



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> Alyssa M. Mendoza	<b>Project Number</b> <b>J1619</b>
<b>Project Title</b> <b>Do the Different Types of Soil Affect a Plant's Growth?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of my science project is to investigate do different soils affect a bean plants growth. After my investigation, I will learn which soil best affected a bean plants growth. I will have a better understanding of which soil is best suited for growing plants.</p> <p><b>Methods/Materials</b> I will first rinse 25, 960 milliliter planting pots in 5 gallons of water mixed with 10 tablespoons of bleach to disinfect the planting pots. Disinfecting the pots will assure that no disease left in the pots will affect the growth of the plant. Next, I will label each pot with a number 1 and number 2 on opposite sides to verify rotation of plant daily to promote equal light exposure. After measuring 840 ml of organic soil for each of the 5 planting pots, I will label the planting pot #O# for organic soil. I will repeat this procedure for all the other 4 different soils and label each planting pot according to the type of soil. Once I have completed measuring each of the 5 planting pots I will plant one bean seed to the depth of my index finger in the middle of the pot. Next, I will water each planting pot with 250 milliliters of water on the first day and will water each plant when needed with the amount of 125 milliliters. Daily I will rotate the plants and observe them for dryness of soil and possible plant growth. Materials: Organic Soil, Fir Bark, Rice Hulls, Redwood Bark, Backyard Soil, Metric ruler, Kentucky Blue Bean Plant, Water, Sun, 240 milliliter Pitcher, 960 ml plastic pot, Clorox</p> <p><b>Results</b> Organic soil results #affected the plants growth the best by having all of the plants grown in the 12 day period. AVERAGE=10.67 Backyard soil results#affected the plants growth the by having no plants grown. AVERAGE=0 Mix 1 results#affected the plants growth the 2nd worst by having 3 plants grown. AVERAGE=3.28 Mix 2 results#affected the plants growth the 3 best with 3 plants grown on the last day AVERAGE=6.4 Mix 3 results#affected the plants growth the 2nd best with 4 plants grown on the last day AVERAGE=8.32</p> <p><b>Conclusions/Discussion</b> After completing my investigation on if different soil types affect a plants growth, I found out that my hypothesis was correct. My hypothesis for soil affecting plant growth stated that the organic soil would help a plant grow faster and bigger. Many people should use this organic soil made by many nutrients to help plants grow healthy and strong.</p>	
<b>Summary Statement</b> The reason I am doing this investigation is to determine which soil is the best soil to use at home for the growth of a plant.	
<b>Help Received</b> Craig Peterson, Miller/Clark Nursery; Miss Carrie Given, Science teacher; Parents	