KAJIAN SIFAT KIMIA TANAH PADA BEBERAPA UMUR PENGELOLAAN LAHAN TANAMAN KENTANG (*Solanum tuberosum*) DI KENAGARIAN KAMPUANG BATU DALAM KABUPATEN SOLOK

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STUDY ON SOIL CHEMICAL PROPERTIES AT SEVERAL AGES OF POTATO (Solanum tuberosum) LAND MANAGEMENT IN KAMPUNG BATU, SOLOK DISTRICT

Abstract

A research on the chemical properties of soil at different ages of potato plants *(Solanum tuberosum)* was conducted in Kenagarian Kampung Batu Dalam Danau Kembar District Solok Regency from February to December 2022. This study was aimed to assess the chemical properties of soil at different ages of potato land management. The research was conducted using the survey method. Soil samples were collected through purposive sampling based on three land management ages of potato plants (<1 year, 5-7 years, >10 years) and mixed garden having of 0-8% slope at 0-30 cm and 30-60 cm soil deph as a comparison. The chemical properties of the soil (pH, organic-C, total-N, P-available, CEC, available sulfate, and basic cations) were analyzed at the Soil Chemistry Laboratory Faculty of Agriculture Andalas University. The research results showed that the chemical characteristics of the soil tended to increase with the age of potato land management. The pH value increased from 5.43 to 5.69, and 5.89, organic-C from 2.06 to 5.59, and 6.90%, total-N from 0.29 to 0.54, and 0.62%, P-available from 6.10 to 6.22, and 8.07 ppm, CEC from 16.75 to 27.17, and 38.57 cmol/kg, available sulfate from 133.97 to 134.62, and 152.07 ppm, Ca-exchangeable from 2.14 to 3.61, and 7.88 cmol/kg, Mg-exchangeable from 1.27 to 1.91, and 2.05 cmol/kg, K-exchangeable from 0.71 to 0.67, and 1.08 cmol/kg, and Na-exchangeable from 0.32 to 0.59, and 0.87 cmol/kg.

Keywords *: Potato, Kampung Batu Dalam Village, Soil Chemical Properties, age of land management*