



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.) Elise M. Livengood	Science Fair Use Only <h1 style="margin: 0;">J1613</h1>
Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) Phosphates and Algae Growth	Division <input checked="" type="checkbox"/> Junior (6-8) <input type="checkbox"/> Senior (9-12)
Preferred Category (See page 5 for descriptions.) 7 - Environmental Biology	
Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.	
<p>Objective or Goal: My objective was to learn what affect phosphate fertilizer has on freshwater plants. I believe that the phosphates will stimulate algae growth and eventually suffocate the anachris plants.</p> <p>Materials and Methods: Into four twelve-ounce jars was placed lake water and one strand of anachris plant. One jar was left with no phosphate fertilizer. Into the others were put increments of fertilizer as follows: one-half teaspoon, one teaspoon, and two teaspoons. Observations were made over a three-week period.</p> <p>Results: As the weeks went on, many changes occurred. The water in the one-half, one and two teaspoon jars were tainted blue from the fertilizer. The algae growth in the phosphate-enriched jars was a great deal larger than in the control jar. The algae growth did suffocate the plants within two and a half weeks.</p> <p>Conclusion/Discussion: I proved my hypothesis correct. The phosphate-enriched jars stimulated algae growth and suffocated the anachris plant. After conducting this experiment, I have a new understanding of why it is important to pay attention to what the runoff from farmers' fields and sewage treatment plants contain.</p>	
Summary Statement (In one sentence, state what your project is about.) My project is about what effect phosphate fertilizer has on freshwater plants.	
Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. Father provided paper cutter	