INTISARI

Penelitian ini dilaksanakan untuk mengkaji karakteristik tanah yang telah disawahkan di daerah muara Sungai Opak bagian barat, Bantul, Daerah Istimewa Yogyakarta serta mengamati karakteristik fisika dan kimia tanah yang dipengaruhi oleh endapan muda (aluvium) Sungai Opak dan pengaruh dari perpindahan material pasir Pantai Baros. Tujuan penelitian ini adalah untuk mengidentifikasi karakteristik fisika dan kimia tanah, serta mengklasifikasikan jenis tanah berdasarkan klasifikasi USDA, FAO, dan PPT Bogor. Penelitian dilakukan dengan cara pengamatan lapangan serta analisis laboratorium. Penelitian dilaksanakan pada 6 titik lokasi (AL1–AL6), yang merupakan lahan pertanian yang ditanami komoditas padi sawah. Parameter penelitian yang dianalisis meliputi tekstur, berat volume, berat jenis, porositas, kadar lengas, pH aktual, pH potensial, daya hantar listrik, dan bahan organik tanah. Hasil penelitian menunjukkan bahwa nilai C-organik rendah, sebaran partikel tanah didominasi oleh partikel pasir baik halus maupun kasar, pH tanah sangat masam-agak alkalis, porositas tinggi, dan daya hantar listrik yang rendah. Klasifikasi tanah menurut soil taxonomy pada keenam titik pengamatan masuk pada subgrup humaqueptic psammaquents (AL4) dan aquandic humaquepts (AL1, AL2, AL3, AL5, dan AL6). Klasifikasi FAO (AL-AL6) masuk pada anofluvic fluvisol (geobruptic). Klasifikasi PPT Bogor masuk pada aluvial sulfik (AL1 dan AL3), alluvial gleik (AL2, AL4, dan AL5), dan alluvial hidrik (AL6).

Kata Kunci : aluvial, endapan sungai, genesis tanah, tanah sawah, Bantul.

ABSTRACT

This research was conducted to examine the characteristics of soil that had been tilled in the estuary area of the western Opak River, Bantul, Special Region of Yogyakarta and to observe the physical and chemical characteristics of the soil which were influenced by young sediment (alluvium) of the Opak River and the influence of the movement of sand material of Baros Beach. The purpose of this study was to identify the physical and chemical characteristics of the soil, and to classify soil types based on the classification of USDA, FAO, and PPT Bogor. The research was conducted by field observation and laboratory analysis. The research was conducted at 6 location points (AL1–AL6), which are agricultural land planted with rice paddy commodities. The research parameters analyzed included texture, volume density, bulk density, porosity, soil moisture, actual pH, potential pH, electrical conductivity, and soil organic matter. This study indicated that the C-organic and EC value were low while the soil pH was strongly acid to moderately alkaline and the soil particle distribution was dominated by fine or coarse sand with high porosity. Soil classification according to soil taxonomy at the six observation points in the subgroup of humaqueptic psammaquents (AL4) and aquandic humaquepts (AL1, AL2, AL3, AL5, and AL6). According to FAO classification systems (AL1-AL6) this soil is classified to anofluvic fluvisol (geobruptic). In addition, following to PPT Bogor classification systems, it is classified to alluvial sulfic (AL1 and AL3), alluvial gleik (AL2, AL4, and AL5), and alluvial hydric (AL6).

Keywords : alluvial, paddy soil, river sediment, soil genesis, Bantul.