

Vermicomposting Activity: Potting Mix Experiment

DESCRIPTION

Students will test the effects of using compost as a soil enhancer, by comparing the health and growth of two plant seedlings, to demonstrate how nutrient-rich vermicompost can help plants grow.



BACKGROUND INFORMATION

- Vermicomposting organic waste helps us send less garbage to the garbage dump.
- Finished vermicompost is made from worm castings and other decomposed organic material.
- Decomposer organisms break down organic material and recycle nutrients back into the soil.
- Finished vermicompost, or humus, makes healthy soil and healthy plants.
- The earth gives us everything we need to live. Vermicomposting helps us give back to the earth.

MATERIALS



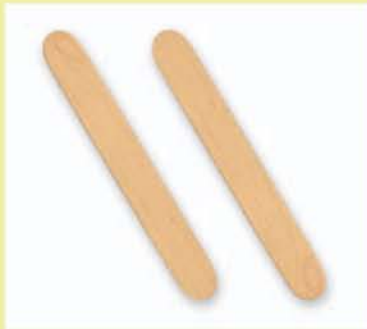
Harvested vermicompost



Two hardy seeds such as peas



Watering can



Two popsicle sticks



Potting soil (no added fertilizer)



Two equal size flower pots



Ruler



Marker or pen

PROCEDURE

1. Fill one flower pot with potting soil.
2. Fill the other flower pot with a mixture of 50% potting soil and 50% vermicompost.
3. Add a seed to each pot.
4. Identify each pot by labeling and dating the popsicle sticks and placing them in the soil.
5. Place both of the pots in the same sunny location.
6. Water seedlings as necessary.
7. Observe the health and appearance of each seedling and record your observations as a class on the table provided (you may want to make a large poster to show students the results).
8. Use a ruler to measure the growth of each seedling and record your measurement as a class on the table provided.
9. Try experimenting with other potting soil and vermicompost mixtures.



PREDICTION QUESTIONS

1. Which seedling do you think will grow faster?
Why?
2. Which seedling do you think will look healthier?
Why?

FOLLOW-UP QUESTIONS

1. Which seedling grew faster?
2. Which seedling looks healthier?
3. What is vermicompost made from?
4. How does vermicompost help plants grow?

TABLE 1: VERMICOMPOST AND PLANT GROWTH

DATE PLANTED: _____		POTTING SOIL	POTTING SOIL & VERMICOMPOST
Example WEEK 1	What do you see?	<i>TWO SMALL LEAVES</i>	<i>TWO SMALL LEAVES</i>
	How tall is the plant?	<i>4mm</i>	<i>4mm</i>
WEEK 1	What do you see?		
	How tall is the plant?		
WEEK 2	What do you see?		
	How tall is the plant?		
WEEK 3	What do you see?		
	How tall is the plant?		
WEEK 4	What do you see?		
	How tall is the plant?		
WEEK 5	What do you see?		
	How tall is the plant?		
WEEK 6	What do you see?		
	How tall is the plant?		

