



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>Jason R. Regier</b>	<b>Project Number</b> <b>J1633</b>
<b>Project Title</b> <b>Determining the Effects of Nutrient Concentrations on Hydroponically Grown Lettuce, Year 2</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of my science project is to determine the effects of different concentrations of fertilizer on hydroponically grown lettuce.</p> <p><b>Methods/Materials</b> Red Leaf lettuce seeds were germinated in individual starter cups. Three separate hydroponic tanks were constructed. A Styrofoam panel was placed within each tank. Holes were drilled through the panels to form "pockets" for each starter cup. Aerators were connected to each tank to supply oxygen. Artificial plant lights were hung over each tank to substitute for sunlight. Water and MAXSEA 16-16-16 fertilizer was added to each tank.</p> <p><b>Results</b> The plant weight varied from tank to tank depending on the amount of fertilizer added per gallon of water. Plant health also was affected by the amount of fertilizer added.</p> <p><b>Conclusions/Discussion</b> As a result of conducting this investigation, I learned that variations in fertilizer can impede the growth rate of plants. Plants may produce less or more plant weight due to the amount of fertilizer added.</p>	
<b>Summary Statement</b> To determine the effects of nutrient concentrations on hydroponically grown lettuce.	
<b>Help Received</b> Mother helped type report; Father help construct planting beds	