Effect of mixed organosolv on the pretreatment process of lignocellulose biomass

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Lignocellulose biomass, a second-generation biomass, is a raw material that can be easily supplied as non-edible crops. However, lignocellulose biomass is required to perform a pretreatment process for removing enzymatic saccharification inhibitors such as lignin, thereby improving the efficiency in the production of sugar and the like. The organosolv pretreatment extracts lignin from lignocellulose biomass to organic solvent and improves the efficiency in the subsequent process. But, pretreatment of lignocellulose biomass is most effective when it has severe conditions such as high temperature, high pressure and high chemical treatment. The pretreatment process for organosolv using mixture of ethanol and hydrogen peroxide in order to obtain the effect of relatively mild conditions than the conventional pretreatment conditions was discussed. In the pretreatment process, the two solvents were appropriately mixed and applied to the pretreatment process. Corn stover and *pinus rigida* as lignocellulose biomass were used.