

ANALISIS KARAKTER DEPOSIT MATERIAL DI KETIAK PELEPAH KELAPA SAWIT UMUR 11 TAHUN

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INTISARI

Pada sektor perkebunan, kelapa sawit merupakan komoditas ekspor yang berperan penting dalam pembangunan perekonomian negara. Produktivitas yang sesuai dengan standar kelas lahan kelapa sawit dapat dicapai melalui kegiatan pemeliharaan salah satunya pemupukan. Aplikasi pemupukan kelapa sawit melalui perakaran kurang efektif pada masa pertumbuhan, dikarenakan dosis, waktu, dan komposisi unsur hara yang diserap sangat tergantung kondisi lahan setempat. Dengan analogi pemupukan lewat daun maka ide pemupukan melalui ketiak pelepah kelapa sawit ini muncul. Diperkirakan deposit material di dalam ketiak pelepah akan berpengaruh pada penyerapan pupuk melalui organ tersebut. Penelitian ini bertujuan untuk menemukan dan mengetahui karakter serta kandungan deposit material di ketiak pelepah kelapa sawit pada tanaman menghasilkan 11 tahun meliputi sifat fisik, kimia, dan biologi.

Penelitian ini dilaksanakan di perkebunan kelapa sawit PT. Bumitama Gunajaya Agro Ketapang Kalimantan Barat dan Laboratorium Ilmu Tanah Universitas Mercu Buana Yogyakarta pada bulan September sampai Desember 2018. Penelitian survei ini menggunakan rancangan. Pada areal tanaman 11 tahun dibagi menjadi 3 lokasi yaitu pinggir, tengah dan dalam. Dalam tiap lokasi ditentukan 3 tanaman sampel dimana dan dalam tiap tanaman ditentukan 3 titik sampel.ketiak pelepah.

Hasil penelitian menunjukkan bahwa karakter fisik deposit material di ketiak pelepah kelapa sawit yaitu persentase kandungan material di ketiak pelepah kelapa sawit umur 11 tahun pada lokasi pinggir dengan berat total material 149 g memiliki persentase material kasar, halus, sedang, tanah (36%, 27%, 28%, 9%). Pada lokasi dalam memiliki berat total deposit 107,5 g dengan persentase material kasar, halus, sedang, tanah (54%, 17%, 19%, 10%). Pada lokasi tengah memiliki berat total deposit 106,2 g dengan persentase material kasar, halus, sedang, tanah (44%, 18%, 25%, 13%) dan kadar lengas tertinggi terdapat pada lokasi dalam, lalu tekstur material deposit pada lokasi pinggir merupakan tekstur lempung bepasir, lokasi dalam dan tengah memiliki tekstur lempung. Karakter kimia deposit material yang menunjukkan persentase tertinggi terdapat pada lokasi dalam kecuali kapasitas tukar kation yaitu pada lokasi tengah. Karakter biologi deposit material pada parameter total mikroba tertinggi terdapat pada lokasi dalam dan jumlah bakteri pelarut fosfat tertinggi terdapat pada lokasi tengah.

Kata kunci: Deposit material, karakter, kelapa sawit, ketiak pelepah.

ANALYSIS OF MATERIAL DEPOSITS CHARACTERS IN 11 - YEAR OIL PALM'S LEAF AXIL

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ABSTRACT

In the plantation sector, oil palm is an export commodity that plays an important role in the country's economic development. Productivity that is in accordance with the palm oil class standard can be achieved through maintenance activities, one of which is fertilization. The application of oil palm fertilization through roots is less effective during the growth period, because the dosage, time, and nutrient composition absorbed are very dependent on the local land conditions. By analogy with fertilization through leaves, the idea of fertilizing through oil palm leaf axil emerged. It is estimated that material deposits in the leaf axil will affect the absorption of fertilizer through that organ. This study aims to find and find out the character and content of material deposits in 11-year oil palm leaf axil consist physical, chemical and biological properties.

This research was carried out at the PT Bumitama Gunajaya Agro Ketapang, West Kalimantan plantation for sampling and material deposit analysis carried out at Laboratory of Soil Science Mercu Buana University Yogyakarta in September to December 2018. This survey research using a Nested Design. In the 11-year crop area is divided into 3 locations, namely edge, middle and inner. In each location 3 sample plants were determined and in each plant 3 sample points of leaf axil were determined.

The results showed that the physical character of the material deposit in the oil palm leaf axil was the percentage of material content on the edge site with a total material weight of 149 g having a percentage of coarse, soft, medium, soil material (36%, 27%, 28%, 9%). In inner location have a total deposit weight of 107.5 g with the percentage of coarse, soft, medium, soil material (54%, 17%, 19%, 10%). The middle location has a total deposit weight of 106.2 g with the percentage of coarse, soft, medium, soil (44%, 18%, 25%, 13%) and highest moisture content found in the inner location. The texture of the deposit material at the edge location was loose clay, the inner and middle location has a clay texture. The chemical character of the deposit material which shows the highest percentage is found in the inner location except the cation exchange capacity which is in the middle location. The biological characteristics of material deposits are the highest total microbes found in the inner location and the highest number of phosphate solvent bacteria is in the middle location.

Keywords: Material deposit, characteristics, oil palm, oil palm leaf axil.

