ABSTRAK

PENGARUH ARAH GULUDAN DAN PEMUPUKAN TERHADAP NISBAH PENGAYAAN SERTA PRODUKSI SINGKONG (*Manihot esculenta* Crantz) PADA LAHAN PERTANIAN DI BANDAR LAMPUNG

Oleh

AMALIA CHAERUNNISA

Singkong (*Manihot esculanta Crantz*) komoditas subsektor tanaman pangan penting ketiga setelah padi dan jagung. Adapun yang menjadi tantangan adalah hilangnya unsur hara dan bahan organik tanah akibat erosi yang menimbulkan penurunan produksi singkong. Tindakan konservasi tanah seperti guludan dan pemupukan merupakan upaya untuk mengurangi terjadinya erosi. Tujuan penelitian ini untuk mengetahui pengaruh pembuatan arah guludan searah lereng dan memotong lereng berpengaruh terhadap kehilangan unsur hara dan C-organik akibat erosi serta produksi singkong. Penelitian dilaksanakan pada Mei 2023-Maret 2024 di Laboratorium Lapang Terpadu Fakultas Pertanian Universitas Lampung. Perlakuan disusun secara faktorial 2x2 dalam Rancangan Acak Kelompok Lengkap dengan 4 ulangan sehingga diperoleh 16 satuan percobaan. Faktor pertama adalah tindakan konservasi tanah (arah guludan) yaitu G1 = guludan searah lereng; dan G2 = guludan memotong lereng. Faktor kedua adalah pemupukan yaitu P0 = tanpa pupuk; dan P1 = pemberian pupuk. Hasil penelitian menunjukkan bahwa perlakuan arah guludan memotong lereng (G2) berpengaruh menekan laju kehilangan hara dibandingkan guludan searah lereng (G1), tetapi tidak berpengaruh terhadap produksi. Perlakuan pemberian pupuk tidak berpengaruh dalam menekan kehilangan unsur hara, tetapi berpengaruh terhadap bobot umbi.

Kata kunci : erosi, guludan, kehilangan hara, phonska, pupuk urea, singkong

ABSTRACT

INFLUENCE OF GRINDING DIRECTION AND FERTILIZATION ON THE INCREASE INCOME AND PRODUCTION OF SHRONT (Manihot esculenta Crantz) ON FARM LAND IN BANDAR LAMPUNG

By

AMALIA CHAERUNNISA

Cassava (Manihot esculanta Crantz) is the third most important food crop subsector commodity after rice and corn. The challenge is the loss of soil nutrients and organic matter due to erosion which causes a decrease in cassava production. Soil conservation measures such as mounds and fertilization are efforts to reduce erosion. The purpose of this study was to determine the effect of making the direction of the mounds in the direction of the slope and cutting the slope on the loss of nutrients and C-organic due to erosion and cassava production. The research was conducted in May 2023-March 2024 at the Integrated Field Laboratory of the Faculty of Agriculture, University of Lampung. This study treatments were arranged factorially 2x2 in a Completely Randomized Block Design with 4 replications to obtain 16 experimental units. The first factor was soil conservation measures (direction of mounds), namely G1 = mounds in the direction of the slope; and G2 = mounds cutting the slope. The second factor is fertilization, namely P0 = without fertilizer; and P1 = fertilizer application. The results showed that the treatment of the direction of the weeds cutting the slope (G2) had an effect on suppressing the rate of nutrient loss compared to the weeds in the direction of the slope (G1), but had no effect on production. The treatment of fertilizer application had no effect in suppressing nutrient losses, but had an effect on tuber weight.

Keywords : erosion, ridges, urea, phonska fertilizer, nutrient loss, cassava