A Two-Year Study: How Does Planting Configuration and Irrigation Method Affect Soybean Growth?

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The purpose of this field study is to observe which planting configuration produces the highest yield for farmers. The planting configurations of twin row, single row, and broadcast will be used in soybean fields and observed for growth and yield. The second part of my field study involves the need for irrigation in farming. Two broadcast fields will be evaluated through one dry farmed and one irrigation flooded. I predict the number of soybeans planted in a row, directly affects the yield produced. Also, I predict the irrigated broadcast will have an improved yield and growth pattern compared to the dry farmed broadcast. The soybean fields were checked on average every two weeks for the growth in height and width of the soybean plant, leaf length and width, and any additional changes to the plant. The fields were treated similarly, however, there were a few differences including irrigation and desiccate application. In conclusion, the student was able to accept both parts of the hypothesis. At the end of the growing season, the twin row field had the largest growth and highest yield. Farmers can utilize twin-row planting to maximize their yield which increases crop revenue. The irrigated broadcast planting method proved irrigation increases yield and growth patterns in broadcast fields. If a farmer was to plant using the broadcast configuration, it is proven irrigation will help maximize the yield. The data from this field study can be used in any area worldwide as long as the soil type and the growing season are similar.

Awards Won: