CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY

Name(s)
Aliza D. Arya

Project Number
34659

Project Title
Elodea Plants Get Killed When Oil Is Spilled!

Abstract

Objectives/Goals
This experiment was designed to test if exposure of Elodea plants to different amounts of motor oil affected oxygen production during photosynthesis. It was expected that plants exposed to motor oil would produce less oxygen.

Methods/Materials
Ten Stems of Elodea Plants were placed in separate beakers filled with 250 ml of water. Different amounts of motor oil were added to the beakers. Elodea plants in water without any motor oil served as control. The level of oxygen was recorded every hour for five hours.

Results
A study decline in the oxygen level was observed in beakers with motor oil. On the contrary, the control group recorded an increase in the oxygen level. The group of Elodea stems exposed to motor oil for five hours had average oxygen levels of 0.22-0.24 cm, whereas the control group produced an oxygen level of 3.33 cm.

Conclusions/Discussion
Motor Oil interfered with the ability of plants to produce oxygen during photosynthesis. Several plants died after exposure to motor oil. The effect of motor oil and other pollutants on the survival of several aquatic plants should be tested.

Summary Statement
To test if exposure of Elodea plants to different amounts of motor oil affected oxygen production during photosynthesis

Help Received
Teacher helped finalizing the project.