The Impact of Compost Composition on Plant Growth

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Decomposition is nature’s way of recycling. Organic matter breaks down over time and will turn into a black substrate containing nutrients that plants use. In this project tomatoes, bananas, pears, strawberries, potatoes, and regular compost were tested to see how each one's soil composition affects plant growth. In this experiment lettuce was used as the plant that would grow. Each food contains different amounts of nutrients, so when it was decomposed that nutrients from each food either decomposed too or was used as nutrients and food for the lettuce. If more fruits and vegetables decompose and provide more nutrients and nitrites then the result of the plant will grow bigger, faster, and healthier. The experiment was constructed first by cutting up the foods and putting them into six five gallon buckets. Each food was put in its own separate bucket and mixed with already made compost, so the project would be more effective. Then the fruits and vegetables had to decompose for the next several months and then once it was December 1st the compost mixture was put into tupperware containers so the lettuce seeds could be planted. Lastly, maintenance on the plants were required to keep the plants from dying by keeping the plants warm, watered, and maintaining a working grow light on them.

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