



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

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| <b>Name(s)</b><br><b>Raquel E. Solis</b>   | <b>Project Number</b><br><br>23354 |
| <b>Project Title</b><br><b>Does a Greenhouse's Glass Affect Plant Growth?</b>  |                                    |
| <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b><br/>My objective is to determine whether the thickness of the glass walls of a greenhouse affects plant growth.</p> <p><b>Methods/Materials</b><br/>Four glass cubes with thickness of : 1/16", 3/16", 1/8", and 1/4". Five thermometers were used to measure temperature as well as a centimeter ruler to measure growth. Planted radish seeds in five containers. The fifth container was used as a control. The control was outside of any glass. Measured growth and temperature and growth for eleven days. Watered when necessary.</p> <p><b>Results</b><br/>Radishes in the 3/16" cube and in the natural environment ( the control) grew faster. They grew bigger in the 1/4" cube. 1/8" cube had the slowest growing plant. The plant in the 1/16" cube grew at a steady rate.</p> <p><b>Conclusions/Discussion</b><br/>My project proved me half right. I thought that the plant in the 1/4" cube would grow faster and bigger. It only grew bigger.</p> |                                    |
| <b>Summary Statement</b><br>My project is to test the affects of the thickness of greenhouse glass on plant growth.  |                                    |
| <b>Help Received</b><br>Mother helped decorate, Father glued the glass together ( it was too sharp for me); Used teacher's laptop  |                                    |