



SAMPLING INSTRUCTIONS FOR SOIL TESTING

All samples must be accompanied with a Soil Submission Form. For most accurate results, samples submitted for biological analysis must be sent Next Day Air. **Ecoli tests cannot be performed on samples received on Fridays.**

SOIL SAMPLES

Chemical Analysis

- For lawns and row crops, take 10 representative 1" diameter cores 3-6 inches deep, if possible, in area of interest. For shade trees and ornamentals take several representative 1" diameter cores 6-12 inches deep, if possible.
- Record depth of compaction, if any.
- Mix cores thoroughly, place 2 cups into a sealable plastic bag, and label sample.
- Send via 2-3 day delivery service.

Biological Analysis

- For lawns and row crops, take 10 representative 1" diameter cores within the root zone of plant (usually about 3-6 inches). For shade trees and ornamentals take several representative 1" diameter cores 6-12 inches deep, also within the root zone. If testing for mycorrhizal colonization, be sure to include the roots.
- Mix cores together and place 2 cups in a sealable plastic bag, leaving room for air. Label sample.
- Send via Next Day Air.

COMPOST SAMPLES

- Take several samples throughout the pile from at least 12 inches into the pile, halfway from the ground to the top.
- Mix the samples together and place 2 cups in a sealable plastic bag, leaving room for air. Label sample.
- For chemical analysis, send 2-3 day delivery; for biological analysis, send Next Day Air.

COMPOST TEA SAMPLES

- Use a clean, dry 1 liter bottle.
- Take several samples from the center of your brewer and mix them together.
- Fill the bottle with 1/3 tea and 2/3 air. A 20 oz bottle needs ½ tea and ½ air. Label sample.
- Send via Next Day Air.

SOIL TESTING METHODOLOGY

The laboratory methods we use to analyze each sample's chemistry and biology are as follows:

- Soil moisture content & % organic matter: 24 hr drying, then combustion
- Nitrate nitrogen: measured with a NO₃ meter
- Sulfur: extraction, then analyzed on a spectrophotometer
- Basic & Basic Plus nutrients (S, B, P, K, Ca, Mg, Fe, Cu, Zn, Mn): Melich III process extracts nutrients which are then analyzed on an ICP Spectrometer
- Complete Chemistry nutrients: involves extracting nutrients twice; once through a Melich III process and then through a Melich I process. Both analyzed on an ICP Spectrometer and the two data sets are compared.

The methodology we use to analyze soil microbiology was developed by Dr. Elaine Ingham. After 30+ years of studying and improving soils, she and the Soil Foodweb Inc. have identified optimal soil microbe ratios for compost, compost teas, crops, landscape plants, trees, and shrubs.