

Purdue Extension Does...Soil Sampling for Lawns and Gardens

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Proper soil fertility is a necessity for any plant, with the needs of one plant compared to the next sometimes being different. Correct soil testing in your garden, orchard, lawn, or landscaping area helps you better understand what your soils contain and, in turn, what nutrients your plants will need as we enter the spring growing season.

A basic laboratory soils test should provide you with your soil's phosphorus, potassium, calcium, magnesium, pH (acidity), and organic matter levels, as well as cation exchange capacity (how many nutrients the soil can hold) and recommendations on fertilizer to add to the soil to provide what your plants need.

A laboratory soil test is recommended rather than a simple "quick test" available at big box stores and other locations due to the much higher level of accuracy it can provide, as well as for the specific recommendations returned with the actual soil test results. Laboratory soil test kits are available through any Purdue Extension office or through most agrichemical dealers, and are recommended every 3 to 5 years under normal soil conditions.

To begin your sample, obtain a soil probe, auger, shovel, or spade to sample your chosen location. Each soil location should be sampled separately, which means do separate samples for the garden area, for the front yard, for the back yard, for the home landscaping areas, etc. due to the fact that the use of that location as well as the type of plants growing there will have affected the nutrient levels in different ways.

Using your spade or soil probe, poke the instrument into the ground for 15 or more subsamples to be mixed together to make your representative sample. Depth of the samples should usually be to the tillage depth (for tilled areas like gardens) or the rooting depth (for non-tilled areas like lawns). Recommended depths include: gardens – 6-8 inches; lawns – 3 inches; landscaping, ornamental plant, or flower beds – 6 inches; and established trees – 8 inches deep with samples taken out to the drip line.

Collected sub-samples should have clods broken up and be thoroughly mixed in a plastic bucket (metal buckets may give off zinc and iron, which can affect test results), and the soil should be spread on a newspaper to dry naturally for one day. The amount of soil to be sent to the lab will be around one cup, and small soil bags included in soil test kits usually have a "fill line" for the samples being submitted.

Fill out requested paperwork (which will be used to provide the recommendations for your specific plants), and submit the paperwork, fees, and soil sample either through the mail or through your local fertilizer dealer. Results will usually be mailed to your home in 7 to 10 days, with longer delays in early spring when other homeowners are also submitting their samples.

If you would like more information, please contact Purdue Extension – Dubois County at 812-482-1782 or kjeck@purdue.edu.