



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> Mariel A. Lisud	<b>Project Number</b> <b>S1608</b>
<b>Project Title</b> <b>The A's Melee: Allicin vs. Acid Rain</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> To determine whether acid rain deters the antibacterial component of garlic</p> <p><b>Methods/Materials</b> Acid rain was applied on one group of garlic plants and another group of garlic was sprayed with normal water. The juices of the two garlic groups were separately extracted then applied to a culture of bacteria then incubated.</p> <p><b>Results</b> The petri dish applied with the acid-rained garlic plant extract developed an average of 121 colonies, while the petri dish with the pure-watered garlic plant extract developed only an average of 22 colonies.</p> <p><b>Conclusions/Discussion</b> Bacteria are inhibited less effectively by garlic plants watered with acid rain than by garlic plants watered with pure water. Therefore, acid rain does discourage allicin, the antibacterial component, from inhibiting bacteria effectively.</p>	
<b>Summary Statement</b> It is about acid rain's effect on the make-up of garlic plants' antibacterial component.	
<b>Help Received</b> Ms. Della Santina supplied laboratory equipments (petri dishes, incubator, refrigerator, etc.)	