



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Danielle C. Serna	Project Number J1433
Project Title Electrifying Plants	
Objectives/Goals If I add electricity to the growth of plants then the plants metabolism would speed up causing the plant to grow faster.	
Abstract	
Methods/Materials Materials: 10 Plant Pots, 10 Drainers, 10 Broccoli Plants, 9 Volt Battery, Cables/Nails, Water, Soil, Wire Procedure: Day One - First I will place the soil in the plant pot and plant the broccoli sprout two millimeters below the surface in the soil. Then I will moisten the soil with the drainer under the pot. Day Two - I will wire up the battery with the battery cables and jolt the plant for 10 seconds then wait an hour and jolt the plant again. I will repeat day two twice a day for 2 weeks.	
Results The shocked plants grew larger and faster than the non-shocked plants.	
Conclusions/Discussion I think one the problems were that I waited to long in between the shockings. I think that if I would have shocked them more frequently than the plants' growing rates would have been higher. If I conducted the experiment again the one thing I would do different would be shocking them more frequent and not forget about them. I also found that when I stopped shocking them for a period of time they still grew more rapidly than the non-shocked. I think that this science fair fits into the greater scheme of things because if farmers would shock their crops then their supply would nearly double.	
Summary Statement I electrocuted plants with a nine volt battery for three weeks.	
Help Received Grandma helped layout board, Uncle helped build electricity transmitter, Step-Father gave me the idea, Mom helped me shop for materials.	