



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Zoe Marsh; Maxwell Menke	Project Number S2112
Project Title The Effects of Agricultural Runoff on Periphytic Algae	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective is to find if and at what concentration is algae affected by both pollutants.</p> <p>Methods/Materials We made a half series dilution for six different concentrations of both glyphosate and nitrogen fertilizer. There was six trials for each concentration. A small amount of algae was added to each concentration, and the results were observed.</p> <p>Results There was a significant difference in growth between the control and all concentrations of glyphosate indicating that it maybe dangerous to algae. The nitrogen fertilizer stimulated growth only in low concentrations, higher concentrations decreased the growth in algae.</p> <p>Conclusions/Discussion This suggests that Agrocultural runoff maybe harmful the the ecosystems of fresh water lakes and streams.</p>	
Summary Statement We are testing the effects of agricultural run off on periphytic algae for its potentially harmful effects on an ecosystem.	
Help Received Our teacher Daisy Sharrock and our mentor Dr. Ed Parnell helped greatly with our project. Andrew Lerario and Jeff Lohman gave some donations of necessary supplies for the project including a Spectrophotometer, flasks and a grow light.	