

STUDI TINGGI MUKA AIR DAN BEBERAPA SIFAT FISIK TANAH GAMBUT PADA BERBAGAI UMUR TANAMAN KELAPA SAWIT DI DESA KARYA BHAKTI KABUPATEN TANJUNG JABUNG TIMUR

Joan Andre¹⁾, Aswandi²⁾, Hasriati Nasution²⁾

¹⁾ Alumni Jurusan Agroekoteknologi Fakultas Pertanian, Universitas Jambi

²⁾ Dosen Jurusan Agroekoteknologi Fakultas Pertanian, Universitas Jambi

Kampus Pinang Masak, Mendalo Darat, Jambi 36361

Email : Joanandre022@gmail.com

ABSTRAK

Penelitian ini bertujuan untuk mengetahui dan mempelajari tinggi muka air dan perbedaan beberapa sifat fisik tanah gambut pada berbagai umur tanaman kelapa sawit. Penelitian ini dilaksanakan di Desa Karya Bhakti Kabupaten Tanjung Jabung Timur pada bulan September hingga November tahun 2023. Penelitian ini menggunakan metode survei dengan purposive sampling sebanyak 9 titik pada kelompok umur tanaman kelapa sawit 0-5 tahun, 6-10 tahun, dan >11 tahun. Jarak titik pertama 50 meter dari kanal, kemudian 75 meter dari titik sebelumnya dan 100 meter dari titik sebelumnya. Pengamatan tinggi muka air dilakukan selama 2 bulan. Data dianalisis menggunakan uji regresi dan korelasi dan interpretasi data disajikan secara deskriptif. Parameter yang diamati kedalaman gambut, kematangan gambut, tinggi muka air tanah, tinggi muka air kanal, kadar air, bobot volume, bahan organik. Hasil penelitian menunjukan nilai bahan organik berkisar antara 78-92 %, bobot volume berkisar antara 0,14-0,30 gr/cm³, dan kadar air berkisar antara 205-629 %. tinggi muka air tanah dan kanal bervariasi pada setiap umur tanaman kelapa sawit, kematangan dan kedalaman gambut pada setiap kelompok umur bervariasi dan dipengaruhi oleh tinggi muka air. Kadar air, bobot volume, dan bahan organik dipengaruhi oleh tinggi muka air, umur tanaman, kedalaman gambut, dan kematangan gambut.

Kata kunci : *tinggi muka air, sifat fisik tanah, gambut, umur tanaman, kelapa sawit.*

ABSTRACT

This study aims to find out and study the water level and the differences in some physical properties of peatland at various ages of oil palm plants. This research was carried out in Karya Bhakti Village, East Tanjung Jabung Regency from September to November 2023. This study uses a survey method with purposive sampling of 9 points in the age groups of oil palm plants 0-5 years, 6-10 years, and >11 years. The distance of the first point is 50 meters from the canal, then 75 meters from the previous point and 100 meters from the previous point. Observation of water level is carried out for 2 months. The data were analyzed using regression and correlation tests and the interpretation of the data was presented descriptively. The observed parameters were

peat depth, peat maturity, groundwater level, canal water level, moisture content, volume weight, organic material. The results of the study showed that the value of organic matter ranged from 78-92%, the volume weight ranged from 0.14-0.30 gr/cm³, and the moisture content ranged from 205-629%. The height of groundwater and canals varied at each age of oil palm plants, and the maturity and depth of peat in each age group varied and were affected by water level. Water content, volume weight, and organic matter are affected by water level, plant age, peat depth, and peat maturity.

Keywords: water level, physical properties of soil, peat, plant age, oil palm.