

ABSTRAK

Bahan baku yang digunakan pada penelitian adalah limbah jerami padi. Limbah jerami padi merupakan bahan baku alternatif yang dapat digunakan dalam pembuatan *pulp* karena kadar selulosa yang tinggi.

Hasil uji analisa penelitian pembuatan *pulp* berbahan jerami padi dengan proses soda didapat % yield 62%, kadar air 69,5%, kadar abu 32,5%, dan kadar α selulosa 22,67% di variabel pertama dengan suhu 100°C selama 100 menit dan variabel kedua dengan suhu 120°C selama 100 menit menghasilkan analisa % yield 66%, kadar air 58%, kadar abu 26%, dan kadar α selulosa 37,67%.

Berdasarkan hasil uji analisa, maka didapat hasil *pulp* dengan kualitas terbaik yaitu pada variabel kedua dengan suhu 120°C selama 100 menit menghasilkan analisa % yield 66%, kadar air 58%, kadar abu 26%, dan kadar α selulosa 37,67%.

Perbedaan variabel berubah berupa suhu saat pemasakan sangat berpengaruh pada hasil penelitian. Perbedaan variabel ini berfungsi untuk dapat mengetahui kondisi operasi yang optimum untuk proses *pulping* yang baik.

Raw materials used in the study was the waste rice straw. Waste rice straw is an alternative raw material that can be used in the manufacture of pulp for high cellulose content.

The test results of research analyzes the pulps made from rice straw by the process acquired soda 62% yield, 69.5% moisture content, ash content of 32.5%, and α cellulose content of 22.67% in the first variable to 100°C for 100 minutes and the second variable with a temperature of 120°C for 100 minutes to produce an analysis% yield of 66%, 58% moisture content, ash content of 26%, and levels of cellulose α 37.67%.

Based on the test results of the analysis, the results obtained pulp of the highest quality that is the second variable with a temperature of 120°C for 100 minutes to produce an analysis% yield of 66%, 58% moisture content, ash content of 26%, and levels of cellulose α 37.67%.

Differences variables change of temperature when cooking is very influential on the outcome of the study. The difference this variable serves to be able to determine optimum operating conditions for good pulping process.