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Can You Dig It?

The purpose of this project was to determine if the soil type would affect the way a sweet potato grows. Sweet potatoes have expansive root systems and need room to spread out. Based on our research we hypothesized that the sweet potatoes would grow differently in each medium used because the growth of roots might be restricted.

Our experiment involved using four different mediums- rocky, dirt, potting soil, and sand. Each type of medium was replicated in three separate buckets. The experiment involved us sprouting sweet potatoes in water, potato slips. After the potato slips were started the potatoes were put into the mediums and were watered in a pattern – once a day, every other day, two times a week, once a week. The growth of the leaves and height of each plant was measured weekly.

Preliminary data supports our hypothesis. There was a lot of variation in growth patterns. Growth data is as follows: sand= an average of $\frac{1}{2}$ an inch a week, potting soil= an average of $\frac{1}{4}$ an inch a week, rocky soil= an average of $\frac{1}{4}$ inch a week or they didn't grow at all, dirt= an average of $\frac{1}{4}$ an inch a week. Leaf count varied on each plant. Data collection is on-going.

The preliminary data collected showed that the sweet potatoes in the sand did the best and the ones in the rocky soil did the poorest.