



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Christian A. Louey	Project Number J1518
Project Title Magnets and Plants: What Is the Attraction?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of the experiment is to determine if magnetism affects the growth of plants.</p> <p>Methods/Materials The following materials were used: twenty 2000 gauss magnets, wood blocks to hold magnets, fifty Cherry Belle radish seeds, spray bottle with tap water, and five clear plastic containers filled with approximately nine centimeters of Miracle Gro gardening soil. Five groups were created with each comprising ten seeds. All seeds were planted about one centimeter deep and placed against the sides of the containers. Two groups contained seeds that were pre-magnetized for a period of three days; one with seeds exposed to the northern polarity and the other with the southern polarity. These groups were not further exposed to magnetism after planting. Two groups contained seeds that were constantly exposed to magnets only after planting; one with the northern and the other with the southern polarity. The fifth group of seeds was the control group. Over a period of a month, each group was watered twice a day with six squirts from a spray bottle. The height of the plants was recorded daily.</p> <p>Results After a month, the average growth of each group are as follows: seeds pre-magnetized north grew 4.00 cm, seeds pre-magnetized south grew 4.40 cm, seeds constantly magnetized north grew 4.11 cm, seeds constantly magnetized south grew 6.20 cm, and seeds in the control group grew 4.50 cm.</p> <p>Conclusions/Discussion The southern magnetic pole enhances the growth of radishes, while the northern pole slightly inhibits the growth. In addition, magnetizing during the growth had a greater impact than simply pre-magnetizing the seeds. Lastly, magnetized seedlings sprouted faster than the control group.</p>	
Summary Statement My project involves how magnetism affects the growth of plant life.	
Help Received	