

Get A Good Soil Test for Great Lawn and Garden Results

Soil testing is like checking the oil and gas in your car. You need enough fuel and lube to make a trip so you check the gas gauge and the oil dipstick. A basic soil test is similar - it will tell you what "fuel" your soil needs to get the best results in your lawn and gardens.

A basic soil test checks soil pH (the degree of alkalinity or acidity) and the level of the three major nutrients plants need to grow and prosper: nitrogen, phosphorus, and potassium. Since pH, phosphorus, and potassium levels change slowly over time, a soil test every three years is likely adequate to provide an ongoing check for good lawn and garden management.

On the other hand, nitrogen is a different story. Plant growth as well as adding organic matter or a nitrogen fertilizer will rapidly change plant available nitrogen levels in the soil. Aerating the soil by shallow cultivation will promote nitrogen release from any organic matter that is present. Adding small amounts of nitrogen fertilizer multiple times during the growing season will also improve plant growth and green color as well as help to reduce chemical runoff into our streams and lakes.

Follow these steps for getting a good representative sample:

1. Using a trowel or similar tool, obtain samples of the soil at 6-inch depths. Remove all grass and trash.
2. Each area of interest, such as a lawn or vegetable garden, should be tested separately.
3. Obtain 15-20 random sub-samples from the area you want tested. Divide the area and follow a random pattern when sampling. Avoid unusual spots, like wet areas to get a good representation. Do not sample any areas that have been fertilized in the past two months as this will give a false reading.
4. Place your sub-samples in a *clean, dry* plastic container. Mix all the soil thoroughly by hand and put a pint of this mixture in a Ziploc bag. The sample should be fairly dry, not water saturated.

Soil samples can be left at the Southwest door of the OSU Extension Office in the black lock box. There are forms and soil bags in a tub on top of the lock box. The OSU Soil, Water and Forage Analytical Laboratory at Stillwater will do the testing. The test costs \$10 per sample and it generally takes 2-3 weeks for the results to be mailed to you. The test results will show you the levels of nitrogen, phosphorus and potassium and the pH of your sample. In addition, the lab will recommend the correct type and amount of fertilizer to correct for any of these nutrient deficiencies for your lawn or garden.

Detailed instructions and videos on how to get a good soil sample and understanding your test results are available on the Tulsa Master Gardener's web site

www.tulsamastergardeners.org. On the main web page choose the *Lawn and Garden Help* tab. From there, click on *Soil* and scroll down to the bottom of the page.

Soil testing provides you with an accurate basis for applying nutrients to your soil. Otherwise, there is no other accurate and timely way of knowing what might be deficient in the soil. Properly managing the amount of nutrients you add will save you money and help protect the environment.

You can get answers to all your gardening questions by calling the Tulsa Master Gardeners Help Line at 918-746-3701 or by e-mailing us at mg@tulsamastergardeners.org.

[E-1034 Master Gardener's Handbook](#)

[OSU Soil test Instructions](#)

[HLA-6007](#)