KAJIAN SIFAT KIMIA TANAH PADA BEBERAPA PENGGUNAAN LAHAN DI NAGARI SUNGAI ROTAN KECAMATAN PARIAMAN TIMUR

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ABSTRAK

Sifat kimia tanah merupakan salah satu penentu kualitas tanah. Faktor yang mempengaruhi sifat kimia tanah salah satunya yaitu penggunaan lahan. Penelitian ini bertujuan mengkaji sifat kimia tanah pada beberapa penggunaan lahan di Nagari Sungai Rotan Kecamatan Pariaman Timur. Pengambilan sampel dilakukan secara *purposive sampling* berdasarkan jenis penggunaan lahan (cabai rawit, jagung, pepaya, dan semak belukar) pada kedalaman 0-30 cm. parameter yang dianalisis yaitu pH tanah, C-organik, N-total, P-tersedia, K-dd, dan kapasitas tukar kation (KTK). Hasil analisis sifat kimia tanah pada berbagai penggunaan lahan memiliki nilai pH sebesar 4,77-5.16, C-organik sebesar 1,28-2.63%, N-total sebesar 0,23-0.35%, P-tersedia sebesar 3,05-4.79 ppm, K-dd sebesar 0,23-0.54 me/100g, dan KTK sebesar 17,8-26,6 cmol/kg. Lahan cabai rawit secara umum memiliki sifat kimia tanah yang lebih baik dibandingkan lahan jagung, pepaya, dan semak belukar. Dimana lahan cabai rawit memiliki nilai pH sebesar 5.16, C-organik sebesar 2.63%, N-total sebesar 0.35%, P-tersedia sebesar 4.79 ppm, K-dd sebesar 0.54 me/100g, dan KTK sebesar 26,6 cmol/kg. Berdasarkan hasil penelitian, disarankan kepada petani agar meningkatkan kandungan bahan organik seperti pupuk kandang, kompos, dan sisa tanaman sebagai upaya memperbaiki sifat kimia tanah. Selain itu, petani juga perlu menerapkan pemupukan yang berimbang antara pupuk organik dan anorganik sesuai dengan kebutuhan tanaman.

Kata kunci : *Cabai Rawit, Sifat Kimia, Penggunaan Lahan, Sungai Rotan*

STUDY ON SOIL CHEMICAL PROPERTIES AT SOME TYPES OF LAND USE IN SUNGAI ROTAN, PARIAMAN TIMUR

ABSTRACT

Soil chemical properties are one of the determinants for soil quality. One factor influencing soil chemical properties is type of land use. This study was aimed to assess soil chemical properties in 4 types of land use in Sungai Rotan, Pariaman Timur. This research employed survey method, and soil sampling was conducted using purposive sampling based on land use type (cayenne pepper, corn, papaya, and shrubs) at 0-30 cm depth. The parameters analyzed were soil pH, organic-C, total N, available P, K-exchangeable, and cation exchange capacity (CEC). The data resulted showed that the soil pH value was 4.775.16, organic-C was 1.28-2.63%, total N was 0.23-0.35%, available P was 3.05-4.79 ppm, K-exchangeable was 0.23-0.54 cmol/kg, and CEC was 17.8-26.6 cmol/kg. Overall, the soil chemical properties of soil under cayenne chili were better than those under corn, papaya, and shrub lands. The characteristics of soil under chili cultivation was as folllows: the soil pH was 5.16, organic-C was 2.63%, total-N was 0.35%, available P was 4.79 ppm, K-exch. was 0.54 cmol/kg, and CEC was 26.6 cmol/kg. Based on the research results, farmers were advised to increase the soil organic matter content throughapplying manure, compost, and crop residues to improve soil chemical properties. Furthermore, farmers should apply a balanced fertilization between organic and inorganic fertilizers as plant needs.

Keywords: Chemical Properties, Chili Pepper, Land Use, Sungai Rotan