



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Brissa G. Rodriguez	Project Number 31250
Project Title Determining the Harmful Effects of Battery Acid on Plant Growth	
Abstract Objectives/Goals My objective is to determine if planting seeds/plants in soil contaminated by battery acid will decrease the germination/growth process. I believe that planting seeds and plants in soil contaminated by battery acid will inhibit their growth. Methods/Materials Radish seeds were planted into 10 eight ounce cups safely filled with soil contaminated by old batteries with visible acid leakage. A set of 10 small radish plants were planted in soil contaminated with battery acid. The seeds and plants were watered as needed with tap water which was also contaminated with battery acid. The growth of both seeds and plants were measured with a centimeter ruler and recorded over a period of 20 days. Results Seeds in contaminated soil grew 1.42 centimeters over a period of 20 days. The average germination rate of radish seeds was 19% more than the germination rate of the control group. The Radish Plants steadily increased in growth over a period of 20 days growing an average of 1.37 centimeters. Conclusions/Discussion Battery acid does have an effect on plant growth. Based on my experiment, germinating radish seeds and growing radish plants in soil contaminated by battery acid might actually increase the growth process rather than decrease it. Although my hypotheses were incorrect, the soil is still contaminated with toxic battery acid that might have other effects on the plants that did not show in my experiment.	
Summary Statement The purpose of my science project is to investigate whether battery acid will contaminate soil enough to inhibit the growth of plants.	
Help Received Mother helped type report; Father helped glue title on board	