



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Nathan T. Lyon	Project Number J1917
Project Title Biomimicry in Action: Hypertufa vs. Soil	
Abstract Objectives/Goals In this experiment, my goal was to test the difference in plant height and width between two medias. I grew one set of plants in soil, which was my control. I planted the other set in Hypertufa, which is a solid block made out of several materials. I believed that the plants set in Hypertufa will grow better than the ones set in soil. Methods/Materials For the Hypertufa, several ingredients were mixed in a cement mixer until like the consistency of concrete. Vermiculite, Shagram Moss, cement, glass fibers, and water all make this base for vegetation. To set up my experiment, I placed 4 sets of 4 plants in each media, and placed them in the same spot. I watered them the same amount, and measured the height of the tallest point and the width of the canopy of each individual plant. Results With all my results, I determined that the plants grown in Hypertufa flourished a little bit more, with a slightly higher average height and a slightly wider canopy. These results are fairly accurate, due to the same growing conditions and fairly accurate measuring. Conclusions/Discussion These results support my hypothesis, that the plants in Hypertufa will grow better. The plants in soil did not grow as well and did not do as well visually, either. Each of the plants# quality was slightly less. I learned from this experiment not about the Hypertufa, but more about biomimicry.	
Summary Statement My project is about the difference in plant growth between Hypertufa and soil.	
Help Received Mother helped put poster together; father helped get supplies and plant.	