

**KETERSEDIAAN AIR TANAH PADA BEBERAPA SATUAN  
LAHAN YANG DITANAMI KELAPA SAWIT  
(*Elaeis guineensis* Jacq) DI KECAMATAN PANGKALAN  
KERINCI KABUPATEN PELALAWAN PROVINSI RIAU**

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**ABSTRAK**

Penelitian tentang ketersediaan air tanah pada beberapa satuan lahan yang ditanami kelapa sawit (*Elaeis Guineensis* Jacq) telah dilaksanakan pada Novemver 2015 sampai Mei 2016 di Kecamatan Panglan Kerinci, Kabupaten Pelalawan, Provinsi Riau. Penelitian dengan metode survai, yaitu mengambil sampel tanah utuh dan komposit pada 4 satuan lahan yang ditanami kelapa sawit dan 1 ditanami karet pada lokasi penelitian. Tujuannya adalah untuk mengkaji ketersediaan air dan sifat fisika tanah sebagai acuan untuk pertanian berkelanjutan. Hasil Penelitian menunjukkan adanya perbedaan sifat sifika tanah pada tiap satuan lahan, yaitu tekstur tanah pada kriteria liat, lempung liat berpasir dan lempung berpasir, bahan organik dengan jumlah antara 2,68%-4,79% tertinggi pada satuan lahan Pfq.5.3, bobot volume dengan jumlah antara 1,2 g/cm<sup>3</sup>-1,55 g/cm<sup>3</sup> yang tertinggi pada satuan lahan Au.1.2.1, total ruang pori dengan jumlah antara 36,89%-59,02% yang tertinggi pada satuan lahan Pfq.5.3, pori air tersedia dengan jumlah antara 7,66%-15,69% yang tertinggi pada satuan lahan Pfq.5.3 dan kandungan kadar air tanah yang berfluktuasi. Secara umum kadar air dan ketersediaan air pada lahan karet relatif stabil dan tinggi dibandingkan pada lahan yang ditanami kelapa sawit.

Kata kunci: Kadar air, Ketersediaan Air Tanah, Sifat Fisika Tanah, Kelapa Sawit, Bahan Organik



# SOIL WATER AVAILABILITY IN SOME LAND UNITS PLANTED WITH OIL PALM (*Elaeis guineensis* Jacq) IN PANGKALAN KERINCI PELALAWAN RIAU PROVINCE

## ABSTRACT

A research on soil availability in oil palm (*Elaeis guineensis* Jacq) plantation was held in the District of Pangkalan Kerinci, Pelalawan, Riau Province from November 2015 until May 2016. The objective of the research was to determine soil water availability at different land unit under oil palm (*Elaeis guineensis* Jacq) plantation in Pangkalan Kerinci, Pelalawan, Riau Province. The research was conducted using survey method. Soil samples were taken from intact and composite sample at 4 units of oil palm and 1 unit of rubber plantation. The aim of this research was to assess the availability of soil water and soil physical properties as a reference towards sustainable agriculture. The result showed that there were differences in physical properties of the soil each land unit. The soil texture was classified into clay, sandy clay loam and sandy clay. The soil organic matter content was between 2.68%-4.79%, the highest was found land unit Pfq.5.3. The value of BD was between 1.2 g/cm<sup>3</sup>-1.55 g/cm<sup>3</sup>, with the highest at Au.1.2.1 land unit. Soil total pore was between 36.89%-59.02%, the highest was at land unit Pfq.5.3. Soil available water between 7.66%-15.67%, the highest was at the land Pfq.5.3 the soil water content was fluctuated. In general, water content and the availability in rubber plantation were relatively stable and higher than those on land planted with oil palm.

Keywords: water content, soil water availability, soil physical properties, oil palm

