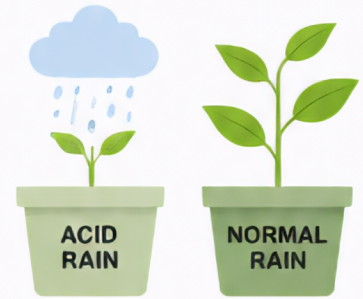




TESTING THE EFFECT OF ACID RAIN ON PLANT GROWTH

QUESTION: How does acid rain affect the growth of plants?



PURPOSE

To investigate how acid rain (water with a low pH) affects the growth of plants compared to normal rain (neutral water).

HYPOTHESIS

If plants are watered with acid rain, then they will grow _____

because _____

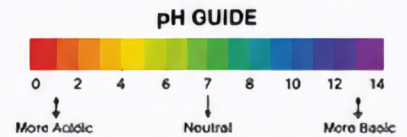
_____.

MATERIALS

- 2 small pots (or more for repeats)
- Potting soil
- Fast-growing seeds (e.g., radish, bean, or grass)
- Water
- White vinegar
- pH test strips or pH meter
- Measuring cup
- Spray bottle or small watering can
- Ruler
- Notebook or data sheet (this page)
- Labels or marker

MAKING "ACID RAIN"

Mix 1 part white vinegar with 4 parts water.
This should have a pH around 4–5.
(Test with pH strips to check.)
This mixture will be your "acid rain."



PROCEDURE

1. Fill both pots with the same type and amount of potting soil.
2. Plant the same number of seeds in each pot. Label one pot "ACID RAIN" and the other "NORMAL RAIN".
3. Place the pots in the same location with the same amount of sunlight.
4. Water both pots with the same amount of water every day.
 - Water the "ACID RAIN" pot with the vinegar-water mixture.
 - Water the "NORMAL RAIN" pot with regular water.
5. Keep all other conditions the same.
6. Observe and measure the plants for 10–14 days.
7. Record your data and make observations each day or every few days.

DATA TABLE

Day	0 (Start)	2	4	6	8	10	12	14
ACID RAIN Average Plant Height (cm)								
NORMAL RAIN Average Plant Height (cm)								
Observations (Color, leaf size, wilting, etc.)								

ANALYSIS QUESTIONS

1. Which plants grew taller? _____
2. Did the color or size of the leaves differ between the two pots? _____

3. What do you think caused any differences you observed? _____

4. What is one way acid rain could affect plants in nature? _____

CONCLUSION

My conclusion:

