



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) James D. Cobb	Project Number J1903
Project Title Does Garden Safe Weed Preventer Hurt Plants?	
Objectives/Goals Test if pre-emergents effect the growth the raddish plants.	
Abstract	
Methods/Materials Planted 3 raddish seeds (72 individual containers) remove unhealthy plants, only one healthy plant per container. broke 72 containers into 3 sections (24 a piece) added pre emergent (recommended amount into one section) (2x recommended in second section) (3rd section is the control) allow plants to grow. (2 weeks) measure root lengths	
Results Control averaged 9.75 cm (root growth) recommended 11.25 2X 11.75	
Conclusions/Discussion I learned that the pre-emergent not only doesn't hurt the plant, but helps growth, while preventing weed growth.	
Summary Statement Does Pre emergent impact plant growth?	
Help Received Teacher taught scientific method, provided classroom help with experiment. Parents helped in purchasing materials. They also helped put board together.	