

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