

INTISARI

Kesuburan tanah menjadi salah satu penentu kestabilan dan peningkatan produksi pertanian. Tanah dapat dikatakan baik ketika tanaman yang ditanam dilahan tersebut dapat tumbuh dengan baik dan maksimal produktifitasnya. Durian merupakan salah satu jenis buah yang populer di Indonesia, memiliki rasa dan aroma yang khas. Penelitian ini bertujuan untuk memberikan informasi mengenai status kesuburan tanah di daerah Embung Tonogoro, Banjaroya, Kalibawang, Kulon Progo pada penggunaan lahan perkebunan durian. Penilaian status kesuburan tanah mengacu pada Petunjuk Teknis Evaluasi Kesuburan Tanah dan menentukan batasan kesuburan berdasarkan *Fertility Capability Soil Classification*. Sampel tanah yang diambil berada di daerah Embung Tonogoro adalah tanah utuh dan tanah terusik pada masing-masing SPL dengan kedalaman 0-30 cm, 30-60 cm dan 60-100 cm. Parameter sifat kimia yang diuji pH-H₂O, Karbon Organik, N-total, KPK, K, Na, Mg, Ca, Kejenuhan Basa. Parameter sifat fisika yang diuji : tekstur, berat volume tanah, berat jenis dan porositas. Hasil penelitian menunjukkan bahwa status kesuburan tanah pada tanaman durian di daerah Embung Tonogoro pada titik sampel secara keseluruhan dikategorikan sebagai rendah, sedangkan pada titik sampel puncak selatan (PSE) dikategorikan sebagai sedang. Faktor pembatas tingkat kesuburan tanah berdasarkan klasifikasi FCC (*Fertility Capability Soil Classification*) adalah harkat K rendah dan pH tanah masam.

Kata Kunci : Tanaman Durian, Status Kesuburan tanah, Faktor Pembatas Kesuburan (FCC),

ABSTRACT

Soil fertility is one of the determinants of stability and increased agricultural production. Soil is considered good when plants can grow well and reach maximum productivity in the area. Durian is one of the popular fruit varieties in Indonesia, known for its distinctive taste and aroma, enjoyed by many people. This research aims to provide information about the soil fertility status in the Tonorogo Embung area, focusing on durian plantation land use with variations in soil depth (0-30, 30-60, and 60-100 cm) concerning the physical and chemical properties of the soil. The assessment of soil fertility status refers to the Technical Guidelines for Soil Fertility Evaluation and establishes fertility limits based on the Fertility Capability Soil Classification. Soil samples were taken as undisturbed and disturbed soil at each Soil Profile Layer (SPL) with depths of 0-30cm, 30-60cm, and 60-100cm. Chemical properties tested included pH-H₂O, Organic Carbon, Total Nitrogen, Cation Exchange Capacity, Base Saturation. Physical properties tested included Texture, Soil Bulk Density, Specific Gravity, and Porosity. The results showed that the overall soil fertility status for durian plants in the Tonorogo Embung area was categorized as low, while at the southern peak sample point (PSE), it was categorized as moderate. Limiting factors for soil fertility levels based on the FCC (Fertility Capability Soil Classification) were low K availability and acidic soil pH.

Keywords : Durian, Fertility Status, Fertility Capability Soil Classification (FCC).