

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

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Project Number

J1929

Project Title

Hummingbirds Aren't Colorblind, You Know!

Abstract

Objectives/Goals

My objective was to discover what color of hummingbird food Anna hummingbirds (Calypte anna) preferred in late fall.

Methods/Materials

7 hummingbird feeders (90ml)

White, blue, green, yellow, and pink tape

Yellow, blue, and green food coloring

Clear commercial nectar

Red commercial nectar

Cup hooks

Colored tape was used to cover the red on five feeders to offer different colors: white, pink, yellow, blue and green. Clear nectar was colored to match the colors of tape and feeders were filled. Two feeders were left with red plastic showing; one filled with red nectar, the other with clear. Feeders were hung along a corner of the house 25 cm apart. Three one hour observations were made, during which hummingbird visits were recorded each time they drank from the feeders.

Results

First observation: Out of the 28 feeder visits, pink nectar was preferred with 14 visits, clear nectar (white tape) was next in order with 9 visits.

Second observation: Out of the 64 feeder visits, green nectar was preferred with 33 visits, clear nectar (white tape) was next in order with 24 visits.

Third observation: Green nectar was the only feeder visited, with 25 visits.

Conclusions/Discussion

I believe that green was the favored color because there were many green hues in our garden during the experiment time (late fall). The few flowers that were in our garden were small and light in color. In my research, I found one published paper with a similar experiment in Arcata, CA. The author (Heather J. Welker, 1980) also found that green was the color favored by Anna hummingbirds in late fall. I plan on investigating this further by repeating the experiment in each season and noting what colors of flowers are blooming at that time.

Summary Statement

My project shows that, contrary to popular belief, Anna hummingbirds favor green nectar rather than red, in late fall.

Help Received

My mom patiently helped me type and organize my project.