



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Madison T. Besnard</b>	<b>Project Number</b> <b>J1803</b>
<b>Project Title</b> <b>Water Efficiency</b>	
<b>Objectives/Goals</b> The purpose of my experiment was to determine the optimum amount of water that a bean plant needs in order to grow over the course of 30 days. I hypothesized that the plant receiving five drops of water would grow the tallest after 30 days because of my background research and further calculations.	
<b>Abstract</b>	
<b>Methods/Materials</b> -1 rectangular box (for germination) -paper towels -water -eye dropper -container to grow the plants in (I used 12 dairy jars) -soil -bean plants In order to conduct this experiment, I germinated and planted the seeds, watered all plants daily with 1-12 drops(each plant receiving one more water droplet than the last), and analyzed the data.	
<b>Results</b> The average number of inches plants 1-6 grew was about 7, while the average number of inches that plants 7-12 grew was about 7 ½. Final results proved my hypothesis wrong because plant 7 grew the tallest with a stem of 9 inches.	
<b>Conclusions/Discussion</b> People commonly think that the more water the better for plant growth. However, after conducting this experiment I have discovered that this is definitely not the case. To conclude, Californians could minimize their water usage and still have proper growth of their plants. My experiment could also have larger agricultural applications for farmers looking to optimize water usage.	
<b>Summary Statement</b> I conducted a water efficiency project to determine the optimum amount of water that a bean plant needs in order to thrive.	
<b>Help Received</b> While performing this project, I received help from my dad in determining the form of measurement of the plants and purchasing the materials.	