

Soil test instructions: Rapitest kit

How might we measure the macronutrients in soil samples? How might we test pH?

This method uses the soil nutrient test kit found here: http://www.lusterleaf.com/nav/soil_test.html

Materials

Rapitest soil test kit, 1601
100-500 mL beaker, 1 per sample
Soil samples
Disposable pipettes

Procedure

Preparation

1. Set up filtrate: Add 1 part soil to 5 parts water. Stir vigorously for 1 minute, then let settle overnight.
2. Spread out a small portion of the soil sample on a paper towel to dry overnight.

Testing pH

3. Use a dry sample of soil to the fill line in the test chamber (smaller) of the pH (green) container.
4. Open the test capsule (green), then add contents of the capsule by pouring in the powder.
5. Use a pipette to add distilled water to the fill line of the container's test chamber.
6. Cap the container firmly. Shake the container for 1 minute. Allow the color to develop for 1 minute.
7. Determine the pH by comparing the color to the chart on the container.

Testing Nitrogen, Phosphorus, and Potassium

8. Use a pipette to remove soil filtrate from the beaker.
9. Fill both chambers of the container with the filtrate.
10. Open the capsule and add the appropriate powder (N = purple, P = blue, K = orange) to the smaller test chamber in the matching container.
11. Cap the container firmly. Shake the container for 1 minute. Allow the color to develop for 5-10 minutes.
12. Determine the amount of N, P, or K by comparing to the color chart on the container.
13. Create a data table below to record your results.

This document may be reproduced for educational purposes, but it may not be reposted or distributed without crediting GrowNextGen and the Ohio Soybean Council and soybean checkoff.