



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brent D. Butler</b>	<b>Project Number</b> <b>J2003</b>
<b>Project Title</b> <b>How Will the Salt Percent Threshold in the Wisconsin Fast Plants Affect Its Next Generation of Offspring?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The purpose of this experiment was to document the different rates at which the two generations of plants grew to determine if the salt percent threshold affects it next generation of offspring. If I grow plants in different salt concentrations then plan the seeds for a second generation, then I expect the offspring's will have similar characteristics in terms of their growth as the parent generation. <b>Methods/Materials</b> In order to grow the plants for both generations, I built a growing chamber. This consisted of a water pad, plastic containers, water and salt, anti-algae squares, plants, diamond wicks and soil. I placed the four growing chambers under the light house and watered them with pure water, 1% salt solution, 2% salt solution and 3% salt solution. I harvested the seeds from the first generation to grow the second generation. I used pollination wands over the flowers to pick-up and distribute the pollen. <b>Results</b> The first generation plants watered with 1% salt solution grew the most at 13.8 cm. The second generation plants watered with the 2% salt solution grew the most at 17.3 cm. First generation plants watered with the 3% salt solution grew the least at 3.5 cm. Surprisingly, the second generation plants were taller than the first generation plants. <b>Conclusions/Discussion</b> My hypothesis was partially supported because the water, 1% salt solution and 2% salt solutions in the second generation grew at relatively the same rate. However in the plants watered with the 3% salt solution, this did not occur based on my data results. The first generation of plants were much shorter than the second generation.	
<b>Summary Statement</b> Document the different rates at which the two generations of plants grew to determine if the salt percent threshold affects its next generation of offspring.	
<b>Help Received</b> My mother helped me type the project abstract and my father helped me on a few occasions to record my growth data.	