

For Healthier Lawns and Gardens
and a Cleaner Chesapeake Bay...

Test Your Soil





Follow These 5 EASY STEPS

- 1.** Go to: extension.umd.edu/hgic/soils/soil-testing for soil test information.
- 2.** Open the PDF titled *List of Regional Soil Testing Labs* (HG 110a).
- 3.** Select a soil testing lab from the list and click on the link to go directly to the lab's website.
- 4.** Order the basic soil test that gives readings for soil pH (acidity/alkalinity), calcium, phosphate, potassium, and magnesium levels. Some labs include lead in their basic test. If you're planting a vegetable garden, ask for a lead test.
- 5.** Follow the lab's instructions for taking and submitting soil samples. Collect separate samples for lawn and garden areas.

"Ask an Expert"

Contact the **Home and Garden Information Center** if you have questions about how to take a soil sample or about the results and recommendations you receive from the lab. Go to: extension.umd.edu/hgic and click on the *Get Help* tab.



When to Test Your Soil

- **New Lawns:** Test after grading, but before seeding.
- **Vegetable Gardens:** Test every three years.
- **Established Lawns, Landscape Plants, and Perennial Gardens:** Test every 3-4 years.
- It's best to test in the fall.

Did You Know?...

- No special kits or bags are required—just a clean plastic bag.
- Costs vary from \$9 - \$20 per sample for the basic test.
- Results are typically available in about two weeks.
- The results will include recommendations for fertilizer and lime, if needed.
- **For lawns only:** Follow Maryland's Lawn Fertilizer Law and apply nitrogen to lawns based on University of Maryland guidelines, not the recommendation provided by the lab. Visit: extension.umd.edu/hgic/plants/fertilizing-lawns for instructions.



Grow Smarter—Know Your Soil

Why Should I Have My Soil Tested?



- Soil testing **takes the guesswork out** of gardening and lawn care.
- A soil test can help you **diagnose plant and lawn problems** and determine what type of plants to grow.
- Lab results provide fertilizer/soil amendment **recommendations unique to your lawn or garden.**
- Soil testing **saves money** that might otherwise be spent on unneeded products such as lime and fertilizer.
- Soil testing **helps protect streams, rivers, and the Chesapeake Bay** from excess nutrients.

How Soil pH Affects Fertility



- The soil's pH level is important because it influences a plant's ability to absorb nutrients from the soil. *No amount of fertilizer can make plants grow in soil that has the wrong pH.*
- The pH scale ranges from 0 to 14. A pH of 7 is neutral. Soils with pH levels below 7.0 are acidic and soils with pH levels above 7.0 are alkaline or basic. It's a logarithmic scale: a soil pH of 6.0 is ten times more acidic than a soil pH of 7.0.
- Some plants prefer acidic soils and others grow best in alkaline soils.
- Most garden and landscape plants grow best in soils with a pH of 5.5–7.0.
- Lawns grow best in soil that is neutral to slightly acidic (between 6.0 and 6.8).
- Acid-loving plants like azaleas, rhododendrons, and blueberries grow best in soils with a pH of 4.5 to 5.5.
- The pH level for vegetable gardens should be in the 6.2-6.8 range. Soil pH can be lowered by adding sulfur or raised by adding limestone based on your soil test recommendations.



Maryland Department of Agriculture

Office of Resource Conservation

mda.maryland.gov/fertilizer

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extension.umd.edu/hgic/soils/soil-testing