

# Soil Testing for Lawns & Gardens

## University Extension Center

Call the Extension Center below for information and soil sample forms or visit their website.

Missouri University Extension Center  
301 Third Street  
PO Box 497  
Hillsboro MO 63050  
636-797-5391  
or visit their website at:  
[extension.missouri.edu/jefferson](http://extension.missouri.edu/jefferson)



Jefferson County  
Stormwater Management  
725 Maple Street  
Hillsboro MO 63050  
636-797-6228  
[www.stormwater@jeffcomo.org](mailto:www.stormwater@jeffcomo.org)

## What is a soil test?

Soil testing is the process of analyzing the nutrients present in a soil sample to determine the type and amount of fertilizer needed. Periodic soil testing provides homeowners with a framework for the effective use of fertilizer to maintain a healthy lawn or garden.

Soil tests take the guesswork out of buying fertilizers, helping homeowners to avoid using too much fertilizer—which can be an unnecessary expense and an environmental hazard. County extension offices provide soil testing services to residents for a minimal charge.

### Why is soil testing important?

Common fertilizers contain the nutrients nitrogen, phosphorous and potassium. These nutrients are essential to maintaining a healthy lawn and garden when used properly. Over-application of fertilizers can be harmful to your lawn and garden, as well as local waterways.

When rain water flows off rooftops to lawns, driveways and streets, it picks up pollutants such as fertilizers along the way. Storm drains then take the polluted water to nearby lakes and streams — untreated.

Excessive nutrients from fertilizers can stimulate algae growth in streams that harms wildlife and causes problems such as reduced water clarity, habitat destruction and bad odors.



## Testing your lawn and garden soil

A basic soil test provides homeowners with the necessary information to begin a fertilization schedule. The results of a soil test will answer four critical questions:

1. What nutrients does my soil need?
2. What type of fertilizer should I use?
3. How much fertilizer should I use?
4. How often should I fertilize?

**Tip:** After you receive the soil test results, create an annual schedule for fertilization based on the recommendations.

### Taking a soil sample

- Use a core device, auger, trowel, spade or other tool to collect core samples 6 to 10 inches in depth. Samples should be uniform in diameter.
- Take 10 or more core samples, at random, from the test area. Combine and crumble, then blend the samples thoroughly in a clean container, removing any stones, grass or roots. If the lawn has areas with distinctly different soil conditions, collect samples from each area.
- Take two cups of *dry* soil sample mixture to your local county extension center (see back panel) in a small, clean, covered container.

The soil test costs \$12.

### Information to provide with your sample:

- Previous fertilizer application
- Uses for the soil (lawn or garden)
- Any problems that prompted the soil test
- Abnormal or problem soil conditions

### Avoid taking samples from:

- Areas which appear abnormal, such as backfill ditches, along fence lines, or under trees and shrubs which may have been given extra fertilizer
- Small spots where grass, vegetable plants or flowers have suddenly died or changed color
- Wet soil

### Results

A written report of results and recommendations will be mailed to you as soon as it is completed. The normal waiting period is 7 to 10 days after sending samples to an extension office; however during the months March through May and August through September, results may take longer. To avoid delays, submit soil samples during the summer and winter months.

**Note:** Soil tests monitor plant nutrient levels and pH levels which may adversely affect plant growth. A soil test does not identify or measure insect populations, diseases, drainage issues, pesticides, or other chemical levels.

