STATUS KESUBURAN TANAH INCEPTISOL DI NAGARI BATU PAYUANG KECAMATAN LAREH SAGO HALABAN KABUPATEN LIMA PULUH KOTA

SKRIPSI

Oleh

RATU FIRDAUSI IWAWAN
NIM. 2110242031

Dosen Pembimbing I : Dewi Rezki, SP., MP
Dosen Pembimbing II : Dr. Zahlul Ikhsan, SP., MP

FAKULTAS PERTANIAN
UNIVERSITAS ANDALAS
DHARMASRAYA
2025

STATUS KESUBURAN TANAH INCEPTISOL DI NAGARI BATU PAYUANG KECAMATAN LAREH SAGO HALABAN KABUPATEN LIMA PULUH KOTA

Abstrak

Produktivitas perkebunan yang rendah di Kecamatan Lareh Sago Halaban, khususnya Nagari Batu Payuang, dipicu oleh kesuburan tanah Inceptisol yang kurang optimal dan penyusutan luas lahan. Hal ini bisa mengancam pasokan produk seperti bubuk kakao, lateks, dan minyak kelapa untuk pasar domestik maupun ekspor. Kendala utama meliputi sifat kimia tanah dan proses erosi pada topografi berlereng, meskipun Inceptisol berpotensi dikembangkan dengan pengelolaan lahan yang sesuai. Penelitian ini bertujuan untuk mengidentifikasi status kesuburan Inceptisol di Nagari Batu Payuang dan menentukan rekomendasi pengelolaan lahan yang sesuai berdasarkan dari hasil status kesuburan Inceptisol. Penelitian ini dilakukan pada bulan Oktober 2024 hingga April 2025, berlokasi di Nagari Batu Payuang, Kecamatan Lareh Sago Halaban, Kabupaten Lima Puluh Kota. Metode yang digunakan yaitu survei dengan pengambilan sampel tanah secara *purposive sampling*. Analisis sampel tanah dilakukan di Laboratorium Kimia Tanah Departemen Ilmu tanah dan Laboratorium Tanah Departemen Budidaya Tanaman Perkebunan, Fakultas Pertanian Universitas Andalas. Sampel tanah diambil dari 3 kelerengan lahan (datar, landai, dan agak curam) dengan total 9 titik sampel. Parameter yang dianalisis di laboratorium meliputi pH, KTK, KB, C-organik, P_2O5, K_2O. Hasil penelitian menunjukkan bahwa kesuburan tanah pada lahan datar, landai, dan agak curam berstatus rendah. Hal ini dikarenakan pada setiap lahan didominasi oleh KTK yang rendah dan parameter lain (KB, P_2O5, K_2O dan C-organik) memiliki kriteria yang beragam dari sedang sampai tinggi. Kesuburan tanah yang rendah dapat ditingkatkan dengan cara pengapuran, pemupukan, pemanfaatan mikroorganisme yang menguntungkan, penanaman tanaman penutup tanah, pembuatan teras dan drainase.

Kata kunci: Bahan organik, Inceptisol, Kelerengan, Pengolahan lahan, Status hara tanah

SOIL FERTILITY STATUS OF INCEPTISOLS IN BATU PAYUANG VILLAGE LAREH SAGO HALABAN DISTRICT LIMA PULUH KOTA REGENCY

Abstract

Low plantation productivity in Lareh Sago Halaban District, particularly in Batu Payuang Village, is driven by suboptimal fertility of Inceptisol soils and a reduction in cultivated land area. This condition threatens the supply of commodities such as cocoa powder, latex, and coconut oil for both domestic and export markets. The main constraints include the chemical properties of the soil and erosion processes on sloping topography, although Inceptisols still have development potential if managed appropriately. This study aims to identify the fertility status of Inceptisols in Batu Payuang Village and to determine suitable land management recommendations based on the fertility status results. The research was conducted from October 2024 to April 2025 in Batu Payuang Village, Lareh Sago Halaban District, Lima Puluh Kota Regency. The method used was a survey with purposive soil sampling. Soil sample analysis was carried out at the Soil Chemistry Laboratory Department of Soil Science and the Soil Laboratory Department of Plantation Crop Cultivation, Faculty of Agriculture Andalas University. Soil samples were taken from three slope classes (flat, gentle, and moderately steep) with a total of nine sampling points. The parameters analyzed in the laboratory included pH, cation exchange capacity (CEC), base saturation (BS), organic C, P_2O_5, and K_2O. The results showed that soil fertility status in flat, gentle, and moderately steep lands was low. This was mainly due to low CEC values, while other parameters (BS, P_2O_5, K_2O, and organic C) varied from medium to high. Low soil fertility can be improved through liming, balanced fertilization, the application of beneficial microorganisms, planting cover crops, constructing terraces, and providing proper drainage systems.

Keywords: Inceptisol, Land management, Organic matter, Slope, Soil nutrient status