

Collecting A Good Soil Sample

- Soil properties vary from place to place. The sample should be representative of the lawn or garden as a whole.
- Do not sample unusual or non-representative areas.
- Scrape plant debris from soil surface before sampling.
- Sample lawns and gardens to a 6" depth.
- Using a clean bucket and a soil probe or spade, combine cores or slices of soil from at least 15 locations scattered throughout the lawn or garden (see diagram).
- Mix soil thoroughly and fill the sample bag with a pint of the mixture.
- Submit samples to your county Extension office. They will send samples to the OSU Soil, Water and Forage Laboratory for testing.



Web Addresses:

Ferguson College of Agriculture
agriculture.okstate.edu

Department of Plant and Soil Science
agriculture.okstate.edu/departments-
programs/plant-soil/

Soil, Water and Forage Analytical Library
agriculture.okstate.edu/departments-
programs/plant-soil/soil-testing/

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Visit us at soiltesting.okstate.edu

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EXTENSION

Soil Testing, The Right First Step Toward Proper Care of Your Lawn and Garden



AGRICULTURAL SCIENCES AND NATURAL RESOURCES

How to Have a Good Lawn and Garden

We all appreciate lush green lawns and productive gardens around our home. After all, attractive lawns and gardens add both the aesthetic value and real value of our home.

To have a beautiful lawn and productive garden, it is necessary to add fertilizer on a timely basis. When lawns and gardens do not receive nutrients needed, they never achieve the quality or productivity we anticipate. When too much fertilizer is applied, nutrients are wasted and pose a threat to the environment.

Why Soil Test?

All plants, including turfgrass and garden plants, need 16 essential nutrients to grow, most of them come from the soil. Plants also require favorable soil chemical conditions as indicated by the soil or pH. For a lawn or garden to maintain quality or productivity, we may need to add fertilizer to supply extra nutrients or add lime to neutralize acidity and adjust the pH. A soil test identifies necessary fertilizer and lime requirements.

Adding more of a nutrient than a lawn or garden needs can cost extra money and may harm the plants or contaminate the environment.

The true value of a soil test is to help ensure that only needed nutrients are added and in quantities which don't adversely affect environmental quality.

Benefits of Soil Testing

- Take advantage of nutrients already in the soil
- Identify nutrients that are lacking in the soil
- Reduce fertilizer applications by applying only what is needed
- Provide a proper balance of plant nutrients
- Adjust soil pH to an optimum level
- Reduce chances of excess nutrients getting into water sources

What is a soil test?

A soil test is a chemical analysis that estimates a soil's ability to supply nutrients. Results from a soil test allow you to monitor soil chemical conditions, tap existing nutrient supplies, identify nutrient deficiencies, and apply optimum fertilizer amounts.

Based on results from your soil sample, your county Extension educator will provide you with the following information:

- Which fertilizer analysis is best for your lawn or garden. The analysis (percentage of nitrogen, phosphate, and potash) is stated on each fertilizer bag. For example: 25-3-3 contains 25 percent N, 3 percent P_2O_5 , and 3 percent K_2O .
- How much of that fertilizer should be applied for each application
- When during the year each application should be made
- Whether your pH is in the proper range, and if not, how much lime is needed to adjust it to the desired range.

When should soil be tested?

The best time to evaluate the nutrient status of the soil is during a time when plants aren't growing, although any time of the year is satisfactory. In any case, it's more environmentally friendly to soil test than to guess about which fertilizers to use. For your soil test to be as accurate as possible, collect the soil sample before fertilizer is applied and use the proper sampling procedures.

Where to find more information

Contact your county Extension office for more information on soil testing. They will submit your samples to the OSU Soil Testing Laboratory and help you interpret the results.

Test Your Soil and Take the Right First Steps Towards:

- **A more beautiful lawn**
- **A more productive garden**
- **A more environmentally friendly home**



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