

Taking a Soil Test

Test results can be no better than the sample collected in the field. Proper collection of soil samples is extremely important.

1. Follow these steps to obtain a good sample:

1. To take the sample, you will need a soil sampling tube (may be checked out at the Extension office), auger or spade, and a clean pail. You will also need soil sample bags (zip lock bags can be used-use a permanent marker to write on plastic bags) and field information forms which may be obtained from your local county agent or fertilizer dealer. Caution: For the zinc test, collect soil samples in a plastic container to avoid contamination from galvanized buckets or material made of rubber.
2. Determine areas of the field or pasture to be sampled. Each area should have similar soil texture, color, slope, and previous fertilization and cropping history. Give each sample area a name or number, and mark the soil sample bags with the identifier to help with record keeping.
3. From each area, take a sample consisting of 10 to 30 cores or slices (the more cores taken, the more accurate the sample), mix thoroughly in a clean pail, and then place one cup of soil in the sample bag. Conventionally tilled row crops should be sampled to a 6 inch depth. On fields that have been reduced-tilled/no-tilled for several years, a split sample from the top 6 or 8 inches (i.e. 0 to 3 inches and 3 to 6 inches) is encouraged to assess pH and nutrient stratification near the surface. Permanent sod is sampled to a 4 inch depth. If the available nitrogen, chloride, or sulphur tests are desired, a soil profile sample to 24 inches is necessary.
4. Avoid sampling in old fence rows, dead furrows, low spots, feeding areas, and other areas that might give unusual results. If information is desired on these unusual areas, obtain a separate sample from the area.
5. Be sure to label the soil bags plainly and record the numbers on the soil bags and the information sheet.
6. Repeat the sampling procedure on each area you want tested.
7. Air dry samples as soon as possible for the nitrogen test. Air drying before shipment is desirable, but not essential for all other tests. Do not use heat for drying.
8. Take the samples to the County Extension Office for mailing to the KSU Soils Lab. Some samples are eligible for cost share dollars from the Douglas County Soil Conservation District, which pay for the soil lab fee.
9. It normally takes a week to get the test results back from the lab. The lab sends the results to the County Extension Office, the local county agent makes fertilizer recommendations for the fields, and then they are mailed to the landowner.