SLOPES OF LAND IN TALANG MAUR VILLAGE, MUNGKA  
DISTRICT, LIMA PULUH KOTA REGENCY**

**ABSTRACT**

A research on soil physical properties at various slopes of land planted by gambier was carried out in Talang Maur Village, Mungka District, Lima Puluh Kota Regency. This study was aimed to examine the physical properties of the soil on land planted by gambier on various slopes. This study used a survey method, the soil was sampled based on purposive sampling at three slope levels, (slightly steep 15-25%, steep 25-45%, and very steep > 45%) at 0-20 cm and 20-40 cm depths. Analysis of soil physical properties was carried out at the Soil Physics Laboratory, Faculty of Agriculture, Andalas University, Padang. The results showed that the soil texture was clayey loam and silt clay loam at 0-20 cm and clay at 20-40 cm depth. The soil organic matter content was very low (0.93-1.35%), the soil bulk density was medium-high (1.01-1.16 g cm<sup>-3</sup>), the total pore space was low-medium (56.32-62.02%), the permeability was moderate-slightly fast (2.59-7.78 cm h<sup>-1</sup>), and the aggregate stability index was not steady to moderately steady (31,28-51,74%). Based on the research conducted in Talang Maur Village, Mungka District, Lima Puluh Kota Regency, it was suggested that farmers improve the physical properties of the soil by increasing the input of soil organic matter.

*Keywords: Soil Physics, Land Slope, Gambier.*

