

Max Snider

*Fermentation of Spirogyra After a Period of Growth*

The purpose of this lab was to find if Spirogyra an eukaryotic green algae is a viable option for production of ethanol as a bio-fuel. The need for alternative fuel sources can be seen in every field from Population Sciences to Economics to Environmental Sciences. Spirogyra was chosen because of its high concentration of carbohydrates by percent body weight, as well as the fact that it is eucaryotic and a freshwater Genus. To if it is a viable candidate for further research, the experiment will have two trails. The first Trial will test the growth rate of Spirogyra in different proportions of organisms to solution to fine growth rates and a possible carrying capacity. The second trail will find the amount of ethanol produced from per weight after a period of exceptional growth and compare it to a simple blue-green algae. The results showed that spirogyra grew at slower rates but produced more ethanol then the blue green algae. These results indicate that Spirogyra is a possible candidate for further research.