



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Mikayli A. Moore	Project Number J0510
Project Title Pepper Power: A Titration Experiment	
Abstract Objectives/Goals I did my project to see if the vitamin C content in red bell pepper concentrate would be affected by the growing method {organic, hot house, or conventionally}. I predicted that a hot house pepper would contain the most vitamin C. Methods/Materials Two pounds of organic, hot house, and conventionally grown peppers were used. I blended the peppers, then used a cheesecloth to drain the pepper juice. I added ten drops of starch to the solution, because when the iodine is finished reacting with the vitamin C, it will be turned blue by the starch, and that is when you are done titrating. I tested each type of pepper four times. Results The organic pepper sample contained the highest level of vitamin C at 36.99 mg, the hot house pepper had 34.04 mg, and the conventionally grown pepper had 33.98 mg. My results were not consistent, and the difference in the vitamin C levels was not large. Conclusions/Discussion My conclusion is that organic red bell peppers contain the most vitamin C, but not by much. If the all the samples were rounded to the nearest whole number, organic would contain 37 mg, the hot house would reach 34 mg, and the conventionally grown would also equal 34 mg. As you can see, the organic only led by 3 mg.	
Summary Statement I wanted to know if the vitamin C content in red bell peppers would be affected by different growing methods (organic,conventional or hot house) at room temperature.	
Help Received My mom, who acted as a second advisor, bought the required materials and helped in preparation of the chemicals.	