

SOIL SAMPLING PROCEDURES

1. To take a soil sample, you will need a soil probe, soil auger, or shovel and a clean plastic bucket.
2. Collect 10 to 15 cores (if using a probe or auger) or furrow slices (if using a spade) 0 to 8 inches deep from a representative area. Composite samples of 10 to 15 cores at 0 to 8 inches can be used to represent an area up to 40 acres. If soil types vary greatly within a field, we recommend using zone sampling to isolate differences in soil types.
3. Surface soil samples should be taken to an 8-inch depth.
4. Subsoil samples should be taken from 8 to 36 inches or 8 to 24 inches and 24 to 36 inches to test for residual nitrate.
5. If cropping, fertilizing, and/or liming has not been applied uniformly in a field, then a separate sample should be taken from each management or soil area. If soil areas within a field are different in appearance (slope, drainage, color, or texture) each area should be sampled separately. Small areas may not need to be sampled, but they will give some indication of the variation within the field.
6. Composite surface soil samples should consist of a mixture of about 10 to 15 soil cores. Composite subsoil samples for the nitrate test should consist of 8 to 10 cores. Mix these cores thoroughly and fill the sample bag. Label the bag correctly and use this same identification on the soil information sheet.
7. Sample separately to avoid such areas as dead furrows, alkali spots, and terrace channels.
8. Cloth or paper soil test bags or a quart size zip lock bag may be used. Include soil sample information sheets with all necessary information.
9. Samples can be mailed too or dropped off at our AgTest location.

SOIL HEALTH SAMPLING PROCEDURES

1. Collect all your samples for comparison on the same day if possible. Samples may be collected on different days but try to keep sampling events to one week or less if comparisons are to be made between the samples. This reduces changes that may take place if moisture or temperature fluctuates between sampling times.
2. Use a standard soil core sampler. **DO NOT** use any form of lubricants on the soil core sampler.
3. Take 10 to 15 cores 0 to 6 inches or 0 to 8 inches deep next to the plants or near the rooting structures. You may also choose the same depth that is normally used for a topsoil sample if it is consistent. Composite samples of 10 to 15 cores at 0 to 6 or 0 to 8 inches can be used to represent an area up to 40 acres. If soil types vary greatly within a field, we recommend using zone sampling to isolate differences in soil types.
4. Combine all the cores, preferably in a zip lock freezer bag or plastic-lined paper soil bag. **DO NOT** use cloth bags for submitting soil health samples.
5. Add all sample identification information you need to the sample bag and place in a cooler (a Styrofoam cooler with a lid works fine) or a regular box if shipment times are relatively quick.

6. Mark each sample and the shipping container with the specific soil health test(s) you wish to run to ensure proper handling once the sample arrives at the lab.
7. If sampling for PLFA analysis when temperatures are above 85 degrees Fahrenheit, freeze samples prior to shipping and use dry ice/ice packs unless shipping overnight.
8. Samples should remain near original soil temperature if left unfrozen. Dry ice / ice packs can be used if sampling during hot weather. Remember to treat all samples equally for individual sampling periods.
9. Samples may be frozen in a standard freezer for storage prior to shipment. This is especially useful and should be done if samples are being taken at different times.
10. Samples can be mailed too or dropped off at our AgTest location.