

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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Project Number

S1917

Project Title

Comparing Fruit Preferences in Labstock and Wild Drosophila melanogaster

Abstract

Objectives/Goals

Labstock and Wild Drosophila melanogaster, fruit flies, were collected and observed over a number of days in intrivals of about an hour.

Methods/Materials

During each observation period data were collected at the end of 5-minute increments of time to determine fruit preference in thee two different types of D. melanogaster. Equal amounts of each fruit (by weight) were added to a non-nutrient agar media that was poured into agar plates. 4.5 cm diameter discs were cut from the agar plates and evenly distributed in 4-liter plastic containers. Fly preferences were observed in regular light and dim red light.

Results

Results showed that under dim red light flies would only crawl and were not very active. the data tables show that the Labstock flies spent a significat amount of time on the control, which has no nutrients, possibly indicating that the Labstock flies, grown in a controlled atmosphere for many generations, had lower survival skills then the wild flies.

Conclusions/Discussion

Overall the Labstock Drosophila melanogaster slightly preferred the apple medium out of orange, pear, banana, and control. The Wild Drosophila melanogaster preferred orange, but not by a significant amount.

Summary Statement

Over time Labstock and Wild Drosophila melanogaster (fruit flies) were observed in containers in order to compare fruit-type preferences.

Help Received