



CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s) Kaytlin R. Sexauer	Project Number J2320
Project Title Will Radish Seeds Germinate Better in Non-contaminated or Contaminated Ashes?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to see if radish seeds will germinate in non-contaminated or contaminated ashes. I believe that the radish seeds will germinate better in Eucalyptus ashes as opposed to Cedar or Plum ashes. I also believe that the radish seeds growing in the used motor oil contaminated ashes will have a higher germination rate when compared to oil base paint and the control group.</p> <p>Methods/Materials First, I gathered 3 types of wood: Plum, Cedar and Eucalyptus. Next, I separated each type of wood into 3 equal piles and put 1 pile of each type of wood into a 5 gallon bucket and another pile of each type of wood into another 5 gallon bucket. I then poured used motor oil over the wood in the 1st bucket and oil base paint over the wood in the 2nd bucket. I burned all the wood making sure to clean out the fireplace and or firepit before burning the next type of wood. Next I laid 2 layers of cotton squares down into 3 plastic trays and laid ashes on top of it. The separated by contaminate so no cross contamination would occur. I then planted the radish seeds 7 down and 3 across. I measured the germination rate every 5 days for 20 days and made sure the cotton stayed moist.</p> <p>Results The radish seeds germinating in the Cedar ashes had the highest germination rate in oil base paint and used motor oil when compared to eucalyptus and plum. The radish seeds that had the lowest germination rate was the seeds growing in the eucalyptus which didn't germinate any seeds at all. The contaminate that had the highest germination rate was oil base paint and the lowest was the control group which also did not germinate any seeds.</p> <p>Conclusions/Discussion My conclusion is the radish seeds germinating in the oil base paint contaminated ashes had the highest germination rate. The type of wood containing the most germinated seeds was Cedar.</p>	
Summary Statement My project was to observe the germination rate of radish seeds growing in different non-contaminated and contaminated ashes.	
Help Received Father helped by burning the different types of wood. He also helped with handling of contaminates and their disposal.	