Instructions For Taking A Soil Test



<u>Step #1:</u> Identify the area that you want to test. Each unique garden or area of your yard should be tested separately for best results. Problem areas should be tested separately.

Step #2: Use a soil probe or shovel to collect at least 8 samples over the area being tested. The depth of the sample will depend on the type of plants you intend to grow in the area:

- Lawn Samples = 3 inches deep
- Vegetable Garden Samples = 6 inches deep
- Tree, Shrub, or Flowerbed Samples = 6 inches deep

Step #3: Take at least 8-12 samples from the area being tested (see diagram below). It is critical that the collected soil represents the entire area, not just one hole. Mix the

samples together in a clean bucket. The KSU Soil Lab requires both a minimum of 2 cups of total soil, and that samples come from at least 8 different locations (even when testing small areas).

Step #4: Allow soil to air dry before packaging. If collected soil is wet/muddy, lay out newspapers and spread out soil over newspaper. Allow to air dry 1-2 days. **DO NOT bring wet soil to the Extension Office.**

<u>Step #5:</u> Place dry soil into a plastic bag. Make sure the sample contains at least 2 cups (one pint) of total soil. Label each bag with the location from your property.

Step #6: Bring bagged soil sample to the Sedgwick County Extension Education Center at 21st & Ridge Road (7001 W. 21st Street North). Use the glass doors nearest the flagpole. Cost varies by test (see reverse side).

Step #7: Complete a soil information sheet for each sample. These forms help us to write specific fertilizer recommendations for your soil. Please fill out this sheet as completely as possible. Soil information sheets will be available at the Extension Office when you drop off your sample, or can be printed from our website at: www.sedgwick.ksu.edu/products-test/soiltests.html



Take plugs of soil from at least 8-12 different locations in the area of your yard or garden being tested. Soil should represent the entire area, not just one hole. Sample 3 inches deep for lawns and 6 inches deep for vegetables, trees, shrubs, or flowers.

<u>Step #8:</u> Samples are sent to the K-State Soil Testing Lab in Manhattan, Kansas for analysis. Once the analysis is completed, a local Sedgwick County Extension Agent will write your fertilizer and soil amendment recommendations. Results will be returned in approximately 6 weeks.

Importance Of Soil Testing For Lawns & Gardens



Soil testing is the basis of a sound fertilization program. It is impossible to know what nutrients must be supplied from fertilizers without first checking nutrient levels in the soil. Routine application of unnecessary nutrients to the soil can create imbalances that may lead to other problems.

For example, excessive phosphorus can interfere with iron uptake by turfgrass roots and lead to an iron deficiency. Excessive levels of soil nutrients also increase the chances of surface or groundwater contamination. Soil testing makes sense horticulturally and environmentally.

Soil testing is offered by K-State Research & Extension, as well as other private labs, and is a service every homeowner should take advantage of. A soil test is a chemical analysis of your soil & soil nutrients. When running the analysis for a standard horticulture soil test, Extension personnel check soil pH, phosphorus and potassium content, available nitrogen, and organic matter levels. If requested to do so, we can also test for trace elements and micronutrients, such as Iron, Zinc, Calcium, Sodium, Salt Alkali, or the presence of heavy metals such as lead. We cannot test for any chemical damage caused by herbicides, oil, or gasoline, etc.

Most Sedgwick County lawn and garden soils are in the pH range of 7.2 - 7.4. Most of our irrigation water is alkaline and slowly raises the soil pH over time. Most plants prefer a pH of around 6.5. Sulfur can be used to lower the soil pH, and lime can be used to raise the soil pH, but **sulfur or lime should** <u>only be applied</u> following the recommendations of a soil test report.

Cost For Standard Horticulture Soil Test (aka Gardener's Package):

Test includes: soil pH, buffer pH, Nitrogen, Phosphorous, Potassium, and Organic Matter levels

- Cost \$23.00 for the first sample
- Cost \$20.00 for each additional sample submitted at the same time
- Pricing varies on additional tests for individual trace elements or micronutrients





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