



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Nathan J. Lewis	Project Number S1909
Project Title Salt Water for Plants?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals This experiment attempts to determine if plants can thrive when supplied with water of higher salinity than fresh water.</p> <p>Methods/Materials Planted three sets of seeds of five different types of plants and used six different water types (18 containers for each type of plant). Every week for six weeks, watered each container with its corresponding water type, measured and recorded the plant height, and tracked how many days it took for the first plant in each container to sprout.</p> <p>Results Plants supplied with distilled water grew best. The higher the water salinity content, the less the plant grew. No plant growth occurred when supplied with ocean water across all plant types.</p> <p>Conclusions/Discussion After six weeks of growth, the plants grew mostly in accordance with my hypothesis. It was true that the plants grew less when supplied with higher salinity water. However, growth did occur in some plants up to 35,000 ppm showing that plants can grow even without pure, fresh water.</p>	
Summary Statement I found that, although plants that were supplied with different levels of saline water did not grow as well, they are able to grow despite the fact that it was not fresh water.	
Help Received My biology teacher helped me learn how to use the refractometer to measure water salinity	