

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

Allison B. Richina

Project Number

J1926

Project Title

Investigating the Effects of Different Food Additives Combined with Meats on Drosophila Behavior

Abstract

Objectives/Goals

The objective of my project was to see which natural substance combined with meats such as Beef and Chicken would attract or repel drosophila. My goal was to see which substance combined with meats would repel drosphila.

Methods/Materials

I had a total of two vials per test and there were a total of 56 vials altogether. There were ten drosophila in each vial A and vial B. I then made a solution of the substances, by pureeing the different meats and natural substances. Then I added 1/2 cup of water. Using the pipette, I aspirated 1.5 mls. of the solution and allowed this to drip onto the sponge. I tested all the natural substances alone at first, then the Beef and Chicken alone, and last the natural substance and meats combined. I then recorded my information.

Results

There was great attraction in all the substances even the plain tap water, but the most attraction was, Jalapeno/Beef, Jalapeno/Chicken, Lime/Chicken, Lime/Beef, and especially to the non comination natural substances of paprika, oregano, jalapeno, and citrus lemon. The Lemon/Chicken and Lemon/Beef did not attract as much as the others.

Conclusions/Discussion

My hypothesis stated that the Paprika/Beef would have a greater attraction to the Drosophila. I later found out that I was wrong, it did have attraction but not the most. So now I know that drosophila attract to odor, taste, vitamins, and minerals.

Summary Statement

Which natural substance combined with meats will attract or repel drosophila, fruit flies.

Help Received

High School teacher gave me the Drosophila and my Mother proof read my papers.