



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2019 PROJECT SUMMARY**

Name(s) Krish Maheshwari	Project Number J2112
Project Title Effect of Wi-Fi Signals on the Growth of Pea Shoot Plants	
Abstract Objectives The objective is to determine if Wi-Fi signals affect the growth of pea shoot plant in terms of height, weight and number of leaves. Methods Materials required were:- Wi-Fi routers(2),Pea Shoot seeds(16 oz), Soil (30 Oz),Peat Moss(30 oz),Growing Trays(8),Spray bottle(1),Measuring tape in cm(1),Cardboard boxes(4),LED growing lamps(4),Kitchen Weighing Scale(1),Sieve(1),Muslin Cloth(1). The Pea Shoot seeds were soaked and germinated and planted in 8 trays using the soil and peat moss. Two trays with Pea Shoots were put under each of cardboard boxes, which were placed at increasing distances from the Wi-Fi routers. Each cardboard box also contained a LED Growth lamp. The growth lamps were switched on for 7 hours per day for next 3 weeks. Each week the height and number of leaves on the pea shoot plants in various boxes was recorded. At the end of three weeks the weight of pea shoot plants in the four cardboard boxes was recorded. Results The height or number of leaves on the Pea Shoot plants did not show any clear correlation to the distance from the Wi-Fi routers. However on the other hand, the Pea Shoot plants that were furthest from Wi-Fi source weighed more at the end of three weeks as compared to the others. Conclusions The height and the number of leaves on Pea Shoot plant are not affected by the distance from Wi-Fi source, but the weight seems to increase as the distance from Wi-Fi source is increased.	
Summary Statement I determined that height and number of leaves in Pea Shoot plant are not affected by Wi-Fi Signals but weight is affected negatively.	
Help Received I selected the topic and process. My science teacher asked me to add a few more variables.The experiment was conducted entirely by me at my home.	