CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY

Name(s)
Brendan J. Chan

Project Number
S1603

Project Title
Secrets to Better Plant Growth

Abstract

Objectives/Goals
My objective was to learn if watering with Liquid Plant Food will help plants grow faster than using other solutions. The purpose of this project was to find out whether different solutions used to water a plant will make it grow faster.

Methods/Materials
Fifteen oregano cuttings were watered with five different solutions. The solutions were Liquid Plant Food, Hydrogen Peroxide, Fish Water, Water, and Green Tea. Three cuttings were watered with each solution. Measurements were taken over a period of 21 days. Plants received a total of ten to eleven hours of light using both sunlight and artificial light. At the end of 21 days, the total average net growth was calculated and analyzed.

Results
Plants watered with Fish Water had the largest total average net growth of 72.7 mm. Green Tea and Liquid Plant Food were tied in second place at 71.0 mm. Hydrogen Peroxide came in third at 66.3 mm, with Water having the least amount of growth at 58.0 mm.

Conclusions/Discussion
The data did not support my hypothesis that Liquid Plant Food would make plants grow the fastest. The Fish Water actually worked the best with 72.7 mm total average net growth, while the Liquid Plant Food tied with Green Tea in second place with 71.0 mm net growth. Though Liquid Plant Food will help plants grow faster, other solutions could be used to grow plants just as fast or faster at a more economical cost.

Summary Statement
This project is about growing oregano cuttings with different solutions and measuring which has the largest total average net growth to see if Liquid Plant Food works the best.

Help Received
Dad helped me obtain all the materials. Mom proofread my project and helped when an extra pair of hands was needed (e.g. measuring plants and gluing the project together). Also, Lori, with Orchard Supply Hardware, showed me how to plant oregano cuttings.