

Soil Testing –FAQs

1. **Why should I have my soil tested?**

A soil test is the best way to check the growing potential of your garden. The CSU Soil Testing Laboratory's "routine" Garden and Landscape test takes the guess work out of your garden's growing potential. It will guide you in deciding which nutrients are deficient and sometimes more importantly, which nutrients you have too much of. Over-fertilizing is a common gardening problem. It is not only expensive, but also may harm your garden's production and our environment. The soil test will also tell you whether your soil's organic matter content is sufficient to support healthy plant growth; whether your soil is too salty; or whether your soil's pH is acceptable for the plants you want to grow.

2. **Where can I have my soil tested?**

The CSU Soil Testing Lab is in the Natural and Environmental Sciences Building, Room A319, Colorado State University, Fort Collins CO. (Telephone: 970-491-5061). Soil sampling bottles can be picked up at County Extension Offices, various Colorado Front Range nurseries (See list of locations on the Lab's website: www.soiltestinglab.colostate.edu, or at the CSU Soil Testing Lab. A submission form and sampling instructions are included in the sample bottle.

Alternatively, a submission form and sampling instructions can be downloaded from the Lab's website, and the sample can be collected in a quart-size zipper-lock plastic bag. Soil samples either can be dropped off at the Lab or mailed to the Lab (address on the back of this page).

3. **How much does it cost?**

The "routine" Garden and Landscape soil test costs \$35.00 (\$48.00 for compost or manure samples). You can pay when submitting your sample, or the lab can bill you.

Why can't I just buy a home soil testing kit? They're cheaper.

Home soil test kits have questionable value. Most home test kits were designed for acidic soils and have questionable accuracy on the alkaline soils found along Colorado's Front Range. At best, home soil test procedures give ballpark readings, but are not precise enough to accurately determine soil pH or nutrient levels.

4. **What information do I get with a soil test?**

The CSU Soil Testing Lab's soil test provides pH, salinity, lime estimate, texture estimate, organic matter content, and plant-available N, P, K, iron, zinc, manganese, copper and boron. Fertilizer recommendations, data interpretations, and management suggestions are also provided.

5. **When should I sample?**

Soil samples can be collected any time of the year, whenever the ground is not frozen. Do not soil sample within 30 days of an application of nitrogen fertilizer, compost, or manure.

6. **How many samples should I collect?**

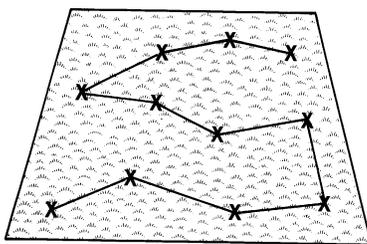
One soil sample should represent a uniform area consisting of land that is similar in slope, drainage, texture, or other characteristics that make the soil properties uniform within the area. Submit a separate soil sample for each area that receives different fertilizer, amendments, and/or soil management treatments. For example, vegetable garden areas are managed differently from lawns, so the two should be sampled separately. Different garden beds, or different lawn areas that receive differing amounts of fertilizers, soil amendments or irrigation, should also be sampled separately.

7. **How often should I soil sample?**

The first time you test your soil establishes base line soil properties. Soil testing should be repeated every 4 or 5 years to re-establish the base line, or, when dramatic changes have been made to the soil (e.g. addition of large quantities of manure or compost), or, when plant problems develop, and a soil problem is suspected.

8. **How do I collect a soil sample properly?**

Use a clean, rust-free trowel, spade, soil tube, or soil auger to collect your soil sample. Each sample should be a composite of 5 to 15 sub-samples (depending on the size of the area), collected randomly throughout the chosen area. Collect these sub-samples to a depth of 6 inches (do not include thatch layer in samples from turf areas), Combine subsamples in a clean plastic container. Try to dig straight down, rather than at an angle, so that equal amounts of soil are collected at each depth increment. Try to collect roughly the same amount of soil from each sampling area.



AREA TO BE SAMPLED

(x's are random sample spots)

Mix the sub-samples together thoroughly. Remove rocks, plant debris and break up clods to pea-size or smaller. Remove about 2 cups of soil; spread on paper towels and air-dry (do not oven dry). Return the rest of the soil to the landscape. Place the dry soil sample into the CSU soil sample container (preferred), or a zipper-seal plastic bag. Seal the container and label the sample with name, address, and location of the sample (for example "Vegetable Garden", "Lawn1", "Lawn2", etc.

If multiple samples are being submitted for analysis, including a map of your sampling procedure would be helpful in interpreting the laboratory analyses.

Complete the sample submission form as completely as possible. Use a separate form for each soil sample. Include the submission form(s) with the soil sample(s). Samples either can be dropped off at the lab, or, mailed to the lab:

Soil Water and Plant Testing Laboratory
Colorado State University
Room A319 NESB
Fort Collins CO 80523-1120

For submittal by UPS or FedEx, please use:

Soil, Water and Plant Testing Laboratory
Colorado State University
200 West Lake Street
Fort Collins CO 80523-1120

Please keep samples cool before mailing. If samples heat up, the nitrogen readings can change dramatically. Submit samples to the lab as soon as possible after sampling.

9. **How long does it take?**

Test results are sent to the customer within 2 weeks of the lab's receiving the sample.

10. **Can I get water and plant samples tested too?** Yes. Information on plant and water sample testing can be found on the website: www.soiltestinglab.colostate.edu.