CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY

Name(s)
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Project Number
J2101

Project Title
Algae and Algaecides

Abstract

Objectives/Goals
The objective of this project is to find the most effective and economic algaecide to kill Volvox.

Methods/Materials
This project requires 20 7 ml Petri dishes divided into 4 quadrants, tap water, Volvox algae cultures for 100 students, lab coat, gloves, goggles, 1 µL pipette and 6 mL pipette, copper, chlorine, and BaquaCil, microscope 20x, and 96 µL pipette tips. To test this project you must get 1mL of volvox algae and insert into each quadrant of the Petri dish and counted. Then 6mL of water was inserted into each quadrant. 25 µL of copper algaecide was inserted into one quadrant. 25 µL of BaquaCil was inserted into one quadrant. 50 µL of Chlorine was inserted into each quadrant. After 8 hours algae would be counted again.

Results
Out of the three algaecides tested to kill Volvox, chlorine is the better algaecide because it kills all the algae and leaves no remains of algae to clean up. Chemical B is the second best algaecide because it kills all of the algae, but leaves whole remains of algae. Copper algaecide has almost no advantages because it kills 43% of the algae.

Conclusions/Discussion
Of three commonly used swimming pool algaecides, chlorine is the most effective and economic.

Summary Statement
This project is about finding the best algaecide to kill Volvox.

Help Received
Prof. Dave Brunette and Prof. Michelle Garcia identified algae. Mrs. McKinny let me borrow supplies.