



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> George M. Bushnell	<b>Project Number</b> <b>J1705</b>
<b>Project Title</b> Can We Make a Bigger Salad?	
<b>Abstract</b>	
<b>Objectives/Goals</b> The Effect of Gibberellic Acid on the Growth of Lettuce Plants Objective: The objective of this experiment is to see if lettuce sprouts will grow taller when gibberellic acid is sprayed on them.	
<b>Methods/Materials</b> Materials and Methods: 75 lettuce sprouts were sprayed with differing amounts of the acid (1000ppm, 500ppm, 0ppm). The plants were measured every day to determine the growth of the plant throughout the experiment.	
<b>Results</b> Results: The plants with the highest concentrations (1000ppm) sprayed on them grew the fastest but they collapsed at a 50mm height. The plants that grew the highest at the end of the experiment were the 500ppm plants with an average height of 57mm compared to the control which had an average height of 36mm.	
<b>Conclusions/Discussion</b> Conclusion: At the end of the experiment the plants sprayed with the 500ppm solution grew on average 21mm higher than the plants that were not sprayed. Although the hypothesis was partially incorrect for it said that the plants sprayed with the 1000ppm solution would grow the tallest, but they collapsed. The hypothesis is correct in saying that the plants that were sprayed would grow taller. This knowledge helps when this hormone is being used to increase crop yield that too high of a concentration should not be sprayed because it will cause the plants to collapse and die.	
<b>Summary Statement</b> The experiment is to see if romaine lettuce plants sprayed with the hormone gibberellic acid will grow faster than those who have not.	
<b>Help Received</b>	