



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Allison B. Richina	Project Number J1917
Project Title Comparing Different Various Natural Substances In Attracting and Repelling Drosophila	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to learn if the Drosophila will be attracted to Citrus fruits more than the peppers and spices.</p> <p>Methods/Materials Obtain the Drosophila flies along with the Natural Substances. I divided the Substances into Citrus fruits: Lemon, Grapefruit, Lime, Orange; Peppers: Black, Lemon, Jalapeno, Cayenne, white; and Spices: Mustard, Paprika, Oregano. For each Natural Substance, I placed it along with a 1/2 cup of water in a food processor to make a liquid. 10 Drosophila flies are placed in vial A and vial B. I saturated the sponge lids, and counted the flies at different intervals, 15 min., 30 min., 45 min., and 1 hour.</p> <p>Results The results that I have determined has been obtained by the number of Drosophila landing on the sponge surfaces at 15 min., 30 min., 45 min., and 1 hour intervals. Individually, the highest percentages are orange-45%, Paprika-61%, and Jalapeno-44%. Averaging the test substances under Citrus, Peppers, and Spices are Citrus-38%, Spices-56%, and Peppers-28%.</p> <p>Conclusions/Discussion In conclusion, I found my objective "The Drosophila will be attracted to the Citrus Fruits more than the Spices and Peppers" was incorrect. Taking an average of the Natural Substances, the Citrus Fruits did attract more than the Peppers, but it attracted less than the Spices. Overall, the control attracted very few Drosophila, but any substance of taste or odor will attract the Drosophila.</p>	
Summary Statement The ability of Natural Substances to attract or repel the Drosophila fly.	
Help Received I used lab equipment from our high school, with the assistance of Mr. W. My mom cut letters out at the teacher center.	