



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>Maya J. Mileck</b>	<b>Project Number</b> <b>S1611</b>
<b>Project Title</b> <b>Saline Soils and Hay Crops</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of my project was to determine which of four hay crops--barley, oats, vetch, or peas--is most tolerant of saline soils. <b>Methods/Materials</b> The different seed types were planted in soil with a range of salinities, created by adding various amounts of table salt to soil. The control was the soil containing no added salt. The plants were then allowed to grow for 16 days before being gently removed from the soil. The roots were then rinsed, and the plants were dried and weighed. <b>Results</b> I compared the different plant types to one another by finding their weight as a percentage of their control. The results for the lower salinities were inconsistent. At the higher salinities, a pattern developed. The barley was the most tolerant, then the oats, the vetch, and finally the peas. <b>Conclusions/Discussion</b> The results were inconclusive, although they did lean toward my background research at the higher salinities where the pattern developed. To make a final conclusion I would need to repeat the experiment, growing the plants for a longer period of time in order to make the weight of the seeds negligible, as I believe this was the primary factor that skewed my results.	
<b>Summary Statement</b> My project tested the tolerance of four hay crops to different soil salinities.	
<b>Help Received</b> My father provided me with the books I used for my background research, as well as my materials and advice.	