UMass Extension
CENTER FOR AGRICULTURE

Soil Testing

soiltest.umass.edu

The University of Massachusetts Soil and Plant Tissue Testing Laboratory offers comprehensive analyses of soil, plant tissue, compost, and soilless greenhouse media. We serve homeowners and backyard gardeners, commercial growers, landscaping professionals, and golf course managers, as well as engineers, consultants, and researcher scientists.

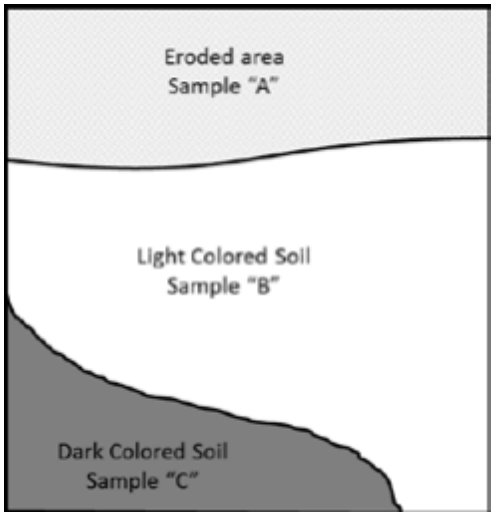
Why Soil Test

Plants produce their own energy using air, water and sunlight, but require fertile soil or growth media to provide essential nutrients. Healthy, well-fed plants are better able to withstand environmental stress, diseases and insect pressure and compete with weeds. For a small investment, routine soil analysis can establish your soil's fertility level and determine if any corrective measures are required. Soil testing is the most effective tool available for determining lime and fertilizer needs to produce healthy plants and protect the environment. Soil testing removes the guesswork and prevents the risk of over or under liming and fertilizing.

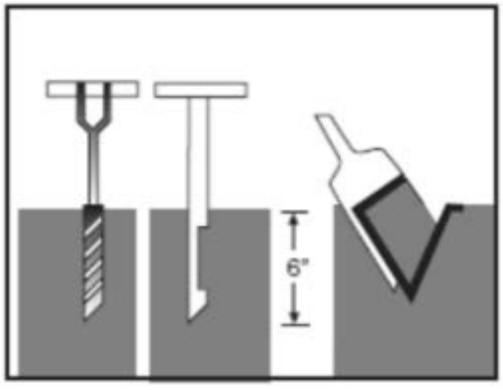
Don't Guess, Soil Test!

Soil Sampling Instructions

The most critical step in soil testing is collecting the sample. It is important that you take the necessary steps to obtain a representative sample; a poor sample could result in erroneous recommendations.



The first step is to determine the area that will be represented by the sample. Soil physical appearance, texture, color, slope, drainage, and past management should be similar throughout the area. Avoid sampling very wet or recently fertilized soils. It may be helpful to draw a map of the property and identify areas where you will collect samples. Using a clean bucket and a spade, auger, or sampling tube collect at least 10 to 15 subsamples to a depth of six to eight inches (four to six inches for turf) from random spots within the defined area. Avoid sampling field or plot edges and other non-representative areas.



Next, break up any lumps or clods of soil, remove stones and debris, and thoroughly mix subsamples in the bucket. This step is very important, because only a few grams of your sample will be used for testing. Once the sample is thoroughly mixed, scoop out approximately one cup of soil and spread on a clean sheet of paper to air-dry. A fan set on low will help speed the drying; do not apply heat.

Place approximately one cup of your dry sample in a UMass Soil Testing Laboratory carton (obtained from the lab) or a plastic zip-lock bag. Do not submit wet soil samples to the lab.

Label each box or zip-lock bag with your sample ID (you create this: limit of 5 characters) and complete the submission form. Be sure to specify a Crop Code (listed below) for each sample; without a Crop Code, the lab cannot provide lime and fertilizer recommendations.

For a submission form and details about the various testing options, go to soiltest.umass.edu

Send your sample(s), completed submission form and payment to the address below:

UMass Soil Testing Lab
West Experiment Station
6182 N. Pleasant St.
Amherst, MA 01003-9302