



## Intisari

Budidaya tanaman dan pengolahan lahan secara intensif dapat mempengaruhi kesuburan kimia tanah. Upaya peningkatan kesuburan tanah perlu dilakukan karena kondisi tanah pada suatu lahan akan mempengaruhi tidak hanya kuantitas, tetapi juga kualitas produk pangan yang dihasilkan. Penilaian kesuburan tanah merupakan dasar bagi penyusunan rekomendasi pemupukan agar tanaman dapat berproduksi secara optimal. Penelitian ini dilakukan untuk menilai kesuburan aktual tanah dan hubungan antar parameter kesuburan terhadap status kesuburan tanah pada lahan budidaya bawang merah. Pengumpulan data dilakukan melalui survei lapangan, analisis laboratorium, dan uji statistik. Sampel tanah untuk analisis laboratorium berjumlah 16, dimana masing-masing titik sampel merupakan komposit tanah dari petak budidaya bawang merah. Parameter status kesuburan tanah didasarkan kepada petunjuk teknis dari Balai Penelitian Tanah Bogor yaitu C-Organik, kejenuhan basa,  $P_2O_5$ ,  $K_2O$ , dan kapasitas pertukaran kation. Hasil penelitian menunjukkan bahwa kesuburan tanah di lokasi penelitian rendah. Semua parameter kesuburan tanah tidak berhubungan kuat dan tidak berpengaruh langsung terhadap produktivitas tanaman. Parameter fisik-kimia tanah yang paling berpengaruh terhadap status kesuburan tanah adalah kalium tersedia.

Kata kunci: bawang merah, kimia tanah, penilaian kesuburan tanah, tanah pasiran



### *Abstract*

Crop cultivation and intensive land management can affect the chemical fertility of soil. The efforts to increase soil fertility needed to be done because soil fertility affects not only the quantity, but also the quality of the products from the land. Soil fertility assessment is the basis for formulating fertilizer recommendations so that crops can produce optimally. This study was conducted to assess the actual fertility of the soil and the relationship between fertility parameters to the status of soil fertility in shallot cultivation land. Data was collected through field surveys, laboratory analysis, and statistical analysis. Soil samples for laboratory analysis were taken from 16 sample points, where each sample point is a soil composite from shallot cultivation plots. Parameters of soil fertility status were based on the technical instructions from the Bogor Soil Research Institute, namely C-Organic, base saturation,  $P_2O_5$ ,  $K_2O$ , and cation exchange capacity. The results showed that soil fertility status in the study area was low. All soil fertility parameters are not strongly related and have no direct effect on plant productivity. Soil physical-chemical parameter that greatly affected the soil fertility status is available potassium.

Keywords: sandy soil, shallot, soil fertility assessment, soil chemistry