

EVALUASI STATUS KESUBURAN KIMIA TANAH DI KALURAHAN PACAREJO, SEMANU, GUNUNGKIDUL

Oleh: Ni Nyoman Pande Satya Prema Nandini
Dibimbing oleh: Lelanti Peniwiratri

ABSTRAK

Wilayah Kalurahan Pacarejo Kapanewon Semanu Kabupaten Gunung Kidul memiliki dua jenis tanah yaitu Tanah Mediteran dan Tanah Latosol dengan berbagai kemiringan lereng datar hingga sangat curam dengan penggunaan lahan yang berbeda seperti hutan, tegalan, dan sawah tadah hujan yang berdampak pada status kesuburan kimia tanah. Penelitian ini bertujuan mengidentifikasi karakteristik sifat kimia tanah, mengetahui status kesuburan, dan membuat peta status kesuburan kimia tanah di Pacarejo. Metode yang digunakan yaitu metode deskriptif kuantitatif. Penelitian dilakukan pada bulan Maret sampai Mei 2025. Penilaian status kesuburan tanah berdasarkan petunjuk Teknis Kesuburan Tanah PPT 1995. Penentuan sampel tanah yang dilakukan secara *purposive sampling* berdasarkan hasil *overlay* peta kemiringan lereng, peta penggunaan lahan dan peta jenis tanah didapatkan 12 titik sampel, pengambilan sampel menggunakan cara komposit. Hasil penelitian menunjukkan bahwa nilai pH tanah berkisar antara 6,32–7,60 dengan rata-rata tergolong netral hingga agak basa. Kandungan C-organik sebagian besar tergolong rendah hingga sedang. Status KTK umumnya rendah hingga sedang, sementara kejenuhan basa bervariasi dari rendah hingga tinggi. Kandungan N-total tergolong rendah, sedangkan P_2O_5 dan K_2O memiliki keragaman dari sangat rendah hingga tinggi. Peta Status Kesuburan Kimia Tanah disajikan dengan skala 1:35.000. menunjukkan sebaran status kesuburan kimia tanah yaitu 58,33% berstatus rendah dan 41,67% berstatus sedang dari luasan lahan sebesar 1.971 ha.

Kata Kunci: Status Kesuburan Tanah, Kimia Tanah, Pacarejo

EVALUATION OF SOIL CHEMICAL FERTILITY STATUS IN PACAREJO VILLAGE, SEMANU DISTRICT, GUNUNGKIDUL REGENCY

By: Ni Nyoman Pande Satya Prema Nandini

Supervised: Lelanti Peniwiratri

ABSTRACT

The Pacarejo Village area in Semanu District, Gunung Kidul Regency contains two soil types: Mediterranean soil and Latosol soil with various slope gradients ranging from flat to very steep terrain. Different land uses including forest, dryland, and rainfed rice fields affect the chemical fertility status of the soil. This research aims to identify the characteristics of soil chemical properties, determine fertility status, and create a soil chemical fertility status map for Pacarejo. The method employed was descriptive quantitative analysis. The research was conducted from March to May 2025. Soil fertility status assessment was based on the Technical Guidelines for Soil Fertility PPT 1995. Soil sample determination was conducted through purposive sampling based on overlay results of slope gradient maps, land use maps, and soil type maps, yielding 12 sampling points. Sample collection was performed using composite sampling methods. The research results indicate that soil pH values ranged from 6.32–7.60 with an average classification of neutral to slightly alkaline. Organic carbon content was predominantly classified as low to moderate. Cation exchange capacity (CEC) status was generally low to moderate, while base saturation varied from low to high. Total nitrogen content was classified as low, whereas P_2O_5 and K_2O showed variation from very low to high levels. The Soil Chemical Fertility Status Map was presented at a scale of 1:35,000, showing the distribution of soil chemical fertility status with 58.33% classified as low status and 41.67% as moderate status across a total land area of 1,971 hectares.

Keywords: *Soil Fertility Evaluation, Soil Chemistry, Pacarejo*