CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY

Name(s)
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Project Number
J1601

Project Title
CO(2): Friend or Foe?

Abstract

Objectives/Goals
My goal is to help the greenhouse industry produce bettter and more fruit production.

Methods/Materials
1. Commercial Greenhouse 2. 36 tomatoe plants 3. 2"X 10' PVC pipe 4.2 PVC end caps 5. 1 drill 6. 1 drill bit 7.two air blowers 8. one roll of duct tape 9. two cylinders of CO2 10. 2" X 6' hoses 11. Hand held CO2 meter 12. one pound reading scale 13. 2 CO2 flow regulators

Results
Sample C(which was control) had the best tomato fruit production at 4.29 lbs average. Sample A (1000-1100 ppm) did second best with 4.01 lbs average. Sample B (600-700) came in last with 3.96 lbs average.

Conclusions/Discussion
I found out that CO2 was not necessary in this perticular greenhouse environment. There was enough atmospheric CO2 coming in the greenhouse. In other greenhouse facilities it may be different. On a sunny day adding CO2 may help tomato fruit production, because the plants take in more CO2 on a sunny day because they need CO2 and sun to make photosynthsis and they need photosynthsis to live.

Summary Statement
Inducing CO2 into greenhouse tomtato plants to monitor there growth and devolopment of the plant fruit by weight.

Help Received
Ciro Garcia day to day manegment; Rene Beusen mentor; TopFlavor Farms for letting me use the facilities