

# Soil Testing

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## Factsheet

It is highly recommended that you analyze your soil to establish a baseline soil analysis for chemistry, texture, and nutrient availability. A basic soil test that gives readings for soil pH, phosphate, potassium, calcium, and magnesium levels is sufficient for most home gardeners. In addition to nutrients and pH, ask for organic content analysis, and request organic care recommendations.

The University of Maryland Extension Service recommends soil testing every 3 years for lawns and gardens, with fall being the best time to test as soil amendments will have time to improve the area come springtime. Be sure to use the same lab for every soil test as testing labs use different standards.

When you receive your results make an assessment of what needs to be done to improve your soils. Ideal pH should read between 6.5 and 7.0, which is slightly acidic. Soil that is too acidic will need a sprinkling of lime; sulfur can be added to soil which is not acidic enough. Organic content should be 5% or higher, if the organic content is lower you may need to adjust the soil amendments to include fertilizers or composts. For a complete list of regional soil test labs refer to the [University of Maryland Extension directory](#).

In general, soils in Maryland tend to be clay-based. If you have these conditions the University of Maryland Extension gives the following recommendation:

“Soils high in clay (more than 50%) feel sticky, don’t drain well, and become rock hard when dry. You can’t change the texture of your soil (the percentage of clay) but you can improve soil structure (the arrangement of individual soil particles). Adding lots of organic matter such as compost, farm manure, or shredded leaves to clayey soil will allow it to drain more easily and hold the right amounts of water and air for better plant growth and increased biological activity.”

For more information on soil testing, visit the University of Maryland Extension Service, [soil testing fact sheet](#). It covers topics including: Taking a Soil Sample, Mailing in a Soil Sample, Interpreting Test Results, Abbreviations and Terms Found in Soil Test Reports, Fertilizing Responsibly for a Healthy Chesapeake Bay.

**REGIONAL SOIL TEST LABS FOR HOME GARDENERS\***

Lab Name	Address	Website	Basic Test Description (and Organic material)	Can I Download Forms From Website?	How Will I Get Results?	Graphic Display of Results?	How Long Will I have to Wait for Results?	Will They Test for Lead?
A&L Eastern Agricultural Laboratories, Inc. 804-743-9401	7621 Whitepine Rd. Richmond, VA 23237	<a href="http://www.aleastern.com">http://www.aleastern.com</a>	pH, OM, P, K, Mg, Ca, S, pH, OM, P, K, Mg, Ca, S, Zn, Mn, Fe, Cu and B	Yes	E-mail (free), postal mail, or fax (\$1.00)	Yes	2-4 days	Yes
Agri Analysis, Inc. 800-464-6019	PO Box 483 280 Newport Rd. Leola, PA 17540	<a href="http://www.agrianalysis.com">http://www.agrianalysis.com</a>	pH, P, K, Ca, Mg (OM: \$2.00 extra)	Yes	E-mail, postal mail, or fax	Yes	3-5 days	No
AgroLab, Inc. 302-265-2734	1009 Mattlind Way Milford, DE 19963	<a href="http://www.agrolab.us">http://www.agrolab.us</a>	pH, OM, P, K, Mg, Ca, CEC	Yes	E-mail, postal mail, fax	Yes	1-2 days	No
Spectrum Analytic, Inc. 1-800-321-1562	1087 Jamison Rd. Washington Court House, OH 43160	<a href="http://www.spectrumanalytic.com/">http://www.spectrumanalytic.com/</a>	pH, OM, P, K, Ca, Mg, CEC pH, OM, P, K, Ca, Mg, CEC Fe, Mn, Zn, Cu	Yes	E-mail, postal mail, or fax (\$1.00 per page) or on-line	Yes	1-2 days	Yes
Pennsylvania Agricultural Analytic Services State University Laboratory 814-863-0841	University Park, PA 16802	<a href="http://www.aasl.psu.edu">http://www.aasl.psu.edu</a>	pH, P, K, Ca & Mg, CEC, (OM \$5.00 extra)	Yes	E-mail, postal mail, fax (\$1.00 per page)	Yes	Email 3-5 days, postal mail 7-10 days	Yes
University of Delaware Soil Testing Program 302-831-1392	152 Townsend Hall 531 S. College Ave. Newark, DE 19717-1303	<a href="http://aq.udel.edu/dstp/aboutus.html">http://aq.udel.edu/dstp/aboutus.html</a>	pH, P, K, Ca, Mg, Mn, Cu, Zn, Fe, B, Mo, S, OM	Yes	E-mail, postal mail, fax	Yes	10 - 15 working days	Yes
University of Massachusetts Soil Testing Laboratory 413-545-2311	West Experiment Station Amherst, MA 01003-8020	<a href="http://www.umass.edu/soiltest/">http://www.umass.edu/soiltest/</a>	pH, P, K, Ca, Mg, Mn, Cu, Zn, Fe, B, Pb, Cd, Ni, Cr, CEC (OM \$5.00 extra)	Yes	postal mail, e-mail, fax (\$2.00 for more than one type of transmission of results)	Yes	1-2 weeks	Yes; total and extractable lead are included in basic test

\*Basic soil tests are typically \$10 - \$15. Any additional testing will increase the cost. Please contact lab for current pricing before submitting your sample. Include payment with your sample.