

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

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Project Number

J1618

Project Title

a-MAZE-ing Plants: What Amount of Light Makes a Plant Grow through a Maze the Farthest?

Abstract

Objectives/Goals

The goal of my project was to see what amount of light (a little or a lot)makes a plant grow through a maze the farthest.

Methods/Materials

Part 1: Making the Mazes

- . I got 17 in. x 7 in. boxes
- · I made 4.5 in. x 4 in. cardboard dividers for the maze and I hot glued them into the maze

Part 2: Transplant the Honeysuckle Green Sprouts

- · I bought 18 honeysuckle green sprouts.
- · I took them out of the containers they came in and transplanted into 3.5 in. jiffy pots with a diameter of 3 in.
- · After I put the honeysuckle green sprouts into the jiffy pots I surrounded the plants with E.B Stone Organics Seed Starter Mix, all of the plants all started out at height of three centimeters tall. Part 3: Putting the Plants in the Mazes
- · When I was finished I put one plant in each maze that I built
- · Five mazes had a small hole admitting light I called that type of Maze, Maze A. Five mazes had a medium hole admitting light I called that type of maze, Maze B, and the last five mazes had the whole top cut of and that is where the light was admitted, I called that type of maze, Maze C.

Part 4: Measuring Growth

· I measured the plants every day for the next three weeks using centimeters as my unit of measurement; every time I measured them I watered them.

Results

The plants in my Maze C group (the mazes in which the hole where light entered was the largest) grew the farthest throught the mazes.

Conclusions/Discussion

My hypothesis was correct and the plants in Maze C (the maze in which the most light was admitted) grew through threw the mazes the farthest over a three week time period. Since my control group (plants that was just in a box without a maze) grew taller, that means the limited light in the mazes slowed down the growth of the plants in the other three groups. One of the reasons that light was so limited in the mazes, besides the size of the hole where the light entered, was because the dividers in the maze blocked

Summary Statement

My project is about the impact of light on plants growing through mazes.

Help Received