



CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Jagjot Grewal	Project Number J2108
Project Title Determining Which Natural Pesticides Will Kill Pests	
<p style="text-align: center;">Abstract</p> <p>Objectives I wanted to see if there was a safe way to use pesticide around the house. Something that would harm ants but not humans or pets. I decided to use certain foods. Oranges, lemons, and limes, because they have citric acid. Chile pepper seemed like a food that could kill something.</p> <p>Methods I basically made a paste from the natural foods. (Ex; chop lemon and put in blender, include the peel) I then made a box with the food on one side and ants on the other. I put the paste between the ants and the sugar. I then waited 30 minutes to determine if the ants would cross the barrier of paste to get to the food. I recorded how many were killed or did not cross the barrier. Repeated with each variable (food)</p> <p>Results Chili pepper worked the best. None of the ants crossed the barrier. Lemons were next 16 out 20 did not pass Lime 12 out of 20 did not pass last was orange . 8 did not pass</p> <p>Conclusions I learned that i could use chili pepper as a barrier. For example i could put it around plants to protect the plant. Maybe a windowsill.</p> <p>I also learned that citric acid wasn't a deterrent that we were hoping for. oranges seemed to have no effect on the ants. They stopped at the orange and ate./</p> <p>I would like to use the chilli pepper as a year 2 project to determine if I could protect plants from insects.</p>	
Summary Statement i want to determine if I can use natural pesticides (food) as a barrier from ants	
Help Received Teacher helped with general knowledge of how to do science fair project. Guided me along the way. Parents helped with board, and using the blender.	