

**PENGARUH BEBERAPA TIPE PENGGUNAAN LAHAN TERHADAP
STOK KARBON ORGANIK TANAH DI NAGARI DUKU
KECAMATAN KOTO XI TARUSAN**

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ABSTRAK

Penelitian ini bertujuan untuk menghitung dan memetakan sebaran stok karbon organik tanah pada beberapa tipe penggunaan lahan di Nagari Duku Kecamatan Koto XI Tarusan Kabupaten Pesisir Selatan. Penelitian ini telah dilaksanakan pada bulan Januari 2020 sampai Juli 2020, dilaksanakan di Nagari Duku Kecamatan Koto XI Tarusan Kabupaten Pesisir Selatan dan di Laboratorium Jurusan Tanah, Fakultas Pertanian, Universitas Andalas, Padang. Metoda yang digunakan dalam penelitian ini adalah metoda survei. Ada empat tipe penggunaan lahan di lokasi penelitian, yaitu sawah, pertanian lahan kering, semak belukar dan hutan sekunder. Sampel tanah diambil pada tiap tipe penggunaan lahan dengan kelerengan dan jenis tanah yang sama secara acak berdasarkan luasan polygon. Hasil penelitian menunjukkan stok karbon organik tertinggi terdapat pada penggunaan lahan hutan sekunder berkisar 128.82 – 294.09 ton/ha. Penggunaan lahan sawah berkisar 16.99 – 227.14 ton/ha, pertanian lahan kering berkisar 10.40 – 65.43 ton/ha, serta penggunaan lahan semak belukar 13.39 – 53.19 ton/ha. Hasil pemetaan sebaran karbon menunjukkan bahwa 17% wilayah penelitian memiliki stok karbon <50 ton/ha, 39% memiliki stok karbon organik 50 – 100 ton/ha, 32% memiliki stok karbon organik 100 – 150 ton/ha, 10,5% memiliki stok karbon organik 150 – 200 ton/ha, 1% memiliki stok karbon organik 200 – 250 ton/ha, 0,5% memiliki stok karbon organik 250 – 300 ton/ha.

Kata kunci : Stok Karbon Organik , Sawah, Semak Belukar, Pertanian lahan kering, Hutan sekunder

EFFECT OF SOME TYPES OF LAND USE ON SOIL ORGANIC CARBON STOCK IN DUKU, KOTO XI TARUSAN DISTRICT

ABSTRACT

This study was aimed to calculate and map the distribution of soil organic carbon stock in several types of land use in Duku, Koto XI Tarusan District, Pesisir Selatan Regency. This research was conducted from January 2020 to July 2020 in Duku, Koto XI Tarusan District, Pesisir Selatan Regency and Soil Laboratory, Faculty of Agriculture, Andalas University, Padang. The method used in this research was survey method. There were four types of land use in the research site, those were paddy field, dryland agriculture, bush, and secondary forest. Soil samples were taken at each land use type with the same slope and soil type, randomly based on the polygon area. The results showed that the highest organic carbon stock was found in secondary forest ranging from 128.82 - 294.09 ton/ha, paddy field from 16.99 - 227.14 ton/ha, dry land agriculture from 10.40 - 65.43 ton/ha, and bush from 13.39 - 53.19 ton/ha. The organic carbon stock distribution in the research site showed that 17% was <50 ton/ ha, 39% was 50-100 ton/ha, 32% was 100-150 ton/ha, 10.5% was 150-200 ton/ha, 1% was 200-250 ton/ha, and 0.5% was 250-300 ton/ha.

Key words: *Organic Carbon Stock, Paddy Field, Bush, Dryland Agriculture, SecondaryForest*



