

Cass County Extension

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Clay County Extension

1901 N.E. 48th Street, Kansas City, MO 64118
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Jackson County Extension

1501 N.W. Jefferson, Suite 110
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816/252-5051 / www.extension.missouri.edu/jackson

Johnson County Extension Office

11811 S. Sunset Drive, Suite 1500, Olathe, KS 66061
913/715-7000 / www.johnson.ksu.edu

Leavenworth County Extension

500 Eisenhower, Suite 103, Leavenworth, KS 66048
913/250-2300 / www.leavenworth.ksu.edu

Miami County Extension

104 South Brayman, Paola, KS 66071
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Platte County Resource Center

11724 N.W. Plaza Circle, Suite 300
Kansas City, MO 64153
816/270-2141 / www.extension.missouri.edu/platte

Ray County Outreach & Extension

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Wyandotte County Extension

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Know Your Soil



Soil Testing for Lawns and Gardens

What is a soil test?

Testing your lawn and garden soil

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 helps homeowners 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. When used properly, these nutrients are essential to healthy lawn and garden maintenance. Overapplication of fertilizers can be harmful to your lawn and garden, as well as local waterways.

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

Excessive nutrients from fertilizers can threaten our ecosystem and pose severe health risks for humans, pets, wildlife and aquatic organisms.



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: Soil test results can aid homeowners in creating 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 from 4-6 inches in depth.
- Take 5-10 core samples, at random, from the test area. Combine and mix the samples thoroughly in a clean container, removing any stones, grass or roots. Allow to air dry. If the lawn or garden has areas with distinctly different soil conditions, collect samples from each area, keeping each sample separate.
- Take 1-2 cups of the soil sample mixture to your local county extension center (see back panel) in an airtight, resealable plastic bag.

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
- Size of your lawn

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 14–20 days after taking 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: Plant growth may be adversely affected by overapplication of fertilizer and other nutrients. Soil tests monitor these levels, helping you maintain healthy soil. A soil test does not identify or measure insect populations, diseases, drainage issues, pesticides, or other chemical levels.