

**KARAKTERISTIK KIMIAWI BATU GAMPING, TANAH ZONA
PERAKARAN DAN TANAH REVEGETASI AREA PERTAMBANGAN
KALSIT PT. SUGIH ALAMANUGROHO KALURAHAN BEDOYO,
GUNUNGKIDUL**

Oleh: Sri Anggun Pratiwi
Dibimbing oleh: Miseri Roeslan Afany

ABSTRAK

PT. Sugih Alamanugroho merupakan Perusahaan Pertambangan yang bergerak dalam bidang penambangan batu gamping. Penelitian ini bertujuan untuk mengetahui yang menjadi faktor penentu pertumbuhan tanaman tahunan berhubungan dengan kimia tanah dan mengetahui karakterisasi sifat kimia dari tanah revegetasi di area pertambangan PT. Sugih Alamanugroho Kalurahan Bedoyo, Gunung Kidul. Metode yang digunakan penelitian ini yaitu metode *survey*, Pengambilan sampel dari hasil overlay peta sehingga mendapatkan 5 titik yaitu TS 1 tanah revegetasi tanaman jati, TS 2 tanah revegetasi tanaman sengon mahoni akasia, TS 3 tanah zona perakaran baru, TS 4 tanah zona perakaran lama lokasi pertambangan, dan TS 5 batu gamping. Parameter yang diamati analisis kimia tanah yaitu Bahan Organik, pH, N tersedia, P tersedia, K tersedia, Ca, dan Mg dan analisis batu gamping pH, N Total, P Total, K Total, Ca total dan Mg Total. Karakteristik kimia tanahnya dinilai sesuai dengan harkatnya. Batu gamping memiliki unsur hara yang lengkap dengan status keheraan sangat rendah hingga tinggi, harkat tinggi terdapat pada unsur Ca total batu gamping. Tanah zona perakaran status keheraannya sedang sampai tinggi dan memiliki faktor pembatas Bahan Organik, N tersedia, K tersedia pada tanah. Tanah revegetasi status keheraan rendah sampai tinggi dan memiliki faktor pembatas N tersedia, K tersedia. Batu gamping yang memiliki unsur hara yang cukup lengkap sehingga berperan sebagai media tumbuh pada revegetasi walaupun solum tanah relatif tipis. Tanah zona perakaran secara keheraan mencukupi namun perlu adanya bantuan pemupukan ketika berada di lahan revegetasi berupa pupuk kandang. Tanah revegetasi hasil menunjukkan status hara rendah pada Bahan organik, K tersedia sehingga hara ini perlu masukan dari luar agar statusnya optimum bagi pertumbuhan. Melakukan perbaikan pengelolaan lahan secara maksimal dengan perencanaan jenis tanaman dan melakukan peningkatan unsur hara yang kurang optimal pada kegiatan rekvegetasi yang mendatang.

Kata Kunci: Batu Gamping, Tanah Zona Perakaran, Tanah revegetasi, Kimia tanah

CHEMICAL CHARACTERISTICS OF LIMESTONE, ROOT ZONE SOIL AND REVEGETATION SOIL OF CALCITE MINING AREA PT. SUGIH ALAMANUGROHO BEDOYO VILLAGE, GUNUNGKIDUL

By: Sri Anggun Pratiwi
Guided by: Miseri Roeslan Afany

ABSTRACT

PT. Sugih Alamanugroho is a Mining Company engaged in limestone mining. This study aims to find out the determinants of perennial plant growth related to soil chemistry and to determine the characterization of chemical properties of revegetation soil in the mining area of PT. Sugih Alamanugroho Bedoyo Village, Gunung Kidul. The method used in this study is the survey method, sampling from the results of the map overlay so that 5 points are obtained, namely TS 1 soil for revegetation of teak plants, TS 2 soil for revegetation of sengon mahogany macadamia plants, TS 3 soil for new rooting zones, TS 4 soil for old rooting zones for mining sites, and TS 5 limestone. The parameters observed for soil chemical analysis were Organic Matter, pH, N available, P available, K available, Ca, and Mg and limestone analysis pH, N Total, P Total, K Total, Ca total and Mg Total. The chemical characteristics of the soil are assessed in accordance with its dignity. Limestone has complete nutrients with a very low to high nutrient status, high value is found in the total Ca element of limestone. The soil of the root zone has medium to high fertility status and has a limiting factor of Organic Matter, N available, K available on soil. Revegetation soils with low to high fertility status and have limiting factors N available, K available. Limestone has enough nutrients so that it acts as a growing medium for revegetation even though the soil solum is relatively thin. The soil in the root zone is sufficiently sufficient but needs fertilization assistance when it is in revegetation land in the form of manure. The resulting revegetation soil shows a low nutrient status in organic matter, K is available so that this nutrient needs to be input from the outside so that the status is optimal for growth. Improve land management to the maximum by planning plant types and increasing nutrients that are less than optimal in future revegetation activities.

Keywords: Gamping Stone, Root Zone Soil, Revegetation Soil, Soil Chemistry