



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Jason E. Poole	Project Number J2214
Project Title Do Different Types of Wood Ash Affect Plant Growth?	
Objectives/Goals If an area is covered with wood ash, will plant growth be negatively affected	
Abstract Methods/Materials In two burn barrels, burn samples of orange tree and oak tree wood. Next day collect 4 cups of each sample of wood ash. In clear plastic solo cups, layer pea sized gravel, organic potting soil, and either radish seeds and fescue grass seeds. A total of 60 cups should be prepared. Use the ash collected to apply 1 teaspoon to each type of cup to be grown. Label; oak tree/ radish, orange tree/ radish, radish, oak tree/ fescue grass, orange tree/ fescue, fescue. Apply 1/6 cup water to each cup. Cover with cellophane. Allow plants to grow for 14 days, observing and recording data every other day. After 14 days, remove cover, measure plant growth and record results.	
Results The results of my investigation regarding if different types of wood ash effect the growth of plants indicate that orange tree ash and oak tree ash have a negative effect on the growth of both radish plants and fescue grass. The radish plants and fescue grass that did not have orange tree ash or oak tree ash grew taller than the plants that had ash added to the soil.	
Conclusions/Discussion After completing my project, I found my hypothesis to be correct, plants grown in an area covered with wood ash would be negatively affected. Plants grown without ash added to the soil grew better. My experiment proved that there is a relationship of different types of wood ash to the effect on how plants grow. The information can be important to farmers in the Central Valley as they choose to burn old crops and plant new crops without removing the remaining ash. This could also be important, as California continues to suffer from a drought leading to record number of wildfires.	
Summary Statement I proved that different types of wood ash negatively affect plant growth.	
Help Received My dad helped be burn the wood samples	