CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY

Name(s)
Carolyn C. Pandol

Project Number
J1630

Project Title
Does the Color of Light Affect Plant Growth?

Abstract

Objectives/Goals
I would like to know which color in the light spectrum is most needed for plant growth.

Methods/Materials
Materials: 1)Tinker Toy set 2) 4 colors of plastic wrap and clear wrap 3)tape 4) five small styrofome cups or bowls 5)a package of turnip seeds 6)water 7)fertilizer 8)digital gram sclae or triple beam balance 9)scissors 10)potting soil
method: 1)make 5 boxes out of tinker toys and cover with wrap, different color for every box 2)fill bowls(cups) with potting soil and fertilizer 3) water well 4)plant seeds 5)leave outside in full sun for 3 weeks or more 6) take plants out and wash excess dirt off roots 7) weigh roots and tops separatly

Results
Red was the largest overall. Green was much the same in the growth pattern but was smaller. Blue had the second-largest ratio but was otherwise average. Purple had the largest ratio and the smallest roots. Control was all around average!

Conclusions/Discussion
The plants covered by red plastic grew the largest overall. Plants cover by blue plastic had a greater top to root ratio which confirmed my research.

Summary Statement
I would like to know what color in the light spectum is most needed in plant growth.

Help Received
Dad helped with weighing of plants and most of the project ;