EVALUASI STATUS KESUBURAN KIMIA TANAH PADA LAHAN TEGALAN DI DESA TLOGOLELE KECAMATAN SELO KABUPATEN BOYOLALI

Oleh : Anjelina Theresia Br Simbolon
Dibimbing Oleh : Dyah Arbiwati

ABSTRAK

Desa Tlogolele Kecamatan Selo Kabupaten Boyolali berada pada ketinggian 1200 mdpl, dengan kemiringan lereng rata-rata mencapai 54,3% dan didominasi penggunaan lahan tegalan. Penelitian ini bertujuan untuk mengetahui status kesuburan kimia tanah pada lahan tegalan di Desa Tlogolele. Penelitian dilakukan pada bulan Juli hingga Oktober 2024 menggunakan metode *survey* dan uji tanah. Penentuan lokasi penelitian secara *purposive sampling* pada lahan tegalan yang digunakan untuk budidaya sayuran dan tembakau. Titik sampel diperoleh berdasarkan hasil *overlay* peta jenis tanah, peta kemiringan lereng dan peta penggunaan lahan tegalan, menghasilkan 6 (enam) sistem lahan, masing-masing sistem lahan diwakili oleh 2 (dua) titik sampel menghasilkan 12 (dua belas) titik sampel. Penentuan status kesuburan tanah berdasarkan petunjuk teknis evaluasi kesuburan tanah Pusat Penelitian Tanah (1995). Hasil analisis sifat kimia tanah pada tanah Entisol, memiliki pH Agak masam. Nilai C-organik 0,82-2,12 (sangat rendah sampai sedang). Kandungan N-Total 0,04-0,700% (sangat rendah sampai tinggi). Kandungan P_2O_5 10,06-25,96 me/100 mg (rendah sampai sedang). Kandungan K_2O 2,75-19,42 mg/100g (sangat rendah sampai rendah). KPK 3,71-7,95 cmol (+) kg-1 (sangat rendah sampai rendah). KB 21,06-42,79% (rendah sampai sedang). Berdasarkan hasil analisis sifat kimia tanah pada tanah Andisol, memiliki pH Agak masam sampai netral. Nilai C-organik 1,03-2,79% (rendah sampai sedang). Kandungan N-Total 0,04-0,82% (sangat rendah sampai tinggi). Kandungan P_2O_5 9,99-15,19 me/100mg (rendah sampai rendah). Kandungan K_2O 3,32-19,42 mg/100g (sangat rendah sampai rendah). KPK 2,26-5,47 cmol (+) kg -1 (sangat rendah sampai rendah). KB 20,86-43,58% (rendah sampai sedang). Hasil penelitian status kesuburan kimia tanah di Desa Tlogolele, ditemukan dua kelas kesuburan tanah, yaitu sangat rendah dan rendah, dengan rincian luas lahan: tanah Andisol dengan kesuburan sangat rendah seluas 97,19 Ha (30,50%) dan kesuburan sangat rendah hingga rendah seluas 103,97 Ha (10,26%), serta tanah Entisol dengan kesuburan sangat rendah seluas 32,71 Ha (32,63%), kesuburan sangat rendah hingga sedang seluas 17,88 Ha (5,61%), dan kesuburan rendah seluas 66,83 Ha (21,52%).

Kata Kunci**:** Desa Tlogolele, Evaluasi Kesuburan Kimia Tanah, Lahan Tegalan

EVALUATION OF SOIL CHEMICAL FERTILITY ON DRY LAND

IN TLOGOLELE VILLAGE SELO SUB DISTRICT BOYOLALI DISTRICT

By: Anjelina Theresia Br Simbolon
Supervised by: Dyah Arbiwati

ABSTRACT

Tlogolele Village, Selo District, Boyolali is located at an altitude of 1200 meters above sea level, with an average slope of 54.3% and dominated by dry land use. This study aims to determine the chemical properties of the soil and to determine the status of soil chemical fertility on dry land in Tlogolele Village. The research was conducted from July to October 2024 using survey and soil testing methods. The research location was determined using purposive sampling on moorland used for cultivating vegetables and tobacco. Sample points were obtained based on the overlay of soil type maps, slope slope maps and dry land use maps, resulting in 6 (six) land systems, each land system represented by 2 (two) sample points resulting in 12 (twelve) sample points.. Determination of soil fertility status is based on the Soil Research Center's technical guidelines for soil fertility evaluation (1995). Based on the results of the analysis of the chemical properties of the soil in Entisol soil, it has a slightly acidic pH. The C-organic value is 0.82-2.12 (very low to moderate). The N-Total content is 0.04-0.700% (very low to high). The P_2O_5 content is 10.06-25.96 me/100 mg (low to moderate). The K_2O content is 2.75-19.42 mg/100g (very low to low). The KPK is 3.71-7.95 cmol (+) kg-1 (very low to low). KB is 21.06-42.79% (low to moderate). Based on the results of the analysis of the chemical properties of the soil in Andisol soil, it has a slightly acidic to neutral pH. The C-organic value is 1.03-2.79% (low to moderate). The N-Total content is 0.04-0.82% (very low to high). P_2O_5 content 9.99-15.19 me/100mg (low to low). K_2O content 3.32-19.42 mg/100g (very low to low). KPK 2.26-5.47 cmol (+) kg -1 (very low to low). KB 20.86-43.58% (low to moderate). The results of research on the chemical fertility status of soil in Tlogolele Village, found two classes of soil fertility, namely very low and low, with details of land area: Andisol soil with very low fertility covering an area of 97.19 Ha (30.50%) and very low to low fertility covering an area of 103.97 Ha (10.26%), as well as Entisol land with very low fertility covering an area of 32.71 Ha (32.63%), very low to moderate fertility covering an area of 17.88 Ha (5.61%), and low fertility covering an area of 66.83 Ha (21.52%).

Keywords: Tlogolele Village, Evaluation of Soil Chemical Fertility, Dry Land