UNIVERSITAS
GADJAH MADA
STATUS HARA TANAH DAN SERAPAN HARA TEH DI BERBAGAI KETINGGIAN DAN KELERENGAN DI PT. PAGILARAN
MARIANTI, Dr. Ir. Rachmad Gunadi, M.Si;Nur Ainun H.J Pulungan, S.Si., M.Sc., Ph.D
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Intisari

Kelerengan dan ketinggian tempat termasuk faktor pembentuk tanah. Perbedaan kelerengan dan ketinggian tempat dapat mempengaruhi sifat tanah yang terbentuk. Penelitian ini bertujuan untuk mengetahui status hara tanah dan serapan hara teh pada kelerengan 0-8% dan 15-25% dan ketinggian yang berkisar antara 700–1100 mdpl di Perkebunan teh PT.Pagilaran sebagai upaya untuk meningkatkan produktivitas tanaman teh. Metode pengambilan sampel yang digunakan adalah metode purposive sampling. Pengambilan sampel tanah dan tanaman dilakukan sebelum pemupukan. Pengambilan sampel tanah dilakukan dengan alat bor tanah. Sifat kimia tanah yang diuji meliputi pH H_2O, pH KCl, pH NaF, kapasitas pertukaran kation, C-organik, nitrogen total, fosfor tersedia, kalium tersedia, berat volume tanah serta analisis tekstur. Analisis tanaman dilakukan dengan menggunakan jaringan daun teh. Pengambilan jaringan daun dilakukan pada daun ke-2, 3 dan 4. Parameter yang diuji adalah kadar nitrogen, kadar fosfor dan kadar kalium daun. Hasil penelitian menunjukkan tidak adanya beda nyata karakterisasi hara nitrogen, fosfor, kalium, C-organik, dan pH tanah antar kelerengan. Berdasarkan uji beda nyata antar ketinggian 700-1100 mdpl menunjukkan adanya beda nyata pada pH KCl, pH NaF, kadar lengas, bahan organik, nitrogen total tanah, C-organik dan fosfor jaringan. Berdasarkan hasil penelitian didapatkan bahwa fosfor tersedia dan kalium tersedia tanah, kadar nitrogen dan fosfor daun pada peneitian ini termasuk dalam harkat sangat rendah, nitrogen total tanah dan kadar kalium daun termasuk dalam harkat sedang hingga tinggi.

Kata kunci : Andisol, ketinggian tempat, sifat kimia tanah, kelerengan, tanaman teh

UNIVERSITAS
GADJAH MADA
STATUS HARA TANAH DAN SERAPAN HARA TEH DI BERBAGAI KETINGGIAN DAN KELERENGAN DI PT. PAGILARAN
MARIANTI, Dr. Ir. Rachmad Gunadi, M.Si;Nur Ainun H.J Pulungan, S.Si., M.Sc., Ph.D
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Abstract

Slope and elevation is one of the soil forming factor. The differences in slope and elevation could affect the soil properties. The objective of this experiment is to find out the characterization of soil chemical properties on 0-8% and 15-25% slopes and elevation that ranges from 700-1100 masl in PT. Pagilaran as an effort to increase the tea productivity. Purposive sampling method was used in this experiment. Soil sample and plant tissue was taken before fertilization. Soil sample was taken by soil drill. Soil chemical properties including, pH H_2O, pH KCl, pH Naf, cation exchange capacity, total organic carbon, total nitrogen, availabe phosphor, available potassium, soil bulk density and soil texture. Plant analysis was conducted using leaf tissue. Leaf tissue was taken from leaf number 2, 3 and 4. Parameters analysed including, nitrogen concentration, phosphor concentration and potassium concentration. Result of this experiment showed that there were no significant differences in nitrogen, potassium and kalium nutrient characterization, organic carbon and soil pH between slopes. Different elevation showing significant differences on soil pH KCl, pH NaF, moisture content, organic matter, total nitrogen in soil, organic carbon, and phosphor in plant tissue. Based on this experiment, we found that available phosphor, and available potassium in soil, nitrogen and phosphor concentration in soil, was classified as very low, total nitrogen in soil and potassium concentration in leaf was classified as moderate to high.

Key words : Andisol, elevation, soil chemical properties, slope, tea plant