



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Megan E. Worton	Project Number J1436
Project Title Determining the Effects of Paclobutrazol on Green Waste Management	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to determine if the product "Paclobutrazol" could be used to control the growth of landscape shrubs and therefore aid in the reduction of green waste. If this product could reduce the overall plant growth without changing the natural appearance of the plant, the need to prune off excess growth could be reduced or eliminated.</p> <p>Methods/Materials I applied various rates of Paclobutrazol to ten container grown shrubs using a soil drench and a foliar spray. All ten plants were grown in a hot house environment with continuous plant light. The air temperature was held at a constant 70 degrees and the soil was kept moist. I made visual observations daily and measured and recorded plant growth weekly, if there was any to record.</p> <p>Results Although all of the plants showed favorable results in my experiment, 5 plants showed the best results. On each of these 5 plants the Paclobutrazol either stopped the growth altogether or caused the plant to die back at the tips of the foliage. The remaining 4 plants tested had various results but had continued growth. The control plant had vigorous growth with overall height increase of three inches and many blooming branches.</p> <p>Conclusions/Discussion In conclusion it appears that this product can control plant growth and could be an effective tool in reducing green waste. In order to evaluate this product more effeciently a longer period of growing time and a wider variety of shrubs would help to determine if this product could be used on a larger more constructive scale.</p>	
Summary Statement My project is about using a bedding plant growth regulator to control growth on landscape shrubs.	
Help Received Father supplied product and supervised application.	