



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Berenice Gonzalez	Project Number S1606
Project Title Plants and Salinity	
Objectives/Goals To find out what different concentrations of salt do to plant growth.	
Abstract	
Methods/Materials Materials: Salt water; 50 large plastic cups; Potting soil; Water; Seeds (peas); A nail; Permanent marker; Plastic Crates; Paper and pencil; Ruler. Methods: Label the fifty cups with permanent marker (Separate into groups of ten: ten with pure water, ten with 1/10 saltwater, ten with 1/4 saltwater, ten with 1/2 saltwater, and ten with pure saltwater). Poke five holes at the bottom of each cup with a hot nail. Put about two inches of potting soil into each cup. Put one seed into each cup and cover with 1 1/2"-2" of potting soil. Prepare water by mixing salt water with pure water(one half saltwater + one half pure water; 9/10 pure water +1/10 saltwater; and 1/4 saltwater + 3/4 pure water). Water each group with corresponding water every other day and record growth (measure growth with a ruler).	
Results Plants with all salt water showed no growth. The ones with 1/2 salt grew an average of 1.4 cm. Plants with 1/4 salt grew an average of 4.9 cm. Plants with 1/10 salt grew an average of 14.4 cm. and pure water plants grew an average of 24.4 cm.	
Conclusions/Discussion My results came out to be what I expected. My hypothesis was supported. The plants that were watered with higher concentrations of salt, grew less (slower) than the pure water plants. My data also came out to be significant. All of my data was at least 68% significant. If I were to do this project again I would do it with different plants and different concentrations of salt in the water. From this project, I learned that salt in water makes plants take longer to grow and affects other things such as their color.	
Summary Statement My project is about the effects of salt on plant growth.	
Help Received Mom helped with planting seeds and collecting water. Mr. Callaway helped with statistical analysis.	