

ABSTRAK

PENGARUH TEKNIK KONSERVASI TANAH DAN PEMUPUKAN TERHADAP PRODUKSI SINGKONG (*Manihot esculenta* Crantz) DI LAHAN BERLERENG

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Lampung merupakan salah satu produsen singkong paling tinggi di Indonesia dan memiliki kemampuan untuk memenuhi permintaan singkong nasional. Pada 2020 produksi singkong di Lampung menyentuh 2.650.289 ton, sedangkan 2021 menurun menjadi 2.485.452 ton dengan luas areal singkong berkisar 489.573 ha. Perurunan produksi singkong ini bisa disebabkan oleh beberapa faktor, salah satunya adalah aliran permukaan dan erosi. Penelitian ini dilaksanakan pada 31 Mei 2023 – 9 Maret 2024 di Laboratorium Lapang Terpadu, Fakultas Pertanian, Universitas Lampung. Penelitian ini menggunakan Rancangan Acak Kelompok Lengkap Faktorial (2x2). Faktor pertama adalah konservasi tanah (guludan) dan faktor kedua pemupukan. Perlakuan teknik konservasi tanah terbagi menjadi G1: guludan searah lereng, G2: guludan memotong lereng. Perlakuan pemupukan terbagi menjadi P0: tanpa pemupukan, P: NPK Phonska 300 kg ha⁻¹ dan Urea 200 kg ha⁻¹. Hasil penelitian perlakuan teknik konservasi tanah tidak berbeda nyata pada semua variabel. Pada perlakuan pemupukan memperlihatkan hasil berbeda nyata pada taraf 5% terhadap variabel bobot umbi, sedangkan pada variabel jumlah umbi, diameter umbi, dan panjang umbi tidak berbeda nyata. Tidak terdapat pengaruh interaksi antara perlakuan teknik konservasi dan pemupukan pada semua variabel.

Kata kunci: erosi, pemupukan, singkong, teknik konservasi tanah.

ABSTRACT

THE EFFECT OF SOIL CONSERVATION TECHNIQUES AND FERTILIZATION ON CASSAVA (*Manihot esculenta* Crantz) PRODUCTION ON SLOPING LAND

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Lampung is one of the leading cassava-producing regions in Indonesia and has the capacity to meet national cassava demand. In 2020, cassava production in Lampung reached 2,650,289 tons, but it decreased to 2,485,452 tons in 2021, with a total planting area of approximately 489,573 hectares. This decline in cassava production may be caused by several factors, one of which is surface runoff and erosion. This research was conducted from May 31, 2023, to March 9, 2024, at the Integrated Field Laboratory, Faculty of Agriculture, University of Lampung. The study employed a factorial randomized complete block design (2×2). The first factor was soil conservation technique (ridge formation), and the second factor was fertilization. The soil conservation treatments consisted of G1: ridges parallel to the slope, and G2: ridges across the slope. The fertilization treatments consisted of P0: without fertilization, and P: NPK Phonska 300 kg ha⁻¹ combined with Urea 200 kg ha⁻¹. The results showed that the soil conservation technique treatments had no significant effect on all observed variables. However, the fertilization treatments showed a significant effect at the 5% level on tuber weight, while the variables of tuber number, tuber diameter, and tuber length showed no significant differences. There was no interaction effect between soil conservation techniques and fertilization on any of the variables.

Keywords: erosion, fertilization, cassava, soil conservation techniques