

**Now is the Perfect Time to Test Your Soil** By Dawn Pettinelli, UConn Home & Garden Education Center

As the days grow shorter and colder, gardeners are wrapping up their outside activities. Gardens are being cleaned up and weeded, perennials cut back, spring blooming bulbs and garlic planted and tools put away. Before you store that shovel and trowel, however, use them to collect a soil sample.

Just like your spade, pruners and rakes, soil testing is a handy tool for gardeners. We spend a lot of time tending our beds; adding fertilizers, composts, and limestone to our soils. So, how can a gardener tell if they are under or over doing it? Think of a soil test as a way to inventory the pH and nutrients in your soil, much as you would check your pantry for ingredients before going to the grocery store. If you already had 5 cans of tuna sitting on your shelf, you likely would not purchase more.

The standard nutrient analysis that is offered by the UConn Soil Nutrient Analysis Lab (<u>www.soiltest.uconn.edu</u>) includes soil pH, major plant nutrients, trace elements and a lead scan for a charge of \$12 per sample. As long as the plants being grown are listed, limestone and fertilizer recommendations can be made.

Fall is a great time to soil test for several reasons. Most notably, the turnaround time is much shorter than it is in the spring. Results will typically be returned in about a week after the sample is received, as opposed to two or three weeks during the busy months of April and May.

Fertilizers can be added in the spring before planting seeds or transplants and the nutrients will be released in time for the plants to use as they grow and develop. If the soil's pH needs to be raised or lowered, however, it may take 6 to 18 months to get it into the range that is desirable for the particular plants you are trying to grow. The pH scale runs from 0 to 14 with a pH of 7 being neutral. Soils below 7 are considered acidic, while those above are alkaline.

Most cultivated garden plants and lawns do well if the soil pH is in the mid 6s. Soil test results for soils with lower pH values will have limestone recommendations. On the other hand, if the

soil pH is higher than it should be for acid-loving shrubs, like blueberries or rhododendrons, a recommendation for sulfur will be made.

Regardless of whether the soil pH has to be raised by limestone or lowered by sulfur, both amendments could take more than a year to actually change the pH so it would be beneficial to apply them in the fall so that the chemical reaction to change the soil pH can start to occur.

While excessive tilling of garden soils is discouraged, it is beneficial to work limestone or sulfur into the top 4 to 6 inches of soil, whenever possible. Organic matter, if needed, can also be incorporated at this time.



Pelletized limestone. Photo by dmp2021

Keep in mind that when submitting a soil test, your results are only as good as your sample. First think about how many samples to send in. If the soils look different or if the areas have been treated differently in terms of how much limestone, fertilizer or other amendments h.ave been added, then they should be sampled separately. For instance, the lawn is usually treated differently than the vegetable garden so one would send in separate samples from the lawn area and the vegetable garden area.

For each area to be tested, a composite or representative sample should be gathered. Do this by taking from 6 to 10 subsamples from the top to about 4 to 6 inches down in the area of interest. Mix these subsamples together in a clean container and remove one cup of soil and place it in a zippered top bag or other unbreakable container for testing. If more than one sample is to be sent in, label the outside of the bag or container with your sample name. This way if multiple samples are sent to the lab, you would know which results go with which sample.

Most folks put their sample, submission form (on website) and check in a mailing envelop or small box and send it off to the lab. Be sure to include contact information, including name, address and email, what plants you want limestone and fertilizer recommendations for and payment. Those near Storrs are welcome to leave samples in the drop box by the front door of the lab.

Take advantage of some nice late fall days to send in your soil for testing. If you have questions about soil testing, call the lab at (860)486-4274. For other horticultural questions, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, visit our website at <u>www.ladybug.uconn.edu</u> or contact your local Cooperative Extension center.