



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Rashmi A. Athavale</b>	<b>Project Number</b> <b>J1901</b>
<b>Project Title</b> <b>What Does Your Garden Drink? How Does the Quality of Water Affect the Growth of Vegetable Plants?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective of this project is to determine the effect of water quality on the growth of vegetable plants, comparing lake water, tap water and distilled water.</p> <p><b>Methods/Materials</b> A brief procedure of the experiment is as follows. Using 9 pots filled with potting soil, plant 25 pumpkin seeds in 3 pots each. Plant the same number of radish seeds in 3 more pots and green bean seeds in the remaining 3 pots. Water the first pot with 0.5 liter lake water, the second with 0.5 liter tap water and the third with 0.5 liter distilled water. Label all pots to indicate the type of seed and water used. Keep pots indoors and close to a window. Once germinated, move plants outdoors in direct sunlight. For each seed group, based on the labeled pots, continue to water the plants with lake water for the 1st plant, tap water for the 2nd and distilled water for the third. Monitor and record the height &amp; number of leaves of each plant periodically (take pictures).</p> <p><b>Results</b> The results show a clear difference in the plants that received lake water compared with those that received distilled and tap water. Plants that received lake water grew taller and produced many more leaves compared with those that received distilled or tap water. Plants that received tap water also grew better compared with those that received distilled water.</p> <p><b>Conclusions/Discussion</b> Since the number of leaves and the height of the plants are indicators of plant growth, the results provide strong evidence that the quality of water is a very important factor in the growth of plants. The data here supports my hypothesis that lake water which is high in dissolved mineral content is the most suitable for plant growth compared with tap water &amp; distilled water.</p>	
<b>Summary Statement</b> This experiment tested vegetable plants treated with lake water, tap water and distilled water to monitor its effect on the plant growth.	
<b>Help Received</b>	