



**CALIFORNIA STATE SCIENCE FAIR  
2013 PROJECT SUMMARY**

<b>Name(s)</b> <b>Sarah Rose George</b>	<b>Project Number</b> <b>J2005</b>
<b>Project Title</b> <b>Some Growing Media Are Better than Others for Growing Plants</b>	
<b>Objectives/Goals</b> If Bush Blue Lake Garden Beans are grown in a controlled environment using different fertilizers, then the results should indicate improved growth when using Roots Organics Soilless Hydroponic Coco Media.	
<b>Abstract</b> <b>Methods/Materials</b> Three different types of growing media were used to grow Bush Blue Lake Garden Beans: Fox Farm Ocean Forest Potting Soil and Roots Organics Soilless Hydroponic Coco Media, and soil collected from an empty housing lot. Ninety-six pots, 32 of each type of growing media, were filled and 3 bean seeds were planted in each pot. All pots were grouped on a table under florescent lighting and watered every 3-4 days. Height of all plants was measured weekly, for a total of 8 weeks, and recorded. Using the tallest plant in each pot; compared the height, number of leaves, and number of bean pods produced in each type of media.	
<b>Results</b> The bean plants grown in the Roots Organics Soilless Hydroponic Coco Media grew the tallest and produced the most bean pods of all three groups. The bean plants grew to an average height of 35.75 centimeters as compared to 27.78 centimeters grown in the Fox Farm Ocean Forest Potting Soil and 14.7 centimeters grown in the empty housing lot soil. The bean plants grown in the Roots Organics Soilless Hydroponic Coco Media produced an average of 2.47 pods as compared to 1.91 pods in the Fox Farm Ocean Forest Potting Soil and .84 pods in the empty housing lot soil.	
<b>Conclusions/Discussion</b> My hypothesis was correct. The Bush Blue Lake Garden Bean plants grew best in the Roots Organics Soilless Hydroponic Coco Media.	
<b>Summary Statement</b> This project compares growth of bean plants and amount of harvest when planted in different growing media.	
<b>Help Received</b> My father helped me install the grow lights and adjust the height as the plants grew. My mother helped me stake the plants and took photos of each step of the project.	