

INTISARI

Penelitian ini bertujuan untuk menganalisis dan mengetahui perbedaan sifat fisika dan sifat kimia tanah pada penggunaan lahan yang berbeda di Sitimulyo, Piyungan, Bantul. Metode penentuan titik sampel yang digunakan yaitu *purposive sampling* yaitu dengan cara mengambil beberapa titik yang dianggap mampu mewakili suatu kondisi. Sampel tanah diambil hingga kedalaman 180 cm. Metode analisis data yang digunakan yaitu dengan uji t serta uji korelasi untuk mengetahui perbedaan serta korelasi nilai antar lapisan tanah. Hasil yang didapatkan berupa nilai berat volume, berat jenis, porositas tanah, tekstur tanah, struktur tanah, sebaran pori, pH tanah, bahan organik, kapasitas pertukaran kation, serta kejenuhan basa. Tipe penggunaan lahan pertanian dominan di Desa Sitimulyo yaitu sawah dan tegalan. Hasil penelitian menunjukkan semua parameter menunjukkan nilai yang berbeda antara sawah dan tegalan, namun berdasarkan uji t yang dilakukan, hanya pada parameter berat volume, porositas tanah, pori drainase cepat, pori air tersedia, dan bahan organik yang berbeda secara signifikan.

Kata kunci: sifat fisika tanah, sifat kimia tanah, penggunaan lahan

ABSTRACT

The aims of this research are to analyze and determine differences in the physical and chemical properties of soil at different land uses in Sitimulyo, Piyungan, Bantul. The method of determining the sample points used is purposive sampling by taking several points that are considered capable of representing a condition. Soil samples were taken to a depth of 180 cm. The data analysis method used is the t-test and correlation test to determine the difference and correlation of values between soil layers. The result obtained are the values of ball density, particle density, soil porosity, soil texture, soil structure, pore distribution, soil pH, organik matter, cation exchange capacity, and base saturation. The dominant types of agricultural land ue in Sitimulyo Village are rice fields and moorland. The results ahowed that all parameters showed different values between rice fields and moorderland, but based on the t-test conducted, only the parameters of ball density, soil porosity, fast drainage pores, available water pores, and organic mater were significantly different.

Keywords: *soil physical properties, soil chemical properties, land use*