



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Christina A. Quisno	Project Number J1627
Project Title Plant Growth: Type of Liquid vs. Plant Height	
Abstract Objectives/Goals The objective of my project was to determine how the variables of salt water, vegetable oil, vinegar, and detergent soap affect the height of the Japanese Boxwood plants. Regular water was used as the control group. The hypothesis stated that the detergent soap would increase the plants' heights more than the other variables. Methods/Materials The Japanese Boxwood plants were measured weekly and "watered" every few days with their specific solution (salt water, vinegar, vegetable oil, and detergent soap). The group of plants "watered" with regular tap water was used as the control group in this experiment. The heights of plants were recorded into a table. The plant growths were then averaged and the hypothesis was answered. Results The group of plants watered with the detergent soap had the worst growing period with an average height loss of 1.00 cm. The group of plants watered with the salt water had the best growing period with an average height growth of 0.10 cm. Conclusions/Discussion After averaging all of my numbers I figured out that the hypothesis I stated at the beginning of this project was wrong. The detergent soap, which I thought would have the greatest effect on the plants' heights, resulted in having the worst effect on the plants' heights. I was surprised that the plants "watered" with the salt water actually grew the most among the non-control solutions.	
Summary Statement I tested different liquids and how they affected the heights of a group of Japanese Boxwood plants.	
Help Received Dad helped format results table in Excel; Mom helped with board layout	