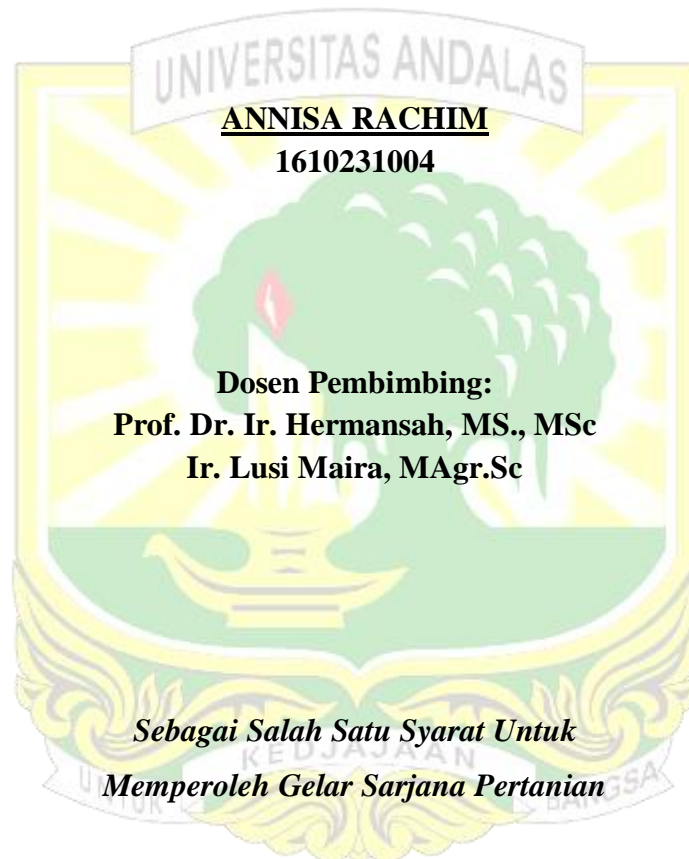


**PENGARUH MULSA PLASTIK DAN PESTISIDA TERHADAP  
KANDUNGAN DAN FRAKSI BAHAN ORGANIK TANAH YANG  
DITANAMI SECARA POLIKULTUR PADA LAHAN VULKANIS  
GUNUNG MARAPI SUMATERA BARAT**

**SKRIPSI**

**OLEH :**



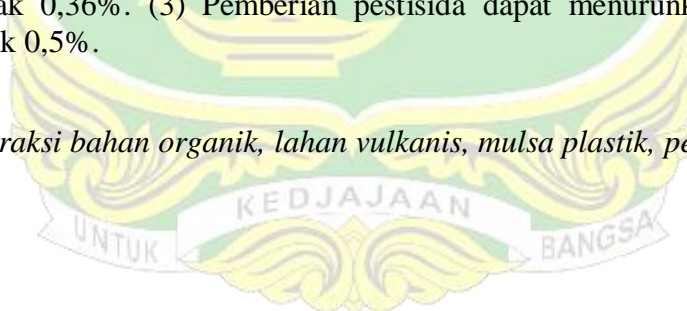
**PROGRAM STUDI ILMU TANAH  
FAKULTAS PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2021**

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**ABSTRAK**

Pemakaian mulsa plastik dan pestisida memiliki dampak terhadap fraksi bahan organik tanah. Penelitian ini bertujuan melihat pengaruh interaksi penggunaan mulsa plastik dan pestisida, pengaruh utama mulsa plastik, dan pengaruh utama pestisida terhadap kandungan dan fraksi bahan organik tanah yang ditanami secara polikultur pada lahan vulkanis Gunung Marapi. Penelitian telah dilaksanakan pada bulan Oktober 2019 hingga Agustus 2020 di Lahan petani Nagari Paninjauan kecamatan X Koto Kabupaten Tanah Datar dan analisis tanah dilakukan di Laboratorium Kimia Tanah Jurusan Tanah Fakultas Pertanian Universitas Andalas. Penelitian ini dilakukan menggunakan faktorial 2 x 2 dengan 3 kali ulangan dengan menggunakan Rancangan Acak Lengkap (RAL). Faktor pertama yang digunakan adalah mulsa plastik dan faktor kedua yaitu pestisida. Hasil penelitian menunjukkan bahwa: (1) Tidak terdapat interaksi antara pemberian mulsa plastik dan pestisida terhadap kandungan dan fraksi bahan organik tanah. (2) Pemberian mulsa plastik hanya berpengaruh terhadap nilai N total tanah. Penggunaan mulsa plastik dapat meningkatkan kandungan N Total tanah sebanyak 0,36%. (3) Pemberian pestisida dapat menurunkan C organik tanah sebanyak 0,5%.

*Kata kunci: Fraksi bahan organik, lahan vulkanis, mulsa plastik, pestisida*



**EFFECT OF PLASTIC MULCH AND PESTICIDE ON SOIL ORGANIC  
MATTER CONTENT AND FRACTION UNDER POLICULTURE  
SYSTEM ON VULCANIC LAND OF MOUNT MARAPI, WEST  
SUMATERA**

**ABSTRACT**

The use of plastic mulch and pesticides has an impact on the soil organic matter fraction. This study was aimed to see the interaction effects between use of plastic mulch and application of pesticides, the main effect of plastic mulch and pesticides on the soil organic matter content and fraction of volcanic land of Mount Marapi planted as polyculture system. The research was in form of field experiment which was carried out on farmer's land in Nagari Paninjauan, X Koto Tanah Datar Regency from October 2019 to August 2020. Soil analysis was conducted at the Soil Chemistry Laboratory, Department of Soil Science, Faculty of Agriculture, Andalas University. This experiment was in factorial 2 x 2 design with 3 replications. The first factor used was plastic mulch and the second factor was pesticides. The treatment units were allocated based on completely randomized design (CRD). The results showed that: (1) There was no interaction between the application of plastic mulch and pesticides to the content and fraction of soil organic matter. (2) The application of plastic mulch could increase the total N content of the soil by 0.36%. (3) The use of pesticides could reduce soil organic C as much as 0.5%.

*Key words: Fraction of organic matter, pesticides, plastic mulch, volcanic land.*

