INTISARI

Penelitian ini membahas tentang karakteristik tanah dari konversi lahan yang semula perkebunan karet menjadi perkebunan kelapa sawit yang dilakukan oleh masyarakat lokal di Kenegerian Kari Kecamatan Kuantan Tengah Kabupaten Kuantan Singingi. Tujuan dari penelitian yaitu untuk mengetahui perbedaan karakteristik pada tanah setelah terjadi konversi lahan. Penelitian dilaksanakan dengan berbagai tahapan dimulai dengan pengamatan tanah dan pengambilan sampel tanah dan dilakukan analisis di Laboratorium Fisika Tanah, Kimia Tanah Umum, dan Kesuburan Tanah Fakultas Pertanian Universitas Gadjah Mada serta Laboratorium BPTP Jawa Tengah. Tanah diambil pada kedalaman yang berbeda yaitu 0-5 cm, 5-10 cm, 10-15 cm, 15-20 cm, 20-25 cm, dan 25-30 cm. Parameter yang dianalisis berupa warna tanah, struktur tanah, berat volume tanah, berat jenis tanah, porositas, bahan organik, N-total, P-tersedia, C-Organik, rasio C/N, KPK, kejenuhan basa, Ca, Mg, K, Na, reaksi tanah (pH aktual dan pH potensial), C-POM, C-BMT, C-larut air, Al-dd, dan H-dd. Hasil penelitian menunjukkan bahwa terdapat perbedaan pada beberapa parameter setelah terjadi konversi lahan dari perkebunan karet menjadi perkebunan kelapa sawit. Tanah dibawah tegakan karet memiliki nilai yang lebih tinggi pada pengamatan rasio C/N, K, Na, KPK, kejenuhan basa, C-POM, C-BMT, C-larut air, Al-dd, dan H-dd, sedangkan tanah dibawah tegakan kelapa sawit memiliki nilai yang lebih tinggi pada pengamatan berat volume, berat jenis, porositas, bahan organik/C-organik, N-total, P-tersedia, Ca. Tanah dibawah tegakan karet lebih masam dibandingkan tanah dibawah tegakan kelapa sawit. Terdapat nilai yang semakin meningkat seiring bertambahnya kedalaman tanah yaitu pada parameter BV, BJ, dan rasio C/N. Terdapat nilai yang semakin menurun seiring bertambahnya kedalaman tanah yaitu pada parameter bahan organik/C-organik, N-total, P-tersedia, K, Ca, Mg, kejenuhan basa, C-POM, Al-dd. Terdapat nilai yang berfluktuasi yaitu pada parameter Na, C-BMT, C-larut air,dan H-dd. Adapun reaksi tanah (pH aktual dan pH potensial) terjadi peningkatan pH seiring bertambahnya kedalaman tanah kecuali pH potensial pada tanah dibawah tegakan kelapa sawit yang semakin menurun seiring bertambahnya kedalaman tanah.

Kata Kunci: Karet, Kelapa Sawit, Karakteristik Tanah.

ABSTRACT

This study discusses the soil characteristics of land conversion from rubber to oil palm plantations carried out by local communities in Kenegerian Kari, Kuantan Tengah District, Kuantan Singingi Regency. The purpose of the study was to determine the differences in the characteristics after land conversion. The research was carried out in various stages starting with soil observations and soil sampling and analysis was carried out at the Laboratory of Soil Physics, General Soil Chemistry, and Soil Fertility, Faculty of Agriculture, Universitas Gadjah Mada and Assessment Institute for Agriculture Technology in Central Java. Soil was taken at different depths, 0-5 cm, 5-10 cm, 10-15 cm, 15-20 cm, 20-25 cm, and 25-30 cm. Soil is taken at different depths. Parameters analyzed were soil color, soil structure, bulk density, particle density, porosity, organic matter, total-N, available P, organic-C, C/N ratio, cation exchange capacity, base saturation, Ca, Mg, K , Na, soil reaction (actual pH and potential pH), particulate organic carbon (POC), microbial biomass carbon (MBC), water exchange organic carbon (WEOC), exchangeable Al, and exchangeable H of soil. The result showed there were differences in several parameters after land conversion from rubber to oil palm plantations. Soil under rubber plantations has a higher value in the observed ratios of C/N, K, Na, CEC, base saturation, POC, MBC, WEOC, exchangeable Al and H while the soil under oil palm tree has a higher value on the observations of bulk density, particle density, porosity, organic matter/C-organic, N-total, P-available, Ca. Soil under rubber plantation is more acidic than soil under oil palm plantations. There are values that increase with increasing soil depth, namely the parameters bulk density, particle density, and C/N ratio. There are values that increase with increasing soil depth, namely the parameters of organic/C-organic matter, N-total, P-available, K, Ca, Mg, base saturation, C-POM, exchangeable Al of soil. There are values that fluctuate, namely the parameters Na, soil microbial biomass carbon, water soluble carbon, and exchangeable H. The soil reaction (actual pH and potential pH) was an increase in pH with increasing soil depth, except for the potential for pH in the soil under oil palm tree which increased with increasing soil depth.

Keyword: Rubber Plantations, Oil Palm Plantations, Soil Characteristics.