



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> Nasser M. Akkari	<b>Project Number</b> <b>J1702</b>
<b>Project Title</b> <b>Moving to the Frequency!</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> For my project, I decided to find out if different pitches of sound affect the way a plant grows. My hypothesis was that the different pitches of sound would affect the way a plant grows.</p> <p><b>Methods/Materials</b> I exposed the plants to 3 different sound pitches (low,medium,high) all at the same volume and all at 44.100 kilohertz. I recorded the plants' growth and health every other night at 7 o'clock P.M.</p> <p><b>Results</b> After recording for 10 days, I found the medium pitch did the best in height (with an average growth of 5.93 centimeters) while the low pitch did the best in health (with an average health of 1.33).</p> <p><b>Conclusions/Discussion</b> My hypothesis ended up being correct due to the fact that the growth of the plants were affected by different sound frequencies. The possible reason this happened was because the sound waves caused the plants to vibrate thus altering the way the plants grew.</p>	
<b>Summary Statement</b> Will different sound frequencies affect the way a plant will grow?	
<b>Help Received</b> My mom helped me make a few decisions on what to use for the materials.	