



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Anthony E. Doser	Project Number S1607
Project Title pH and Its Effect on Plants	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of my experiment was to test the pH levels of the water used to nurish the plants and find out the different effects on the plants.</p> <p>Methods/Materials Two different chemicals were used to change the pH balance of the distilled water used to nurish the plants. They were NaOH (Sodium Hydroxide), HCl (Hydrochloric Acid).The growth facters were then tracked for each of the differnt pH levels. For height,sturdiness,color of leaf,and deformity of plant.</p> <p>Results Plants tested on the lower end of the pH scale pH-1,3,5,and 6 were effected by having the appearance of burnt leaves as well as pH 1,and 5 had lack of sturdiness. Plants tested in neutral (pH 7) showed the best results for health and growth.Plants on the higher end of the pH scale pH-9,10,12,and 14 failed to thrive.They showed early signs of deformity of fruit, lack of sturdiness and discoloration of leaves. They died during the course of the experiment.</p> <p>Conclusions/Discussion In this experiment I found many interesting results. My hypothesis had stated that the plants tested in pH 5,6,and 7 (neutral) would have basicly the same outcome. This statement was proven wrong in the course of the experiment. The plants in pH 5 had a worse reaction of the lower end of the pH scale and pH6 show signs of discoloration in the leaves.pH 7 (neutral)thrived and grew the best. My hypothesis also stated that pH 9,10,12 and 14 would have the worse reaction, this was proven correct. According to my research data it shows just how important the pH levels are to the health and well-being of plants on whether they thrive or not and how important it is for our food crops.</p>	
Summary Statement This experiment will show the effect of pH levels on Plants.	
Help Received Mr. Porter my chemistry teacher helped with equipment and experiment procedures, Mr.Mayfield my FFA adviser helped with board, My mom helped with materials and wording of my report.	