



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Ben J. Pfenninger	Project Number J1625
Project Title The Natives Strike Back	
Abstract Objectives/Goals The objective of this experiment was to find out the effect of acid rain on native and non-native plants. Methods/Materials 36 native, and 36 non native seeds were planted in separate containers. Then they were equally divided, one for control and one for experimentation. The experimentation group received distilled water the first day and an acid substitute (pH was 4) the control group received just distilled water. The acid solution was made by mixing 4 parts vinegar and 6 parts water. The plants were watered with an atomizer bottle. Plants were right next to each other and received same amount of sunlight, moisture, and soil. Everyday the pH of the soil and the temperature of the room where the plants grew was measured. At the end of the experiment success was measured based on blade length and survival rate. Results The data suggested that the acid mixture did not effect the plant growth but did effect how many sprouts grew. Grass on both sides sprouted better with just water but Native grass seemed less affected by the acid mixture. The acid solution did nothing to effect the native grass's growth. The non-native's growth did change but not drastically. One should note that since there was only one sprout that a solid conclusion could not be made. Conclusions/Discussion The Data did not support my hypothesis which was that Non-Natives would do better under acid rain then Native.	
Summary Statement Native plants are less damaged by acid rain then Non-Native plants in Tulare County.	
Help Received Father helped with graphic design	