



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Kylynn M. Leffingwell	Project Number 36019
Project Title The Effectiveness of Various Organic Additives Promoting Water Retention in Extremely Dry Soil	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of my project was to determine if various organic additives effect water retention in extremely dry soil.</p> <p>Methods/Materials Walnut shells, pistachio shells, almond shells, organic brown rice, dry soil, aluminium tins, plastic bags, hammer, water, and a scale that measures in grams as well as ounces. Measured weight in grams and ounces for the mixed dry soil and additives with water for ten days, then recorded results.</p> <p>Results The additives were virtually non-effective, with the exception of the walnut shell, which had the largest evaporation rate.</p> <p>Conclusions/Discussion With the conclusive results that the walnut shell removes liquids from soil at an exceptional rate, this can be used to remove liquids from moist soil. This information can be used to provide as an alternative to remove liquid from moist soil in catastrophies such as mudslides, and highly polluted areas, such as the central valley, where percipitation is cotaminated, therefor it is possible it may need to be removed from the soil.</p>	
Summary Statement I measured the evaporation rate of various organic additives, and found that the walnut shell is the only additive with conclusive results.	
Help Received None, I designed and projected the project by myself.	