



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Christina M. Regan	Project Number J1721
Project Title The Effects of Microwaved Water on Basil Plant Growth	
Abstract Objectives/Goals In this experiment, I tested fifteen basil plants to see if watering them with microwaved water had any effect on their growth. This question is important because if the microwaved water has a negative effect on the basil, then it is possible that the microwave has a negative effect on the food that I eat! Methods/Materials I watered fifteen basil plants over a period of twenty-eight days. Five plants were given water that had been boiled in the microwave. Five plants received water that had been boiled on the stove. The last five plants were given water that had not been boiled at all. All of the other variables were the same for each plant. Results All of the plants were in the same condition when I started the experiment. But, by day twenty-eight I noticed some important differences. On average, the plants that were given microwave-boiled water had almost three times as many dead leaves as the plants that received stove-boiled water, and nearly four times as many dead leaves as the plants that were given non-boiled water. Conclusions/Discussion The results of my experiment showed that the microwave did have an effect on the growth of basil plants. The reason for these results could be due to the way the microwave heats water. When water is heated in the microwave the friction causes the molecules to crash into each other. It is possible that the structure of the molecules becomes damaged in this process. I think that the plants that were given this water became weak and prone to disease, which caused their leaves to die.	
Summary Statement My project examines whether microwaved water has any effect on the growth of basil plants.	
Help Received Uncle helped me decide which type of plants to test in experiment; Mom helped type parts of report after I had written them and helped me take pictures.	