

BIO-PULPING BAGASE SEBAGAI BAHAN PEMBUATAN KERTAS DENGAN MENGGUNAKAN SPESIES JAMUR PELAPUK PUTIH DAN WAKTU INKUBASI

Title	BIO-PULPING BAGASE SEBAGAI BAHAN PEMBUATAN KERTAS DENGAN MENGGUNAKAN SPESIES JAMUR PELAPUK PUTIH DAN WAKTU INKUBASI
Author Order	2 of 3
Accreditation	4
Abstract	The Biopulping is defined as the biological process of lignin degradation by utilizing microorganisms that produce some enzymes. A microorganism which widely known in the degradation of lignin and cellulose is a group of white-rot fungi. The aims for this research to know the most effective white rot fungi species of <i>G.lucidum</i> , <i>P.tuber-regium</i> , and <i>T.versicolor</i> in the degradation of lignin and cellulose with different incubation time on bagasse substrate. The effectivity of biopulping indicated by the highest degradation of lignin concentration and the lowest degradation of cellulose concentration. This study used an experimental design with Completely Randomized design with a two factorial pattern. The independent variable of this study is white rot fungi species and incubation time while the dependent variable is the concentration of lignin and cellulose. The main parameter was the concentration of lignin and cellulose, supporting parameters were pH, weight loss of substrate and mycelial growth. The result showed the degradation of lignin and cellulose in all treatment. The best degradation of lignin and cellulose showed by species <i>T.versicolor</i> and <i>P.tuber-regium</i> within 30 days of incubation
Publisher Name	Fakultas Biologi Universitas Jenderal Soedirman
Publish Date	2020-12-23
Publish Year	2020
Doi	DOI: 10.20884/1.bioe.2020.2.3.1798
Citation	
Source	BioEksakta : Jurnal Ilmiah Biologi Unsoed
Source Issue	Vol 2 No 3 (2020): BioEksakta
Source Page	305-312
Url	https://jos.unsoed.ac.id/index.php/bioe/article/view/1798/1956
Author	Dr Dra NUNIEK INA RATNANINGTYAS, M.S