

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

Jeorgina Lopez

Project Number

J1615

Project Title

The Effect of Bean Mass on Plant Height

Abstract

Objectives/Goals

To investigate whether the mass of a pinto bean affects the height of its plant. I believe that the beans with a larger mass will grow taller plants.

Methods/Materials

The first step was sorting the beans according to their masses. It was designated that the "large" beans would have a mass of 5-6 grams, the "medium" beans have a mass of 4 grams, and the "small" beans have a mass of 2-3 grams. Twenty-four beans from each size were chosen and each bean was planted in individual containers. I observed, monitored the progress, and recorded the data for eighteen days.

Results

The result of my experiment showed that the medium size beans grew the tallest plants. I also observed that the plants germinated faster in a darkened space.

Conclusions/Discussion

Based upon my data, it can be concluded that the medium size beans grow the tallest plants. Therefore, my hypothesis was incorrect. The heaviest cotyledons did not produce the tallest plants.

Summary Statement

I was testing to see if bean mass affected plant height.

Help Received

Mr. Ramirez and Mrs. Mele helped with various aspects of the projects.