



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Madison A. Elliott	Project Number J1810
Project Title Calling the Right Shots	
<div><div>Objectives/Goals The purpose of my project was to find out if there was a difference in vitamin C levels when growing wheatgrass in aquaponics compared with a soil medium.</div><div>Methods/Materials To complete this project, I used an aquaponics system, soil, wheat berries (to grow the wheatgrass), and starch and iodine to complete the various titration tests. I began my project by growing the wheatgrass in both systems for about two weeks. Then, by using titration, I tested the wheatgrass' vitamin C concentration once a week for a total of four weeks to obtain my final results.</div><div>Results By averaging the number of iodine drops it took to react to the vitamin C in the wheatgrass solution, I found that there is a fifty-seven percent increase in vitamin C levels when growing wheatgrass in soil.</div><div>Conclusions/Discussion Even though the wheatgrass grown in aquaponics may have a faster growth rate, and a healthier and greener appearance, the wheatgrass grown in soil had a substantial increase in vitamin C levels. While many people in areas lacking soil turn to aquaponics to grow their fresh fruits and vegetables, they should rethink their choices, and consider sticking with soil to get a more vitamin rich plant.</div></div>	
Summary Statement Is there a difference in vitamin C levels when growing wheatgrass in aquaponics compared with a soil medium?	
Help Received Dad helped me understand titration and guided me through the first test; English teacher helped explain how to write research paper; Science teacher helped me understand the scientific method	