

# **Indeks Kualitas Tanah pada Berbagai Penggunaan Lahan dan Kemiringan Lereng di Desa Mertelu, Kecamatan Gedangsari, Kabupaten Gunungkidul, Yogyakarta**

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## **ABSTRAK**

Tanah sangat berperan penting dalam kehidupan semua makhluk hidup. Tanah dapat mengalami degradasi ditandai dengan kualitas tanah menurun dan tidak optimalnya fungsi tanah. Penelitian ini bertujuan untuk menganalisis karakteristik dan kualitas tanah pada beberapa macam penggunaan lahan dengan berbagai kemiringan lereng di Desa Mertelu, Kecamatan Gedangsari, Kabupaten Gunungkidul, Daerah Istimewa Yogyakarta. Metode yang digunakan adalah metode survey dengan pengambilan sampel tanah secara purposif. Sampel tanah diambil berdasarkan peta satuan lahan dan diambil dari lapisan olah setiap lokasi. Sifat tanah yang diamati yaitu tekstur tanah, berat volume, berat jenis, porositas, pH H<sub>2</sub>O, C organik, N total, N tersedia, K tersedia dan P tersedia. Analisis data yang dilakukan yaitu analisis kualitas tanah dengan identifikasi secara kuantitatif. Hasil penelitian menunjukkan bahwa indeks kualitas tanah tertinggi pada lahan semak belukar kemiringan lereng curam dan diikuti lahan kebun kemiringan curam dengan kriteria kualitas tanah sedang, serta terendah pada lahan tegalan kemiringan lereng curam dengan kriteria kualitas tanah rendah. Perbedaan sifat-sifat tanah di Desa Mertelu dipengaruhi oleh perbedaan penggunaan lahan dan kemiringan lereng.

Kata Kunci: Indeks Kualitas Tanah, Penggunaan Lahan, Kemiringan Lereng.

**Soil Quality Index on Various Land Use and Land Slope in Mertelu Village,  
Sub-District Gedangsari, District Gunungkidul, Special Region of  
Yogyakarta**

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**ABSTRACT**

Soil has important roles for every creatures. Soil could get degraded as indicated by the decreasing of soil quality and its non optimal function. This research was aimed to analyze the characteristic and soil quality on various land uses with various land slopes in Mertelu Village, Gedangsari, Gunungkidul, Yogyakarta. Survey method and purposive sampling were used in this research. Sampling was done based on land unit system and obtained from every location's tabulate layer. Soil properties that was observed are soil texture, particle density, bulk density, porosity, pH H<sub>2</sub>O, C organic, N total, N-available, K-available, and P-available. Data analysis were done using soil quality analysis with quantitatively identification. The result of this research showed that the highest score of soil quality was found on shrubbery land, with steep land slope followed by farm land with steep slope, also the lowest score was found on moor land with steep land slope. The variation of soil properties in Mertelu Village is affected by the difference of land use and land slope.

Key words : Soil Quality Index, Land Use, Land Slope