

## CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

Vicky N. Cuevas

**Project Number** 

**J1905** 

### **Project Title**

# **Determining Which Spice Works Best as a Barrier Against Ants**

### **Abstract**

## **Objectives/Goals**

The purpose of my project is to investigate the effects that spices will have on ants. The reason I am doing this investigation is to determine if spices work as a better barrier than toxic sprays.

#### Methods/Materials

First I will collect seventy (70) ants and place them in jars. Then I will place honey in the center of container #1 and place ten (10) ants around the sides of the container and cover the top with plastic wrap. Then I will wait 30 minutes and see if the ants are attracted to the honey and record the results. Next I will place some honey in the center of container #2 and aprinkle cinnamon about 1 inch around the honey. Then I will place ten (10) new ants around the sides and cover the container. Next I will wait 30 minutes, and then record the results. I will repeat the same process for each of the remaining five (5) spices which are, Nutmeg, Cayenne Pepper, Oregano, and Black Pepper.

#### **Results**

My hypothesis stated that the black pepper would work as a better barrier against the ants. Instead, the nutmeg prevented them from crosssing or even get near for that matter. The spice that worked the best against the ants was the nutmeg, it may have suffocated them. The cayenne pepper was the second best in keeping the ants from crossing over to the honey.

### Conclusions/Discussion

In Conclusion to my project, spices such as nutmeg and cayenne pepper are better, and safer to use on your home than toxic sprays.

## **Summary Statement**

My project is about the effects that spices have on ants when used as barriers rather than using toxic sprays.

## **Help Received**

My Mom took me to the store to buy materials and supplies.