



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Nicolas S. Schroeder	Project Number J1933
Project Title How Will Gibberellic Acid Affect Pea Plants?	
Abstract Objectives/Goals My goal for doing this project was to see if Gibberellic acid will effect the growth of pea plants and if so, by using what amount of the acid. I want to find out if higher concentrations of Gibberellic acid make bigger plants. Methods/Materials The method used in this experiment is first germinating the seeds by placing them between wet paper towels. Then, put them in a plastic bag and let the seeds sit for one week. After they began to sprout I planted them with potting soil in twenty-seven pots. I waited until they came up then I began watering them with Gibberellic acid (GA3) or water. I used a beaker and measured 0.720 liters of water, then put 1 scoop which is 0.080 grams of Gibberellic acid and that became 100 PPM (parts per million) of the mix. For Gibberellic acid that is 200 PPM, I took 0.720 liters of water adding 2 scoops of GA3. The controlled plants were just watered with water. I watered the plants with the plain water and GA3 concentrations every five days. Every 5 days, I recorded the measurements of each plant in my journal. I then added up all of the measurements in the three categories. I divide by nine because that is how many plants are in each section and that got me the height average for each group. I did this for 4 weeks. Results The 200 PPM plants grew a couple inches bigger then the 100 PPM. By using GA3 the plants grow a lot bigger then just by using water. The last measurement I did A=100 PPM the average height was 30.6 and B=200 PPM average was 30.7 and Control was 26.3. The more GA3 I used the bigger the plants grew. Conclusions/Discussion My conclusion is that GA3 does help the growth of plants. By seeing how hormones effect pea plants it expanded my knowledge on the subject because I now have a curiosity about how agriculture may use plant hormones.	
Summary Statement My project is about Gibberellic acid and how it effects the growth of pea plants.	
Help Received Dad helped drive, Dad and Mom helped with photography, Dad bought Gibberellic acid, Mom helped type application.	