



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> Kyle Burdick; Omar Njie	<b>Project Number</b> <b>J0904</b>
<b>Project Title</b> <b>The Effect of Different Types of Water on the Growth of Ice Plant and Salt Grass</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> Invasion of foreign plants in the Ballona Wetlands is a major problem; they prevent the native plants from thriving. The purpose of our experiment is to test what water treatments kill ice plant but allow salt grass to live. Salt grass, along with other native plants to the Ballona Wetlands, is being taken over by a non-native plant named ice plant.</p> <p><b>Methods/Materials</b> In our method we watered four out of our five plant groups three times a week. We watered our drought group once a week. We watered group A with water with low level nutrients. We watered group B with NPK fertilizer in the water. We watered group C with low level nutrient water once a week. We watered group D with low concentrated salt water (fifteen ppt). And we watered group E with high concentrated salt water (thirty-five ppt). We used fifty-one gallon pots, six fifty-pound bags of sand, fresh water, and the substances used in the water.</p> <p><b>Results</b> Ice plant grew better than salt grass being watered with the following substances: All Purpose plant food (group A) and NPK (Nitrogen, Phosphorus, and Potassium) (group B). Salt grass grew better in the following categories: drought (group C), low-level salt water (group D), and high-level salt water (group E).</p> <p><b>Conclusions/Discussion</b> In conclusion, our hypothesis was very accurate. We hypothesized that the ice plant would grow better than in our All-purpose plant fertilizer group (Group A) and in our NPK Fertilizer Group (Group B). We also hypothesized that salt grass would grow taller than ice plant in the Drought category (Group C), the Low Salt Category (Group D), and the High Salt Category (Group E). This project has shown that if somehow the ice plant growing in the Ballona Wetlands was exposed to salt, its growth process would be slowed down considerably. In the long run, the exposure of salt water to ice plant could possibly kill it.</p>	
<b>Summary Statement</b> Our project is trying to determine what water kills ice plant but lets salt grass live.	
<b>Help Received</b> Kyle's mom bought the supplies; Dr. Drennan from LMU helped collect plants.	