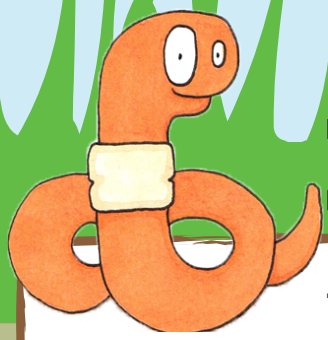

Experiment!

What Effect Does Compost Have on Plant Growth?

Purpose: To determine the effect compost has on how a plant germinates from seed and how well it grows.

Materials:

- Pots or planting trays
- Compost
- Soil mix ideal for types of seeds but without added fertilizer or compost
- Seeds (fast growing seeds with high germination rates, such as radish or lettuce)
- Light source (natural or artificial)

Procedure

While there are different ways to test how compost may affect plant germination and growth, these designs are simple to do in the classroom. Each student or group should be responsible for two to three plants (one control, one with compost, and one more optional plant with compost).

Two/Three Plant Experiment

For this experiment, two seeds are planted. One seed is planted in a pot with the plain soil, the other is planted in a mixture of 50% soil and 50% compost. Refer to the seed packet for planting directions.

For a Three Plant Experiment, you can choose to vary the amount of compost used. For example, one plant may use 25% soil and 75% compost or vice versa.

All of the plants should be placed in the same location to minimize any environmental differences. Refer to the seed packet for care instructions such as the hours of light required and frequency and amount of watering.

Record the progress of the plants daily. Note characteristics such as:

- When the first sprouts are visible
- Plant height/size
- Number and size of leaves
- Color, discoloration or signs of disease

Analysis and Interpretation

There are different ways of analysing and interpreting the data collected.

1) Compare the characteristics of each plant by using the data collected to create graphs and charts. What does the data indicate?

2) Create graphs as above using data from the entire class. What does the data indicate? How are the results different from one student's or group's experiment and explain why there may be differences. Sometimes differences may not be found due to uncontrollable variables. Explore what those variables might be.

3) Create a conclusion based on your findings. What recommendations would you make for using compost with these types of seeds?