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|  | * Conclusion: After carrying out our experiment and analyzing the data, our results concurred with our predictions. The sweet pea plants that were given Miracid fertilizer grew the most, while those receiving the Fish Emulsion fertilizer were significantly smaller. This agrees with our prediction because Miracid contains 30% of nitrogen while Fish Emulsion only contains 5% of nitrogen. Even though the KelpSeaLife fertilizer contains 30% of nitrogen as well, the sweet pea plants receiving it did not show a significantly greater growth like they did with Miracid. This is probably because besides nitrogen Miracid contains many other macro- and micronutrients that affect the plant growth while KelpSeaLife only contains Nitrogen, Phosphate and Potassium. In addition, probably for the same reason, did the plants receiving Super plush Lawn food have a great growth. Super plush Lawn food contains a great amount of nitrogen, but in addition to that also contains a variety of other nutrients that help the plants in their growth. Even though according to our results nitrogen is the most important nutrient contributing to plant growth, the growth of a plant will also be stimulated by other nutrients like Phosphorus, Potassium, Calcium, Sulfur, Iron, Manganese and Zinc. This was also reaffirmed by the significantly bigger growth in the plants that were potted in the supersoil compared to those potted into the creek soil, which was probably not rich in essential nutrients. Additionally, it is important to note that even in the creek soil, which was very poor quality soil, a plant given the fertilizer Miracid grew to practically the same height as the plant grown in Supersoil and Miracid. This would suggest that the nutrients available to the plant are much more important than the medium the plant is grown in. * Recommendations: To maximize the growth of a plant: S Use nutrient rich soil. S Use a fertilizer with high nitrogen concentration. S Use fertilizer with a wide variety of nutrients  To choose soil: S Preferably "manmade" S Look for high nitrogen content S Look for variety of nutrients present S If not manmade, look for nutrient rich soil. Creek soil is not necessarily rich in nutrients. * **Future Projects like this one:** Concentrate more on the comparison between the nutrients rather than the soil; eliminate the lurking variables of the soil by growing the plants in water, rocks, and nutrients *without* soil so that the growth would only be affected by the nutrients themselves. | |
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