



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Sydney S. Gannon	Project Number J1715
Project Title Does Wi-Fi Make Plants Die?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective is to study the growth of wheatgrass seeds in 2 environments. The 1st environment is next to a Wi-Fi router. The 2nd environment is away from a Wi-Fi router. A negative or positive impact on plant growth in the Wi-Fi environment may suggest a negative or positive impact on human health.</p> <p>Methods/Materials Materials: containers, bowls, plates, plastic wrap, potting soil, wheatgrass seeds, water, strainer, pitcher, tablespoon, measuring cup, ruler, thermometer, Wi-Fi router, paper, marker, camera, notebook, pencil</p> <p>Methods: 1) Sprout the wheatgrass seeds 2) Plant one tablespoon of sprouted seeds in each container 3) Give each container ½ cup of water 4) Place 4 containers next to a Wi-Fi router and 4 containers away from the Wi-Fi router. All containers are placed 65 inches from the ground with a similar amount of sunlight and temperature. 5) Water each container daily with ½ cup of water 6) For 10 days, measure the height, number of sprouts, and wheatgrass color 7) Record data and take photos daily 8) I determined it would be helpful to measure the room temperature and started measuring the room temperature on the 4th day.</p> <p>Results -The sprouts growing next to the Wi-Fi were 20 to 25 mm taller than the sprouts away from the Wi-Fi. -The number of sprouts growing next to the Wi-Fi was 100 to 180 sprouts greater per container than the number sprouts growing away from the Wi-Fi. -Both sets of sprouts turned from white to light green to darker green. The sprouts growing next to the Wi-Fi grew darker sooner over the 10 days. -After the 3rd day, I noticed the sprouts next to the Wi-Fi were growing better. I therefore decided to measure the room temperature. The room temperature was one to two degrees higher in the area with the Wi-Fi router.</p> <p>Conclusions/Discussion The results did not support my hypothesis because the sprouts next to the Wi-Fi router grew taller, thicker, and darker during the 10-day measurement period. I believe more research should be done regarding Wi-Fi routers and radiation to protect all living things.</p>	
Summary Statement The point of this project is to determine if Wi-Fi radiation has a positive or negative impact on plant growth.	
Help Received My mom helped purchase the materials and gave guidance during the measurement phase. My dad taught me how to use Excel to great graphs from spreadsheets.	