

Soil Sampling for Home Gardeners

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The soil test provides a starting place for a soil improvement program for the home gardener. Unless you know the deficiencies in your soil, you are only guessing when you apply fertilizer. A soil test should be taken every 2-4 years. Soils that have problems should be tested every 1-2 years. To get an accurate soil test, soil samples need to be properly collected and prepared.

Soil samples need to be representative of the area where the intended plant(s) will be grown. Take a core or slice of soil from at least 6 different areas within the soil sampling site. Do not include soil from a turf area and a garden in the same soil sample. Areas that have been fertilized and treated differently should be sampled separately. Areas with more than one definite soil type require more than one sample.

First, remove debris (such as turf thatch or residue) from the top of the soil before inserting the soil probe, spade, or trowel. Soils from gardens should generally be sampled from the soil surface to the depth of tillage, about 6-8 inches. Tree, shrub and flower beds may also be sampled to 6-8 inches deep. Sample turf areas to a 4 inch depth.

When using a spade, turn out one spade full of soil and then shave a one-inch slice of earth from the side of the hole. Do this in at least 6 different places in the area being tested and mix all the slices together in a bucket to create the average soil sample for the area. After mixing the 6 or more slices or cores in a bucket, save a total of 2 cups (1 pint) of soil and place in a clean container (plastic, paper, etc.)

If you have several samples, keep a record of which portion of the lawn or garden each sample represents. Label each sample with your name, address, and the crop you intend to grow (flowers, vegetables, roses, trees, etc.). Bring the soil sample you collect to the local K-State Research and Extension Office.

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