

Background

The agricultural extension officer has advised bean farmers to plant their crop under improved soil conditions, defined by

- well drained soils
- Use of fertilizers

Methodology

Rose Cocoa Beans were planted on the school's experimental plot. The neighbor's plot was used as the control plot. The crops were planted on the same day on both plots. On the sixth week, a sample of forty beans was selected from each plot and their height determined

Research questions

- Is growth rate in the experimental and control plots different?
- Is the distribution of growth in the experimental and control plots different?

IS THE AGRICULTURAL EXTENSION OFFICER RIGHT ?

An experiment on growth of beans under improved soil conditions

Conclusion

Growth Rate

The bean plants on experimental Plot were distributed with a height of 11.4 cm and a median of 11 cm while the ones on the control plot had a distribution with a mean of 7cm and a median of 4.1cm. This implies that growth of beans under the recommended improved soil conditions yields better results

Growth Distribution

The experimental plot yielded a more evenly distributed growth rate. This is due to the fact that the soil conditions are controlled.

Advise to Farmers

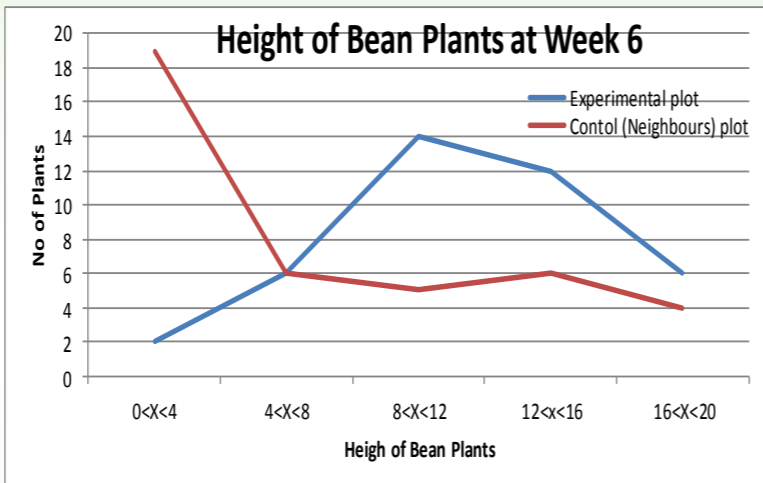
Growth of beans under improved soil conditions ensures a faster rate of growth which leads to higher yields. Growth rates are also more evenly distributed under improved soil conditions which makes it easier for a farmer to predict the yields.

Farmers should adopt the advise given

The Experiment Results

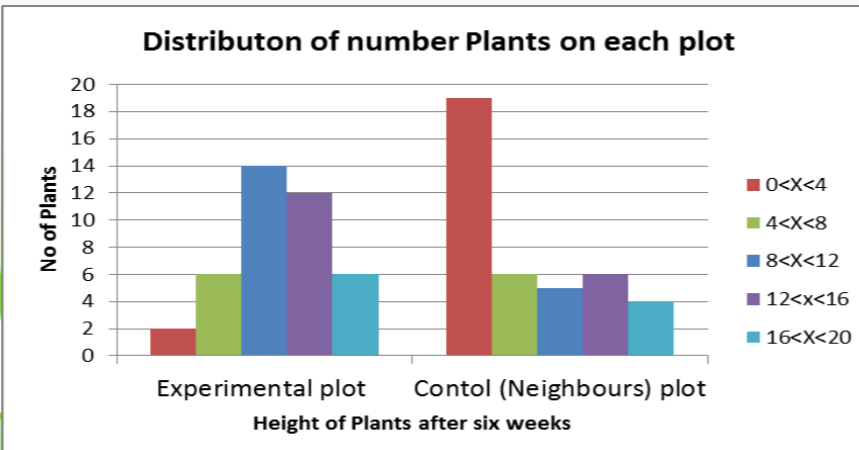
Height	0<X<4	4<X<8	8<X<12	12<x<16	16<X<20	Total
Experimental plot	2 (5%)	6 (15%)	14 (35%)	12 (30%)	6 (15%)	40
Control (Neighbours) plot	19 (48%)	6 (15%)	5 (12%)	6 (15%)	4 (10%)	40

Data Analysis and Findings



Rate of Growth

	Mean	Median	Mode
Experimental Plot	11.4	11	8<X<12
Control Plot	7	4.13	0<X<4



Growth Distribution

The experimental Plot had more of the bean with height greater than 8 cm. The control plot had more beans of height less than 4cm.

The distribution of growth was **even** in the experimental Plot

The distribution of growth in the control plot was **uneven**. There was a higher concentration at the lower side of the scale

