



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> Angela Wirsching	<b>Project Number</b>  22878
<b>Project Title</b> UV Light and Bacterial Decay	
<b>Objectives/Goals</b> To determine whether UV Light has any effect on the bacterial decay of spinach leaves	
<b>Abstract</b> To determine whether UV Light has any effect on the bacterial decay of spinach leaves	
<b>Methods/Materials</b> Materials: Short/long wave ultraviolet lights, spinach, protective clothing, sun glasses, electricity, water, dirt/bacteria, Ziploc baggies, cooler. Procedure: 1. Pick out ninety healthy spinach leaves and dip in a solution of dirt and water. 2. Divide the ninety leaves into three groups of thirty. Place one the groups of thirty under the UV light and expose for one minute. Keep in a plastic baggie and cooler. 3. Take the second group of thirty and place under the UV light for five minutes. Keep in a baggie and cooler. 4. Take the third group and place in the same cooler and a baggie. 5. Each day expose the two groups to the UV light, once the leaves begin to decay remove them and throw away, each day check the leaves in the cooler also. 6. Record data by how many leaves have decayed.	
<b>Results</b> The leaves exposed to UV light for five minutes and the leaves not exposed at all decayed faster than the leaves for one minute exposure. Yet the leaves with no exposure decayed faster than the leaves exposed for five minutes	
<b>Conclusions/Discussion</b> Thus, I concluded that UV light does sterilize. Yet too much light, say five minutes destroys the leaves. While one minute seems to be the right amount for sterilization.	
<b>Summary Statement</b> My project is about UV light slowing bacterial decay.	
<b>Help Received</b> Teacher helped conceive idea; Mother helped design board	