



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Samuel C. Spevack	Project Number J1624
Project Title The Effects of Angle V Graft on Nerium Oleander	
Abstract Objectives/Goals Grafting is regularly used to asexually propagate fruit trees and repair trunk damage. This experiment's goal was to see which Angle V graft would produce the best results or healthiest plants. Methods/Materials Nerium Oleander White Single-leafed was used because it is the best for beginning grafters to work with. This experiment was repeated twice, in the winter of 2001-2002, (Group B) and the winter of 2002-2003, (Group A). Angle V cut of 10, 20, 30 and 40 degrees were tested in Group B and 10, 20 and 30 in Group A. The focus of this report is on the results of Group A. The strength of the grafts were measured by the angle of the graft to host. The higher degree of angle, the better strength of the graft. Success of (Group B) was defined simply by the survival rate of graft vs. angle cut. The experimenter considered the methodology for measurement of success in (Group A), a more accurate means of determining the strength and quality of the graft. Results The experimenter found a strong correlation between angle cut and success of grafting. The lower angle that the Angle V graft was, the stronger the graft became. The best results were obtained on plants which the experimenter used an Angle V cut of 10 degrees. A statistical analysis was performed and showed that there was less than a 5% chance that this correlation was the result of chance Conclusions/Discussion In conclusion, the 10 degree Angle V graft was not only the strongest of all the experimental groups, but the most consistent. The experimenter thinks that this was due to the fact that the steeper the angle graft the more area of cambium layer on the graft exposed to the cambium layer on the host. Overall, the experimenter comes to the conclusion that the steeper the Angle V Graft, the stronger the graft will be.	
Summary Statement This project about angle V grafts and there effects on Nerium Oleander plants.	
Help Received My mother helped me with typing and purchased the Oleander plants.	