



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>Adam Z. Kalawi</b>	<b>Project Number</b> <b>J1625</b>
<b>Project Title</b> <b>Does the Color of Light Affect Plant Growth?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My objective is to find out how different light colors affect plant growth. <b>Methods/Materials</b> <ul style="list-style-type: none"><li>- 4 boxes</li><li>- Colored Transparencies: Red, Blue, Green, Yellow, and Clear.</li><li>- 5 flower pots and plastic bowls (for drainage)</li><li>- 15 lima bean seeds</li><li>- Potting soil</li><li>- Tap water</li><li>- 5 rulers</li><li>- Scissors</li><li>- Box cutters</li><li>- Construction paper in Red, Blue, Green, Yellow, and White.</li><li>- Tape</li><li>- Cup</li><li>- Paper towel</li></ul> I built three boxes with 5 different colored transparencies on top and front. I planted seeds about ½ inch into the pots and let them grow. I recorded measurements every 2-3 days. The Plants were shown different colored light. There were 3 different plants for each different colored light. I measured overall height and leaf width for the tallest and best plant of each color. <b>Results</b> The red grew the tallest, but the transparent was the healthiest. The blue died midway through the project and the yellow was close to beating red. The green did poorly. <b>Conclusions/Discussion</b> My hypothesis was somewhat correct because red was the tallest and green was the worst living plant. I did not expect that the transparent plant would be the healthiest. I conclude that if you want a healthy plant show the plants the full color spectrum, but if you want a tall plant you should only show the plant red light.	
<b>Summary Statement</b> Finding out how different colored lights affect plant growth.	
<b>Help Received</b> My mother helped setting up project and using the paper cutter and box cutter.	