How much does fertilizer affect the growth of plants?

My estimates:

* I think that the plant that is growing with fertilizer will grow to be a stronger, bigger and grow faster than the other plant because the fertilizer gives the plant more nutrients.
* Maybe the plant with the normal soil will grow to be a healthier option because it is grown with no fertilizers or anything of the sorts.
* Perhaps the plant growing in fertilizer will be a different colour because in the past when growing plants with fertilizers they have been discoloured from the plants I see at the mall grown without a fertilizer.

Experiment:

I will test the growth of plants with fertilizer and without fertilizer. I will set up 4-5 different pots with varying levels of fertilizer in them. Then after days of observation I will measure the difference in growth of the plants and indicate the results on a chart.

Testing:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Plants: | Plant 1 | Plant 2 | Plant 3 | Plant 4 | Plant 5 |
| Amount of fertilizer: | 100% fertilizer | 75% fertilizer | 50% fertilizer | 25% fertilizer | 0% fertilizer |

Plant 1: This one had the most fertilizer and it grew the most. It stemmed from its seed and grew out of the fertilizer and was very visible when looking at it.

Plant 2: This one was about the same as plant 1 but it took longer for it to grow but in the end It was just as big as plant 1.

Plant 3: Plant 3 was different in the sense that it grew to the point where you could see it but it was much smaller than plant 1 and 2.

Plant 4: Plant 4 did not have enough time to sprout out of the soil but it stemmed from its seed.

Plant 5: This one did not have enough time to spring from its seed.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Plants: | Plant 1 | Plant 2 | Plant 3 | Plant 4 | Plant 5 |
| Amount of fertilizer: | 100% fertilizer | 75% fertilizer | 50% fertilizer | 25% fertilizer | 0% fertilizer |
| Growth: | 5cm height | 5cm height | 2.7cm height | 1.2cm height | 0cm height |

I was right, I hypothesized that the amount of fertilizer would affect the growth and I was right. I guessed that this would happen because other scientific studies have found the same thing. I think that the experiment would be better if I had tested the growth longer to get better results.