Identification of various hydrolyzing enzymes from waste of beer fermentation broth

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Rapid depletion of fossil fuels has created an utmost demand for searching new alternative energy sources to fulfill the present day and future energy demands. Utilization of waste sources for the production of bio-fuels especially bio-ethanol could provide a major breakthrough in competing with energy requirements. In our previous work significant quantities of bio-ethanol were produced from WBFB using different fermentation strategies. Various hydrolyzing enzymes present in the WBFB commence the conversion of complex sugars to simple fermentable ones. These enzymes either come from microbial sources or biomass (malt) posses them intracellularly. The identification of these enzymes is very important to ensure their proper utilization in enhance production of bio-ethanol and related biofuel from WBFB. In this present study we identified various enzymes and their molecular weights through SDS PAGE analysis and enzyme assay. The study will be much advantageous in promoting the future work of WBFB as an alternate source of bio-fuels.