

**ANALISIS KEBUTUHAN AIR TANAMAN KELAPA SAWIT  
(*Elaeis guineensis* Jacq) PADA TAHAP PEMBIBITAN UTAMA  
(*Main Nursery*) DENGAN MEDIA ULTISOL**

**SKRIPSI**

Oleh :

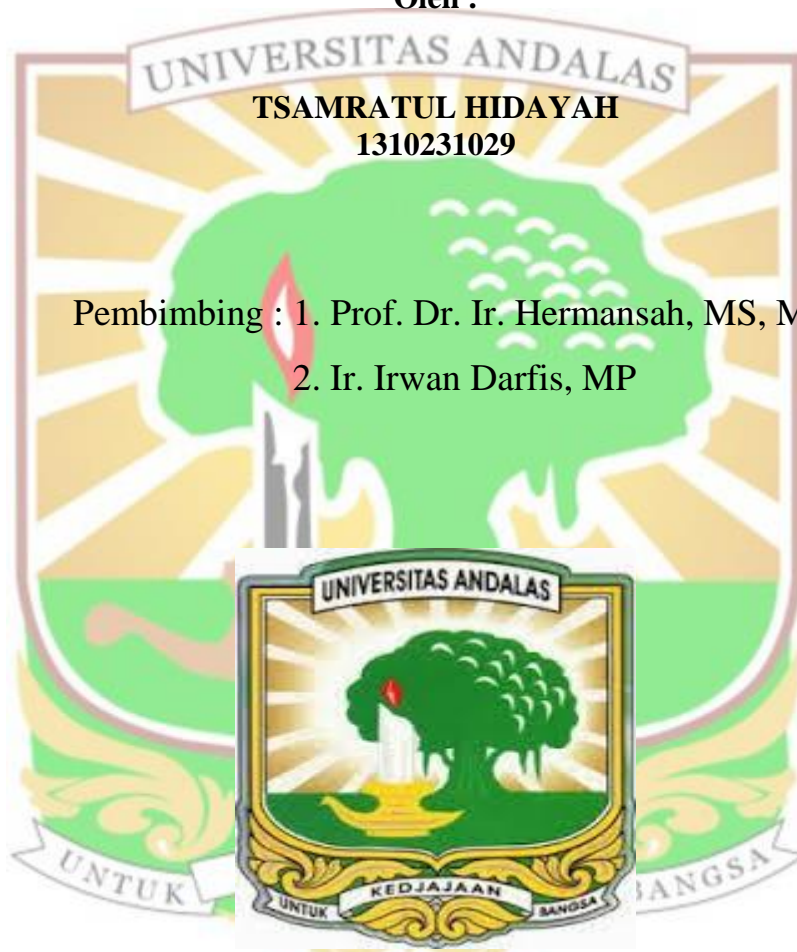
**UNIVERSITAS ANDALAS**

**TSAMRATUL HIDAYAH**

**1310231029**

Pembimbing : 1. Prof. Dr. Ir. Hermansah, MS, MSc

2. Ir. Irwan Darfis, MP



**FAKULTAS PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2018**

**ANALISIS KEBUTUHAN AIR TANAMAN KELAPA SAWIT  
(*Elaeis guineensis Jacq*) PADA TAHAP PEMBIBITAN UTAMA  
(*Main Nursery*) DENGAN MEDIA ULTISOL**

Oleh :



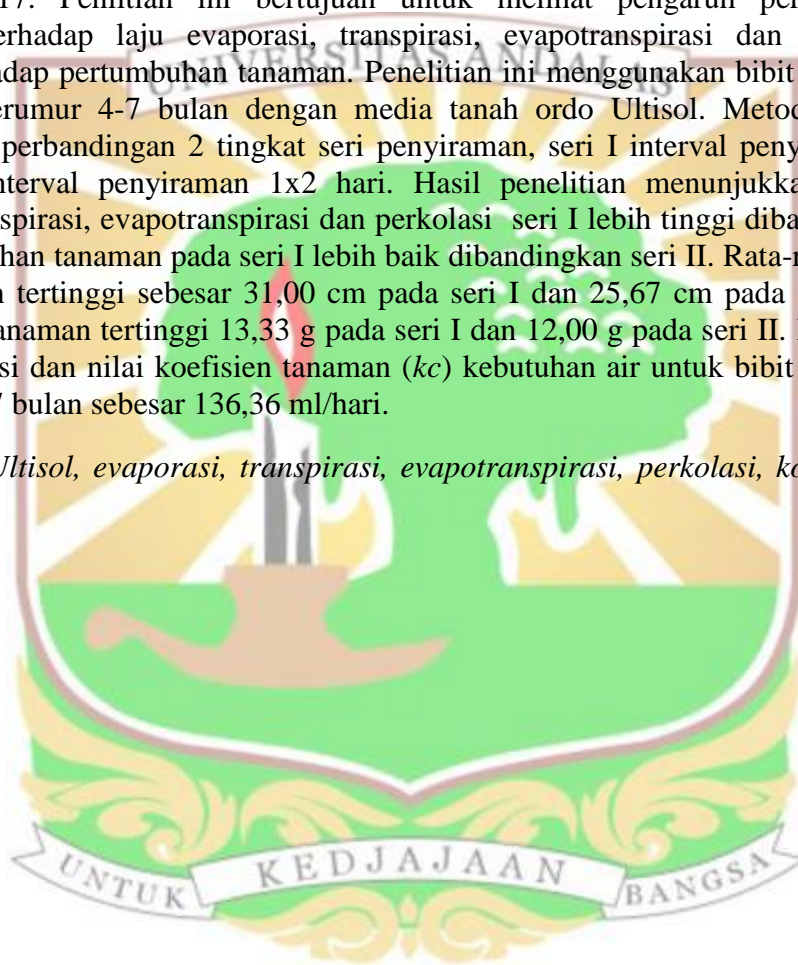
**FAKULTAS PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2018**

