



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Vidur Kailash	Project Number S1906
Project Title Efficiency in Irrigation Systems	
Abstract Objectives/Goals The objective is to determine whether Matthiola plants grow taller when being watered by a sprinkler system or a drip system. Also another objective was to see which system conserves more water and still gets the job done. Methods/Materials Bought 12 Matthiola plants and split them into 2 groups of six, one for the drip system and the other group for the sprinkler system. Then split the drip system group in to 2 groups of 3 and planted all the groups away from each other in soil with no fertilizer. Finally, I waited and recorded the height of each plant on a daily basis for 5 weeks. Results Through this experiment I have found out that the drip system is a better method than the sprinkler because it makes the plant grow equally tall and in certain cases taller than the sprinkler system, even though it is using less water. Because the drip is using less water to accomplish the same goal as the sprinkler system, it is a more efficient way of watering plants. Conclusions/Discussion Since the drip system conserved more water and still made the plants grow the same height and taller, the drip system is one that is more environmentally friendly. One annoyance that I had was that between weeks sometimes some of the plants' stem or flowers vanished which ended up as an outlier in the data charts. Also, my guess that so many stems and flowers went missing was because of the wind, or animals eating them.	
Summary Statement Determined whether plants grew taller when being watered by a sprinkler system or a drip system.	
Help Received Mother helped plant the plants.	