

CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s)

Daniel M. Goodkin-Gold

Project Number

S2007

Project Title

Plant Breath: How It's Keeping You Alive and Helping to Stop Global Warming at the Same Time

Objectives/Goals

Abstract

My project was to determine if certain plants remove more carbon dioxide from the atmosphere than others. I believe that some plants have greater potential for reducing global warming than others.

Methods/Materials

Four plants of different species were each put into a separate biochamber. Each biochamber contained a carbon dioxide sensor and an oxygen sensor. In another biochamber, I placed a light sensor and temperature sensor so that I could correlate carbon dioxide and oxygen readings with light and temperature data. All of the sensors were attached to hand-held units which would record the readings. I then placed each biochamber in the sun from 9 a.m. to 2 p.m. and brought them inside until the next day. I repeated this process for three days.

Results

Of the four plants tested, catnip consistently showed greater declines in carbon dioxide levels compared to the other three plants.

Conclusions/Discussion

My conclusion is that, based on the data, certain types of plants have greater potential for reducing the effects of global warming than others.

Summary Statement

My project was to determine if certain plants are more effective at removing carbon dioxide from the atmosphere than others, and therefore have greater potential for reducing the effects of global warming.

Help Received

Friend's mother helped lay out board; Used lab equipment at Ventura Community College under the supervision of instructor Whiteford