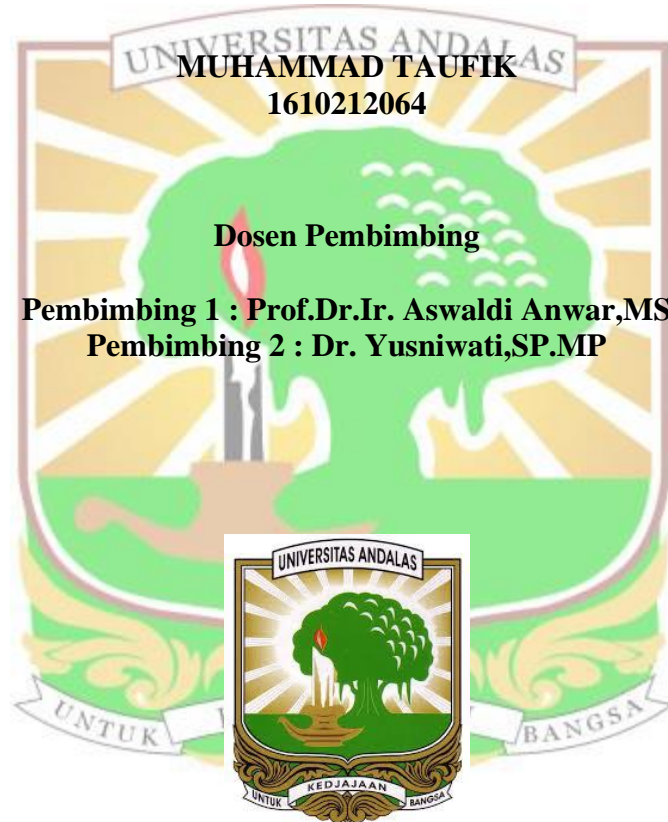


**PENGARUH LAMA PERENDAMAN BENIH KELAPA SAWIT  
(*Elaeis guineensis* Jacq.) SETELAH *HEAT TREATMENT*  
TERHADAP VIABILITAS DAN VIGOR**

**SKRIPSI**

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**FAKULTAS PERTANIAN  
UNIVERSITAS ANDALAS**

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# **PENGARUH LAMA PERENDAMAN BENIH KELAPA SAWIT (*Elaeis guineensis* Jacq.) SETELAH *HEAT TREATMENT* TERHADAP VIABILITAS DAN VIGOR**

## **Abstrak**

Kelapa sawit merupakan komoditas yang sangat menjanjikan dimasa depan. Pada umumnya kebanyakan kelapa sawit menggunakan benih. Salah satu varietas benih unggul kelapa sawit adalah DXP Simalungun yang di produksi oleh PT. Palma Inti Lestari, memiliki permasalahan yaitu tingginya persentase kecambah abnormal. Perlunya evaluasi proses produksi benih untuk meningkatkan viabilitas dan vigor benih, salah satunya perendaman setelah *heat treatment*. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh lama perendaman setelah *heat treatment* terhadap viabilitas dan vigor benih kelapa sawit. Penelitian ini telah dilaksanakan pada bulan Januari - Mei 2020 di PT. Palma Inti Lestari. Rancangan percobaan yang digunakan adalah RAL (Rancangan Acak Lengkap) dengan 4 perlakuan dan 3 ulangan. Perlakuannya yaitu perendaman setelah *heat treatment* selama 1, 2, 3 dan 4 hari. Data hasil pengamatan dianalisis dengan uji F pada taraf nyata 5%, jika berbeda nyata dilanjutkan dengan uji lanjut *Duncan's New Multiple Range Test* (DNMRT) taraf nyata 5%. Hasil penelitian menunjukkan bahwa dengan perlakuan perendaman setelah *heat treatment* selama 1 – 4 hari belum mampu meningkatkan daya berkecambah, perkecambahan hitung pertama, nilai indeks perkecambahan dan potensi tumbuh maksimum. Kadar air benih setelah perendaman *heat treatment* berbeda nyata dengan nilai tetinggi 20,38%. Kadar air ini belum mencapai kadar air optimum untuk perkecambahan. Secara keseluruhan, perlakuan yang diberikan belum memberikan pengaruh terhadap viabilitas dan vigor benih kelapa sawit.

**Kata kunci :** *Benih kelapa sawit, dormansi, perendaman, viabilitas, vigor*



# THE EFFECT OF OIL PALM SEED SOAKING TIME (*Elaeisguineensis jacq.*) AFTER HEAT TREATMENT ON VIABILITY AND VIGORS

## Abstract

Oil palm was a very promising commodity in the future. In general, multiplying the oil palm used seeds. One of the superior oil palm seed varieties was DXP Simalungun which was produced by PT. Palma Inti Lestari had a problem, namely the high percentage of abnormal germination. It was necessary to evaluate the seed production process to increase the viability and vigor of the seeds, one of which is immersion after heat treatment. The purpose of this study was to determine the effect of soaking time after heat treatment on the viability and vigor of oil palm seeds. This research was conducted from January - May 2020 at PT. Palma Inti Lestari. The experimental design used was CRD (completely randomized design) with 4 treatments and 3 replications. The treatment was soaking after heat treatment for 1, 2, 3 and 4 days. The data from the observations were analyzed by means of the F test at a significant level of 5%, if it significantly showed a difference, it was continued with a further test of Duncan's New Multiple Range Test (DNMRT) with a significant level of 5%. The results showed that soaking treatment after heat treatment for 1 - 4 days was not able to increase germination, first count test, index value test and maximum growth potential. The moisture content of the seeds after soaking the heat treatment was significantly different with a high value of 20.38%. This water content has not reached the optimum water content for germination. Overall, the treatment which has been conducted has not given effect toward viability and vigor of oil palm seed.

**Keywords:** *Oil palm seed, dormancy, soaking, viability, vigor*

