

# Soil pH Protocol

## Lab Guide

### Task

To obtain three pH readings for a soil horizon

### What You Need

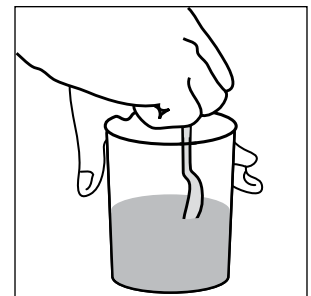
- Dried sieved soil
- Distilled water
- 100-mL graduated cylinder
- Four 100-mL containers
- Balance (accurate to 0.1 g)
- [pH Data Sheet](#)
- Pencil or pen
- Glass stirring rod or other stirring device
- pH meter or pH paper

### In the Lab

1. In a cup or beaker, mix 40 g of dried and sieved soil with 40 mL of distilled water (or other amount in a 1:1 soil to water ratio) using a spoon or other utensil to transfer the soil.



2. Stir the soil/water mixture with a spoon or other stirrer until it is thoroughly mixed. Stir the soil/water mixture for 30 seconds and then wait for three minutes for a total of five stirring/waiting cycles. Then, allow the mixture to settle until a supernatant (clearer liquid above the settled soil) forms (about 5 minutes).



3. Measure the pH of the supernatant using the pH paper or meter. Dip the pH paper or calibrated pH meter in the supernatant. Record the pH value on the *Soil pH Data Sheet*. If pH meter requires calibration, gloves should be worn.
4. Repeat steps 1-3 for two more samples from the same horizon.

