

Nutrient content, pH, and soil testing

Materials

- 100 ml of soil
- Large beaker
- Water
- Spoon
- Nutrient Test Kits: RapiTest Soil Kit, Aquarium Pharmaceutical Kit

Directions

Day 1: Prepare soil for nutrient testing

1. Put about 100 ml of soil in a large beaker (from amount collected for previous activity). Add 500 ml of water to the soil and mix thoroughly with a spoon.
2. Label the beaker with the location the soil was collected and let sit overnight.

Day 2

3. Test the pH of the soil by taking a small amount of soil (to the soil line in the green container). Add water up to the fill line. Shake vigorously. Add the contents of the green capsule to the mixed water. Shake again to mix. Allow to sit for five minutes.
4. Use the nutrient test kits to determine the level of N, P and K in your soil samples.

RapiTest soil kits

For N, P, K tests:

- Fill the container with liquid from soil (prepared as above) to the fill line on both sides of the chamber.
- Add the appropriate powder from the color-coded capsule to the small chamber.
- Replace cap, then shake to mix. Let sit for 5 minutes.
- Determine the level of N, P, K.
- Create a data table to record your results.

Aquarium Pharmaceutical kits

- Fill a test tube with 5 ml of soil liquid (prepared as above).
- Follow instructions on card for Ammonia, Nitrate and Phosphate. Read the amount of each by comparing to the color chart on the card.
- Create a data table to record your results.

5. Compare the results you got for the two different testing methods.

Reflection

1. What soil amendments may need to be added to make your soil fit for the crop/plant you want to plant?
2. How might you change the pH of your soil, if needed?