



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> <b>Ravi K. Bhatia</b>	<b>Project Number</b> <b>J1602</b>
<b>Project Title</b> <b>How Does the Germination Rate of a Plant Affect Its Ability to Outcompete Another Plant Species for Growing Space?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> I asked how plant germination rates affect their ability to outcompete other plants for space. I hypothesized that faster germinating plants would outcompete slower germinating plants.</p> <p><b>Methods/Materials</b> Tomato and broccoli were fast germinators, and garlic chive and creeping thyme were slow. I created an area for the pots, then transplanted seeds into pots. One pot carried tomato and garlic chive (A), and another carried broccoli and creeping thyme (B). The control pots carried each individual plant (C,D,E, and F). I watered and measured the plants for six weeks, doing five trials.</p> <p><b>Results</b> By itself, the average tomato plant was 11.26 cm, and was 5.76 cm with the garlic chive. The garlic chive was 9.4 cm with the tomato, and 3.92 without. The thyme was .26 cm with broccoli, and .78 without. The broccoli was 9.98 cm with chives, and 11.96 without.</p> <p><b>Conclusions/Discussion</b> These results proved my hypothesis false, proving that germination rates do not affect plant competition.</p>	
<b>Summary Statement</b> My project asks if the germination rate of a plant affects its ability to outcompete another plant species for growing space.	
<b>Help Received</b> Mother helped glue everything onto the project display board	