Biomass to Biofuels: An Economic Study

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This research and experiment will prove rather or not switch grass is a viable source for ethanol production that will not affect the price of human or domestic animal feed. Information will be calculated from an experiment where ethanol levels from switch grass and corn fermentation will be recorded on a spreadsheet data base. This recorded information will show which biomass has the most ethanol energy potential to ferment into useable ethanol biofuel. Corn and switch grass will be studied to see which biomass has the most potential to create an efficient ethanol product. Ethanol levels will be taken from each sample using Vernier ethanol sensor and Labquest. This data will be correlated into a spreadsheet data base. This information will show the conclusion of which biomass crop is usable to produce a working ethanol biofuel. Further scientific investigation will be done to state whether or not the discovered biomass is a viable choice in large scale ethanol biofuel production, and on an economical sustainability stand point. Multiple factors must be considered to decide if the biomass would be best suited to be a long term economically efficient biofuel source.

Awards Won: