Soil Test Sample Collection Guide

Representative results of soil testing depend on collecting a good sample. The tools used, area sampled, depth and uniformity of the sample, information provided, and packaging will all influence the quality of your results. The instructions below, while fairly elaborate, are meant to ensure that your soil sample will give you the kind of information you are looking for.

Samples must be a fair representation of the area and should represent only one soil type or area, i.e., a vegetable garden or an orchard block. Each sample should consist of multiple smaller samples, or cores, from multiple sites within the sample area, mixed together. If you are able to manage such areas differently then you may want to sample problematic areas within the same field separately in order to determine whether there is a notable difference in available nutrients. Keep a record for yourself of the area represented by each sample.

Collect the Sample at the Right Time

- Collecting samples during the peak of the growing season when soils are most biologically active provides a snapshot of the mineral profile. The ideal time to sample is mid-August through September in temperate regions. Sampling during the winter months will yield results that show lower nutrients overall. If you have a history of sampling at a certain time of year, continue with that schedule in order to observe changes over time.
- Sample when soils are not overly moist.
- Take a soil sample at least a few months before planting any area new to you. Budget enough time to take, process, and evaluate the sample, as well as to source and apply any materials needed before planting.
- Sample established areas at least every three years or more often if major management changes are occurring.
- If an area consistently exhibits abnormal growth, plant discoloration, notably different weed population or soil texture, consider taking a separate sample from that area.
- Delay sampling six to eight weeks for areas recently grazed, limed or fertilized.

Use the Right Equipment

- A CLEAN stainless steel soil-sampling probe is the preferred tool, but any auger, spade or shovel can be used.
- Tools should be either stainless steel or chrome-plated. Avoid brass, bronze, or galvanized tools because they will contaminate samples with copper and/or zinc.
- Use a clean plastic bucket, free of chemical residues, in which to mix soil cores.
- Request paper sample bags through Logan Labs. If none are available, a quart-sized ziplock bag may be used. The soil must be mostly dry before placing it in a plastic bag.

Collect and Prepare Samples

- Scrape away any surface debris, weeds, cover crop, etc. from the soil surface.
- Avoid zones where amendments have been recently applied. Avoid all roots, twigs, worms, bugs, seeds, or other organic matter concentrations that would give a falsely high estimate of organic matter and nutrient levels.
- Cores should include an even slice of soil from the surface to six inches deep. Do not include soil from under a hardpan, as it will not provide an accurate measurement of soil to which plant roots have access.
- If a shovel or spade is used, dig a V-shaped hole to sample depth (4-6”), then cut a thin slice of the soil with a shovel blade.
- Place all cores for one unique area in a plastic bucket and mix thoroughly.
- Use the mixture in the bucket to fill a soil sample bag with about 2 cups of soil.

Payment

- If you submit soil samples to Logan Labs using the AEA Soil Test Submission Form, you will automatically be invoiced by AEA and do not need to include payment with your test samples.

Ship the Samples

- Download and complete the AEA Soil Test Submission Form.
- Use a permanent, waterproof marking pen to fully label each sample bag with a sample ID and a name; these must match the sample ID and the name on the AEA Soil Test Submission Form. A pencil should not be be used as it can be very difficult to read if bags become soiled.
- Do not enclose any printed information inside a sample bag. Place the submission form inside the shipping box, next to or on top of the samples.
- Place the individual sample bags snugly inside a sturdy cardboard box so they cannot jostle around and break open in transit.
- **Send samples to: Logan Labs, 620 N. Main St., Lakeview, OH 43331.** Do not ship samples to AEA.

What Happens Next

- AEA will email results to you within about 10 business days from when your samples arrive at Logan Labs. If email is not available to you, please allow the same amount of time to elapse prior to calling AEA at 800-495-6603 to obtain your results by mail.
- If you require consulting and recommendations based on your soil sample results, arrangements can be made by scheduling an appointment with AEA.