

Ashlyn Rockey

*Flow or No: Will You Grow? Water Deficit of Quinoa*

Drought conditions are being experienced in areas throughout the world. It affects farmers who grow crops for human consumption worldwide. Learning to adapt to these conditions are an important part of a farmer's job. Quinoa farmers are a part of this struggle to keep crops alive. Therefore, testing different amounts of water to give a crop of Quinoa can help determine the best yield of the crop. I hypothesized that 27.63 centimeters of water was the best amount of water to give a crop of quinoa. My experiment was based on 31.19cm, 27.63cm, 23.52cm, and 19.53 centimeters of water sporadically given to a crop of quinoa. With these amounts of water, I grew a crop of quinoa that lacked production, or seed. This was due to insect pressure. I discovered which had the best potential yield, using the reproductive weight and plant population. I determined that when we watered the crop of quinoa 31.19 centimeters of water, we got the highest yield. Thus, my hypothesis wasn't supported.