

Effect of Oyster Mushroom on Biodegradation of Oil Palm Mesocarp Fibre

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Abstract : Degradation of agricultural residues from palm oil industry is increasing due to its expansion. Lignocellulosic waste from these industry represent large amount of unutilized resources, this is due to their high lignin content. Since, white rot fungi are capable of degrading the lignin, its potential to degradation was accessed for upgrading it. The lignocelluloses content was measured before and after biodegradation and the rate of reduction was determined. From the results of biodegradation, it was observed that hemicellulose reduces by 22.62%, cellulose by 20.97% and lignin by 10.65% from the initials lignocelluloses contents. Thus, to improve the digestibility of palm oil mesocarp fibre, treatment by white rot-fungi is recommended.

Keywords : biological, fungi, lignocelluloses, oil palm

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