

Massachusetts Master Gardener Association

FACT SHEET



Have Gardening Questions? The **Master Gardener Help Line Hours** are 10 a.m. – 2 p.m. on Fridays (all year) as well as Wednesdays (March-November) and Mondays (April-October).

Phone: 617-933-4929 Email: mg helpline@masshort.org.

Soil Testing

Whether you are an organic or a nonorganic gardener, a soil test is an easy and inexpensive way to make certain that your soil is in shape for whatever for you want to grow in your lawn and gardens. And soil tests save you money. How much fertilizer (and what type) do you need for the best lawn? How much lime should you add to make your garden flowers happiest? Do you need those micronutrients that some products promise to provide? Knowing exactly what you need means not spending money and time putting down products that are not necessary— and might be detrimental—to the good health of your property.

Is your grass doing poorly because it needs more nitrogen or because it needs lime to reduce the soil's acidity? Are your vegetables not producing as they should because the soil lacks potassium or because it is picking up too much iron? Is there enough organic matter in the soil to keep your prize roses happy? A soil test can answer each of these questions and many more.

Plants derive their mineral nutrition from the soil. Adding fertilizer, compost or any other supplement only makes sense if it is needed. A soil test provides a cost effective and accurate assessment of the soil's nutrients, pH, organic matter and possible contamination by lead or other heavy metals. Based on the results of the test, the gardener can save money, time and labor by applying the right amount of fertilizer, lime or organic matter only when necessary. Further, by doing it right, you improve your garden while protecting the environment from the runoff of excess nutrients.

Your soil test report will be customized for the what you plan to grow in an area—lawn, vegetables, flowers and so forth. The report sent to you will recommend the proper amounts of lime and fertilizer to apply, let you know your soil's pH (or level of acidity), nutrient and micronutrient

levels, organic matter content and heavy metal levels. How do you take a soil sample? Soil samples should be taken from specific areas based on use (i.e., vegetables, perennials, annuals, shrubs) using a clean digging tool. It is best to take soil samples before the growing season, in the fall or early spring, but can be done at any time of the year.

Each sample should be a mixture of several samples taken over an area. Small gardens should be sampled at 3 or 4 sites; large gardens should be sampled at up to 12 sites. Soil samples should be obtained at a depth of 3-4" for lawns, 6-8" for flower beds and vegetables and up to 10-12" for trees and shrubs.

Mix the sample from one area together, allow to dry and then place in a labeled plastic bag and send it to the soil lab.

The University of Massachusetts Extension Services provides soil testing services. Information and instructions are available on their website at www.umass.edu/plsoils/soiltest

Other New England universities provide similar services.

- New Hampshire – <http://extension.unh.edu/News/SoilNew.htm>;
- Connecticut – <http://soiltest.uconn.edu>
- Maine – <http://extension.umaine.edu/publications/2286e/>
- Rhode Island – www.uri.edu/ce/factsheets/sheets/soiltest.html
- Vermont – www.uvm.edu/pss/ag_testing.

The Massachusetts Master Gardener Association is a non-profit organization whose mission is to share knowledge and experience with the public through outreach programs in education, horticulture and gardening; to provide the Master Gardener Training Program to interested members of the public; and to provide graduates of the Master Gardener Training Program with educational and practical opportunities to extend their knowledge and interests in gardening and related topics. <http://www.massmastergardeners.org/>