# **ANALISIS KEBUTUHAN AIR TANAMAN KELAPA SAWIT (*Elaeis guineensis Jacq*) PADA TAHAP PEMBIBITAN UTAMA (*Main Nursery*) DENGAN MEDIA ULTISOL**

## **ABSTRAK**

Penelitian tentang Kebutuhan Air Tanaman Kelapa Sawit (*Elaeis guineensis Jacq*) Pada Tahap Pembibitan Utama (*Main Nursery*) Dengan Media Ultisol telah dilaksanakan di Rumah kaca, Fakultas Pertanian, Universitas Andalas pada bulan September hingga Desember 2017. Penelitian ini bertujuan untuk melihat pengaruh perbedaan interval penyiraman terhadap laju evaporasi, transpirasi, evapotranspirasi dan perkolasi, serta pengaruh terhadap pertumbuhan tanaman. Penelitian ini menggunakan bibit tanaman Kelapa sawit yang berumur 4-7 bulan dengan media tanah ordo Ultisol. Metoda penelitian ini menggunakan perbandingan 2 tingkat seri penyiraman, seri I interval penyiraman 1x1 hari dan seri II interval penyiraman 1x2 hari. Hasil penelitian menunjukkan rata-rata laju evaporasi, transpirasi, evapotranspirasi dan perkolasi seri I lebih tinggi dibandingkan seri II. Laju pertumbuhan tanaman pada seri I lebih baik dibandingkan seri II. Rata-rata pertambahan tinggi tanaman tertinggi sebesar 31,00 cm pada seri I dan 25,67 cm pada seri II. Rata-rata bobot kering tanaman tertinggi 13,33 g pada seri I dan 12,00 g pada seri II. Berdasarkan laju evapotranspirasi dan nilai koefisien tanaman (*kc*) kebutuhan air untuk bibit tanaman Kelapa sawit umur 4-7 bulan sebesar 136,36 ml/hari.

Kata kunci : *Ultisol, evaporasi, transpirasi, evapotranspirasi, perkolasi, koefisien tanaman (kc).*



# **WATER REQUIREMENT ANALYSIS FOR OIL PALM (*Elaeic guineensis Jacq.*) AT THE MAIN NURSERY STAGE USING ULTISOL AS THE MEDIUM**

## **ABSTRACT**

A research on water requirement analysis for oil palm (*Elaeic guineensis Jacq.*) at the main nursery stage using Ultisol as the medium was conducted in glasshouse, Faculty of Agriculture, Andalas University from September to Desember 2017. This research was aimed to determine the effect of different watering intervals on the rate of evaporation, teranspiration, evapotranspiration and percolation, as well as their effects on the growth of oil palm seedlings. This research used oil palm seedlings have 4-7 months old with the medium was Ultisol. This research method used a comparison of two levels of watering series. Series I was watering interval 1x1 day and series II watering interval was 1x2 day. The results showed that the average of evaporation, teranspiration, evapotranspiration, and percolation rate was higher in series I than in series II, and the plant growth in series I was better than in series II. The highest average of plant height increase was 13.00 cm in series I and 25.67 cm in series II, the highest average of a dry weight of plant was 13.33 g in series I and 12.00 g in series II. Based on evapotranspiration rate and crop coefisien (kc) value, water requirement for oil palm seedlings aged 4-7 months was 136.36 ml/day.

Key word : *Ultisol, evaporation, transpiration, evapotranspiration, percolation, crop coefficient (kc).*

