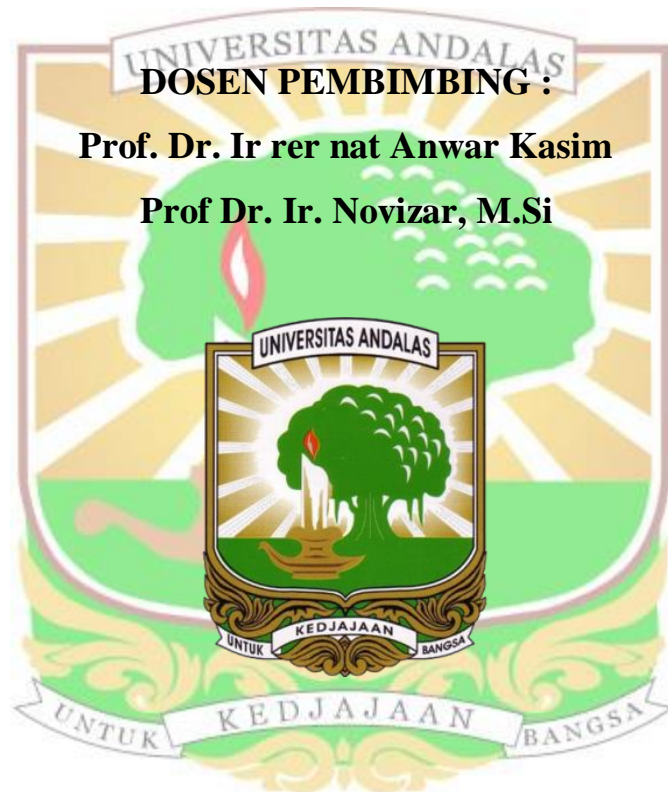


**PENGARUH LAMA PENGEMPAAN TERHADAP SIFAT FISIS  
MEKANIS *WOOD PLASTIC COMPOSITE* (WPC) DARI SERAT  
TANDAN KOSONG KELAPA SAWIT (TKKS) DAN PLASTIK  
DAUR ULANG *HIGH DENSITY POLYETHYLENE* (HDPE)**

**IQBAL FATHRA YUZHA**  
**1611122049**



**Skripsi**

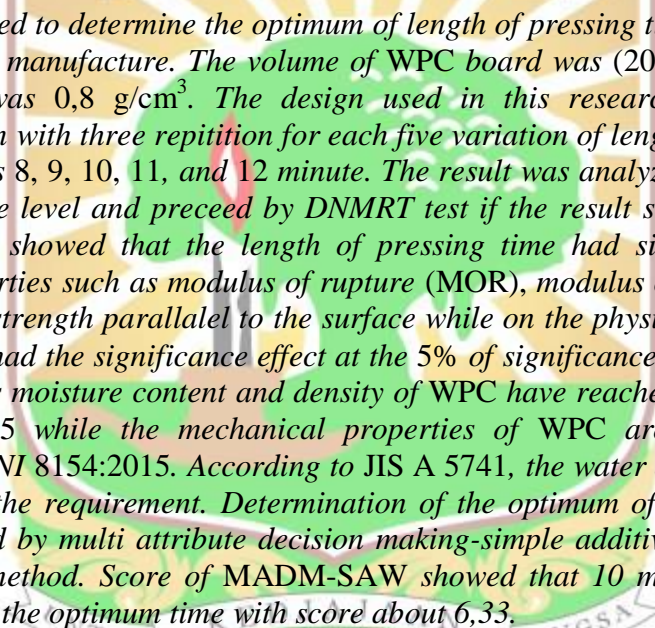
*Sebagai Salah Satu Syarat Untuk Memperoleh Gelar Sarjana Teknologi Pertanian*

**FAKULTAS TEKNOLOGI PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2021**

***“The Effect of Pressing Time Duration on Physical And Mechanical Properties of Wood Plastic Composite (WPC) From Oil Palm Empty Fruit Brunches Fiber and Recycled High Density Polyethene (HDPE) Plastic”***

Iqbal Fathra Yuzha, Anwar Kasim, Novizar

**ABSTRACT**



*This research aimed to determine the optimum of length of pressing time in wood plastic composite (WPC) manufacture. The volume of WPC board was (20x20x1) cm and the desired density was 0,8 g/cm<sup>3</sup>. The design used in this research was completely randomized design with three repetition for each five variation of length of pressing time treatments such as 8, 9, 10, 11, and 12 minute. The result was analyzed by Anova at the 5% of significance level and preceed by DNMRT test if the result showed significance effect. The result showed that the length of pressing time had signicance effect on mechanical properties such as modulus of rupture (MOR), modulus of elasticity (MOE) and compressive strength parallalel to the surface while on the physical properties only moisture content had the significance effect at the 5% of significance level. The physical properties such as moisture content and density of WPC have reached the requirements of SNI 8154:2015 while the mechanical properties of WPC are not reached the requirements of SNI 8154:2015. According to JIS A 5741, the water absorption of WPC had not reached the requirement. Determination of the optimum of length of pressing time was analyzed by multi attribute decision making-simple additive weighting model (MADM-SAW) method. Score of MADM-SAW showed that 10 minutes of length of pressing time was the optimum time with score about 6,33.*

*Keywords : WPC, length of pressing time, density, MOR, MOE.*