

**PENGARUH PERBEDAAN PERSENTASE AMPAS
PENGOLAHAN GAMBIR TERHADAP KUALITAS PAPAN
PARTIKEL TANPA PEREKAT DARI JERAMI PADI**

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Pengaruh Perbedaan Persentase Ampas Pengolahan Gambir terhadap Kualitas Papan Partikel Tanpa Perekat dari Jerami Padi

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan persentase ampas pengolahan gambir terhadap kualitas papan partikel dari jerami padi serta mendapatkan persentase ampas pengolahan gambir yang optimum terhadap papan partikel dari jerami padi. Metode penelitian yang digunakan yaitu Rancangan Ancak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Data yang didapatkan dianalisa menggunakan ANOVA kemudian dilanjutkan dengan uji lanjut *Duncan's Multiple Range Test* (DMRT) pada taraf 5%. Perlakuan yang digunakan yaitu persentase ampas pengolahan gambir A 20%; B 25%; C 30%; D 35% dan E 40%. Pengamatan yang dilakukan yaitu sifat fisis (kerapatan, kadar air, daya serap air, pengembangan tebal) dan sifat mekanis (keteguhan patah, keteguhan tekanan sejajar permukaan, keteguhan rekat internal, keteguhan lentur). Hasil pengujian menunjukkan perlakuan terbaik dengan persentase ampas pengolahan gambir 40%. Nilai sifat fisis papan yaitu kerapatan $0,75 \text{ g/cm}^3$, kadar air 7,79%, daya serap air 62,73%, pengembangan tebal 46,93% sedangkan sifat mekanis yaitu keteguhan patah $51,20 \text{ kg/cm}^2$, keteguhan tekanan sejajar permukaan $36,93 \text{ kg/cm}^2$, keteguhan rekat internal $2,72 \text{ kg/cm}^2$ dan keteguhan lentur $829,08 \text{ kg/cm}^2$.

Kata Kunci - Ampas Pengolahan Gambir, Jerami Padi, Papan Partikel.

The Effect of Difference Percentage Gambier Processing Pulp on The Quality of Particle Board from Rice Straw

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ABSTRACT

The research was aimed to know the effect of the difference in the percentage of gambier processing pulp on the quality of particle board from rice straw and to obtain the optimum percentage of gambier processing pulp for particle board from rice straw. The research method used is a Complete Random Design (CRD) with 5 treatments and 3 replications. The data has been analyzed using ANNOVA and continued with testing *Duncan's Multiple Range Test (DMRT)* at level 5%. The treatment used is the percentage of gambier processing pulp A 20%; B 25%; C 30%; D 35% and E 40%. The physical properties observed (Density, Water Content Test, Water Absorption, Thickness Swelling) and mechanical properties (Modulus Of Rupture (MOR), Parallel press to the surface, Internal Bonding (IB), Modulus Of Elasticity (MOE)). The best treatment in gambier processing pulp 40%. The value of physical properties of the board is Density 0,75 g/cm³, Water Content is 7,79%, Water Absorption is 62,73%, Thickness Swelling is 46,93% while mechanical properties are Modulus Of Rupture (MOR) of 51,20 kg/cm², Parallel press to the surface 36,93 kg/cm², Internal Bonding (IB) 2,72 kg/cm² and Modulus Of Elasticity (MOE) 829,08 kg/cm².

Keywords : Gambier Processing Pulp, Particle Board, Rice Straw