

## CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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**Project Number** 

J1912

**Project Title** 

## What Ethnic Food Do the Ants Like the Most?

# Objectives/Goals Abstract

Since I was young, I had fun looking and observing the ants. In my backyard, I had an anthole, and as I observed it, I found it very interesting how ants get food. I wondered if they also have a certain taste or favor of food. Therefore, I chose this for my science project.

#### Methods/Materials

Materials: ants, ants;# hole in the backyard, four ethnic foods (American food, Chinese food, Korean food, Mexican food), containers for food, a box to put the containers and ants when I do experiment, a scale to measure the amount of food.

#### Procedure:

1. I already have an ant hole in my backyard and there are a lot of ants. 2. Measure each of the foods the ants will be offered. The same volume of the food will be offered to the ants. 3. Put the measured food onto the container. 4. Put the food on the ground with each type of food in a separate corner of the ground, leaving the ant hole in the middle. 5. Cover the ant hole and the food with the container that has holes on it so that the ants can breathe. 6. Allow the ants to go in their own direction to select the food of their choice. 7. Allow them 23 hours to find the food they will stay with. 8. Allow them to feed for 23 hours. Wait until the next day. 9. Get rid of the ants from the food. 10. Weigh each type of food that is left and know how much they ate of each food. 11. Subtract the leftover amount of food from the original amount of food. 12. Compare them and record in the log book. 13. Repeat the procedure seven times. Between each trial, the ants must be allowed to be without food for an hour.

#### **Results**

The ants liked Korean food the most and had a strong dislike for the Chinese food. The second food that the ants liked was Mexican and the third was American.

#### **Conclusions/Discussion**

The ants very obviously had a strong preference for Korean food. My original hypothesis stated that I believed that the ants would enjoy Chinese food best. Clearly, the data demonstrates that my hypothesis was not correct. I learned how to conduct an experiment by using variables and constants and the scientific method. I really enjoyed conducting this experiment. I think it would be fun to do this experiment at home in Korea and compare the results using Korean ants. I wonder would the Korean ants like the Korean food as much as the American ants do? Or would the Korean ants prefer American food? Just how ethnic are ants;# taste sensors anyway?

### **Summary Statement**

My project is about the red ants' favorite ethnic food, which was Korean food.

## **Help Received**

Used balance beam to measure each food's weight from my science teacher, Mrs. Greenfield