

Get a Head Start on Spring with a Soil Test

All those gorgeous, glossy catalogs from the seed and plant nursery companies have you ready to get planting but it is still winter here for a few more weeks. But there IS something you can do now to get a head start on your spring planting. It is the perfect time to get your soil tested!

Soil testing is like checking the oil and gas in your car. You need enough fuel to make a trip so you check the gas gauge and the oil dipstick. Likewise, a basic soil test will tell you what nutrients you need to add to get your best results in your lawn and gardens.

A basic soil test checks soil pH, which is the degree of alkalinity or acidity, and the level of the three major nutrients plants need: nitrogen, phosphorus, and potassium. Since pH, phosphorus, and potassium levels change slowly over time, a soil test every three years is generally enough to provide a basis for good long-term lawn and garden management.

General plant growth, adding organic matter, or adding a nitrogen fertilizer will rapidly change plant available nitrogen levels in the soil. It is not necessary to do soil tests to closely monitor nitrogen each year or during a growing season. Instead, aerate the soil by shallow cultivation to promote nitrogen release from organic matter present. Adding *small* amounts of nitrogen fertilizer multiple times during the growing season is optimum for good plant growth and green color plus it helps reduce runoff into our streams and lakes.

Follow these steps for getting a good representative soil sample:

1. Using a trowel or similar tool, obtain six-inch depth samples of soil. 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 taking samples from unusual spots (i.e., 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 and dry* plastic container. Mix the soil thoroughly by hand and put a pint of this soil in a zip lock bag. The sample should be fairly dry (not water saturated).

