



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Jocelyn X. Overmyer	Project Number J1922
Project Title Aquaponics: Food from Fish	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective of this project is to grow plants using an eco-friendly environment with no pesticides. I predicted that if I grew plants in an Aquaponics system, that they would grow taller and healthier than plants grown in soil.</p> <p>Methods/Materials I built an Aquaponics system, which shelters fish. The fish adds nutrients to the water, which is pumped up to the plants. The cycle continues as it drips back down to the fish tank. The Aquaponics system ran for eight weeks, growing four lettuce plants. As the control group, a growbed was filled with soil. The Soil Growbed was also taken care of for the same eight weeks, growing four more lettuce plants. During those eight weeks, the heights and number of leaves of all eight plants were recorded weekly.</p> <p>Results The data after eight weeks showed that the plants grown in the Aquaponics system were about double the height of the plants grown in soil, with average height around 24cm. Both plants in the Aquaponics system and soil had an average of 10 leaves per plant.</p> <p>Conclusions/Discussion This shows that even though plants grown in the Aquaponics system grow twice as fast and tall, the plants were as sturdy and robust as the plants grown in soil. Overall, plants grown in an aquaponic system is more eco-friendly then growing plants in soil.</p>	
Summary Statement My project is about comparing plants grown in an aquaponic system vs. growing plants in soil.	
Help Received My dad helped me build my design of an aquaponic system.	