

## **ABSTRAK**

### **PENGARUH SISTEM OLAH TANAH DAN PEMBERIAN MULSA TERHADAP KEHILANGAN UNSUR HARA (N,P,K) DAN C-ORGANIK AKIBAT EROSI PADA PERTANAMAN KACANG HIJAU MUSIM TANAM KETIGA**

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Penelitian ini bertujuan untuk mengetahui pengaruh sistem olah tanah, penggunaan mulsa, dan interaksi antar keduanya terhadap kehilangan unsur hara (N, P, K) dan C-organik akibat erosi pada lahan pertanaman kacang hijau. Penelitian ini dilakukan pada Maret sampai Juni 2017 di Laboratorium Lapang Terpadu Fakultas Pertanian Universitas Lampung. Rancangan yang digunakan adalah Rancangan Acak Kelompok Lengkap (RAKL) dengan dua faktor perlakuan yaitu sistem olah tanah dan pemberian mulsa, dan empat kali ulangan. Hasil penelitian menunjukkan bahwa perlakuan sistem olah tanah konservasi, perlakuan mulsa dan interaksi antara keduanya tidak berpengaruh nyata terhadap kandungan N-total, P-tersedia, K-dd dan C-organik dalam sedimen.

Kata kunci: erosi, mulsa, sistem olah tanah, unsur hara.

## **ABSTRACT**

### **THE EFFECT OF SOIL TILLAGE SYSTEM AND MULCH APPLICATION ON THE LOSS OF NUTRIENTS (N, P, K) AND ORGANIC CARBON DUE TO EROSION IN GREEN BEAN CULTIVATION AT THE THIRD SEASON**

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*This study aims to determine the effect of tillage system, mulch application, and interactions between them on the loss of nutrients (N, P, K) and organic carbon due to erosion on green bean cultivation. This research was conducted in March until June 2017 at the Integrated Field Laboratory of Agriculture Faculty, University of Lampung. This research used a Randomized Complete Block design (RCB) with two treatment factors, namely tillage system and mulch application, and four replications. The results showed that the conservation tillage system, mulch application and the interaction between them did not significantly affect the total N-content, available-P, exchangeable-K and organic carbon content in the sediment.*

*Key words:* *erosion, mulch, nutrient, soil tillage system.*