

Soil Sampling Instructions for Homeowners

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- 1) Decide on how many samples are to be taken. Samples analyses typically cost between \$15 and \$30 each, plus shipping. Each sampling area should be unique. In other words, do not combine your garden with your lawn. Some people may only be able to afford to sample their lawn or other yard area. Others may want to sample several areas separately, but do not combine unique areas as this will make the sample results invalid. It is common to sample the following areas: front lawn, back lawn, vegetable garden, orchard, and flower beds. Any area that has the same type of vegetation and has the same type of soil, as well as has been fertilized the same over the last few years can be combined into one sample. Be sure to sample problem areas separately for diagnostic purposes.
- 2) Obtain sample bags and borrow a soil probe from the extension office or a garden center. It is best to use clean, cloth bags so that the soil can breathe. Paper bags will also work if the soil is not wet. Avoid plastic bags unless the sample is to be sent to the lab within 24 hours and kept cool.
- 3) Get a clean plastic bucket for collecting and mixing soil cores. Do not use rubber or metal buckets (stainless steel is ok).
- 4) Insert the probe into the soil to the appropriate depth and extract a soil core. Turf, pasture, and other permanent sod areas should be sampled to a depth of 4 inches. Vegetable, shrub, and flower gardens should be sampled to the depth of tillage (8-12 inches). Ideally, trees should be sampled to a depth of 2-3 feet around the drip-line of the tree or in the root zone for trees to be planted. Do not worry about removing small amounts of living or dead vegetation. Sampling is easier if loose soil is stepped on to firm it up before inserting the probe. It is also easier to sample soil that is moist rather than dry. Knock the core into the plastic bucket.
- 5) Collect 8 to 20 cores from the area to be sampled (the larger the area, the more cores should be taken to result in a sample that accurately represents the average). Walk in a zig-zag pattern around the area to be sampled, and take cores randomly.
- 6) Mix the soil with clean hands or gloves. Make sure that nothing that has fertilizer dust comes into contact with the soil (gloves are often contaminated). Do not use rubber or metal (stainless steel is ok) devices to break up soil.
- 7) Mark the soil sample bag. Be sure to write your name, address, and unique sample identification on each bag. Also, note on the sample bag the depth of the sample. If a compacted layer, rock, etc. prevent inserting the probe to the desired depth, then take the soil cores to whatever depth is possible and record the average depth.
- 8) Pour the soil into the bag and seal it shut with string, zip ties, tape, etc.
- 9) Send the samples to the extension office or directly to the soil testing laboratory as soon as possible. The county extension office can usually provide a list of acceptable soil testing labs, but remember that not all labs do good work. If the samples are to be stored, make sure that they are kept cool (preferable) or frozen. Avoid long periods of heat. Also, avoid allowing the bags to come into contact with anything that could contaminate the soil (fertilizer dust is the biggest problem, but any solid or liquid material may have contaminants).