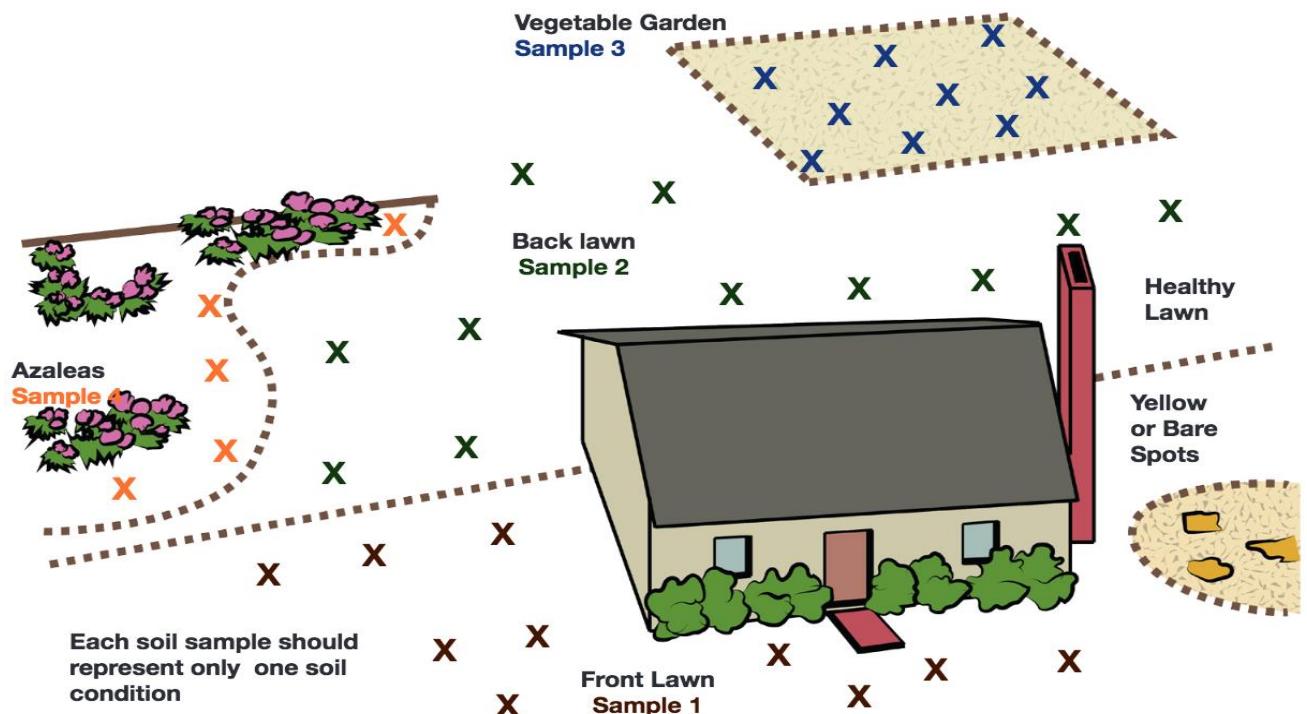
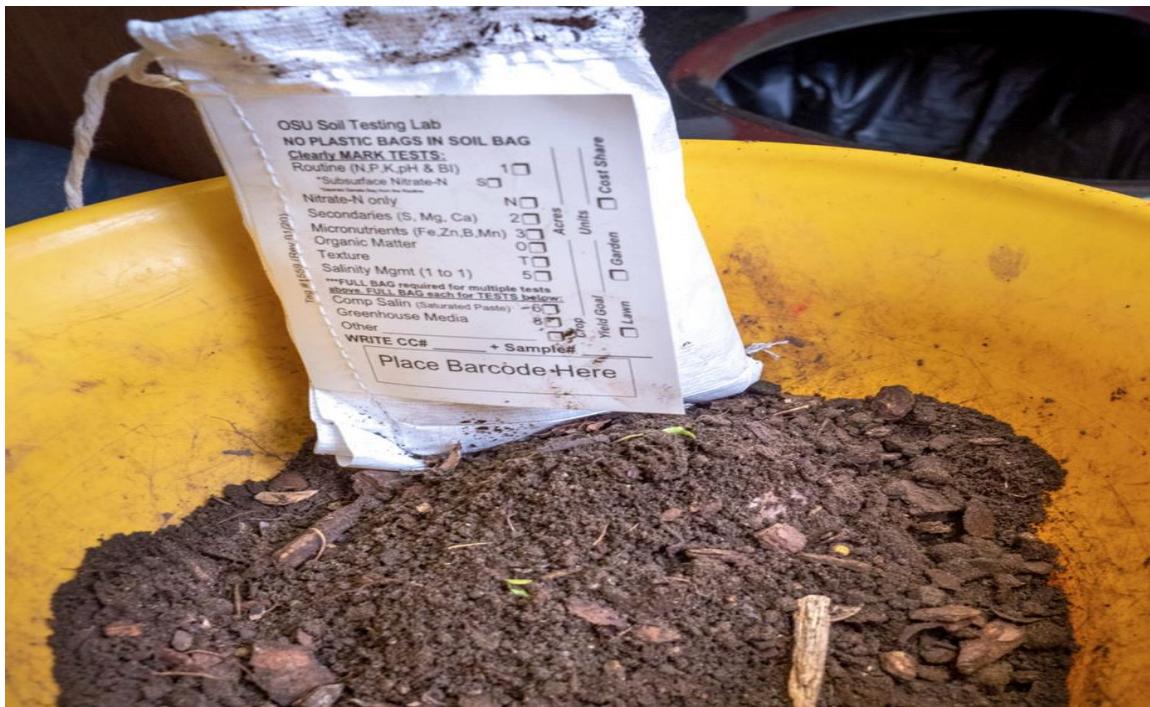


Figure 7.1. Taking soil samples separately to accurately represent pH and soil fertility levels of the vegetable garden, flower bed and lawn.

Bring your soil samples to the Tulsa OSU Extension Office. The OSU Soil, Water and Forage Analytical Laboratory in Stillwater will do the testing. The test costs \$10.00 per sample and it generally takes two to three weeks for the results to be mailed to you. The test results will indicate the levels of nitrogen, phosphorus, and potassium as well as the pH of your sample. The lab will recommend the correct type and amount of fertilizer to remedy any nutrient deficiencies found.



Detailed instructions and videos on how to get a good soil sample and understanding your test results are available by clicking on [SOIL SAMPLING & TESTING.](#)

Soil testing provides you with an accurate basis for applying nutrients to your soil. Properly managing the amount of nutrients you add will save you money, get you better results, 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 emailing us at mg@tulsamastergardeners.org, or come see us at our Diagnostic Center at 4116 E 15th St., Tulsa, OK.

RESOURCES:

- [E-1003:](#) Oklahoma Homeowner's Manual for Soil & Nutrient Management
- [E-1034:](#) Master Gardener's Manual
- [OSU Soil test Instructions](#)
- [HLA-6007:](#) Improving Garden Soil Fertility