

ABSTRACT

Evaluation of soil fertility can be done through soil analysis, plant analysis, observation of plant symptoms, field experiments, and greenhouse experiments. Efforts to increase soil fertility, namely fertilization, recommendations for oil palm fertilization doses can be made based on plant tissue analysis. Analysis of oil palm plant tissue is using leaves from the 17th frond. The purpose of this study was to evaluate the adequacy of nitrogen (N), phosphorus (P), potassium (K) and boron (B) nutrients in oil palm plant tissue at PT. Gemilang Makmur Sawit. This study used a survey method with a detailed level of 1:25,000 scale by creating homogeneous land units based on texture maps and slope maps and then proceeding with making measuring plots for each SLH with measuring plots of 5 plants x 5 plants to collect production data in the form of fresh fruit bunch weight and number bunches, while the leaf sampling took 8 plants from the measuring plot randomly. After the analysis of leaf nutrients on the 17th frond was obtained, then calculations were carried out so that fertilization recommendations were obtained which were used as a reference for PT. GMS in the implementation of fertilization. The results showed that in the study area the status of soil fertility was low, so it was necessary to increase it with the addition of fertilizing doses.

Keywords : oil palm, nutrient status evaluation, leaf analysis, fertilization

INTISARI

Evaluasi kesuburan tanah dapat dilakukan melalui cara analisis tanah, analisis tanaman, observasi gejala tanaman, percobaan lapangan, dan percobaan di rumah kaca. Upaya meningkatkan kesuburan tanah yaitu pemupukan, rekomendasi dosis pemupukan kelapa sawit dapat dilakukan berdasarkan analisis jaringan tanaman. Analisis jaringan tanaman kelapa sawit yaitu menggunakan daun dari pelepah ke-17. Tujuan penelitian ini adalah untuk mengevaluasi kecukupan hara nitrogen (N), fosfor (P), kalium (K) dan boron (B) dalam jaringan tanaman kelapa sawit di PT. Gemilang Makmur Sawit. Penelitian ini menggunakan metode survei dengan tingkat detail skala 1:25.000 dengan membuat Satuan Lahan Homogen berdasarkan peta tekstur dan peta lereng lalu dilanjutkan dengan membuat plot ukur tiap SLH dengan petak ukur 5 tanaman x 5 tanaman untuk pengambilan data produksi berupa berat tandan buah segar dan jumlah tandan, sedangkan pengambilan sampel daun diambil 8 tanaman dari plot ukur secara acak. Setelah analisis hara daun pada pelepah ke-17 didapat kemudian dilakukan perhitungan sehingga didapatkan rekomendasi pemupukan yang digunakan sebagai acuan PT. GMS dalam pelaksanaan pemupukan. Hasil penelitian menunjukkan bahwa di areal penelitian status kesuburan tanahnya tergolong rendah sehingga perlu ditingkatkan dengan adanya penambahan dosis pemupukan.

Kata kunci: kelapa sawit, evaluasi status hara, analisis daun, pemupukan