

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

Kaley E. Mulligan

Project Number

J1916

Project Title

How Does the Coloring and Sweetness of a Flower Affect Bee Visitation?

Objectives/Goals

Abstract

The objective of this project was to determine how the coloring and sweetness of a flower affects bee visitation. My hypothesis was that bees would be most attracted to pink "flowers" with yellow, sweetened centers.

Methods/Materials

I made twenty paper flowers out of five different colors (red, blue, white, yellow, and pink); the centers of the flowers varied (by color and by sweetness). On three different occasions, I set the flowers out for approximately twenty-five minutes each time. I tabulated the number of bees that landed on each flower to determine what the bees were most attracted to.

Results

The total number of "bee visitations" was as follows: white flowers--48, pink flowers--36, blue flowers--33, yellow flowers--33, and red flowers-31. Flowers with sweetened centers--87, with honey--64, with a center--7, and with nothing--4.

Conclusions/Discussion

Due to the number of bee visitations to each type of flower, I concluded that bees were most attracted to white flowers with sweetened, yellow centers. Because these were paper flowers, the results may be different in an experiment with real flowers.

Summary Statement

My project was to determine how the coloring and sweetness of a flower affected bee visitation.

Help Received

My parents helped put together my board.