

## News Column

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### **Fall soil sampling: Sample collection and submission to K-State Soil Testing Lab**

Soil testing provides producers and homeowners important information concerning the fertility status of the soil. This information can help produce better crops and reduce costs by guiding management decisions like the type and amount of fertilizers to apply. If you plan to do your own soil sampling and use the K-State Soil Testing Laboratory, the following outline provides specific information on methods for collecting soil samples and mailing instructions.

To take a sample, you will need a probe, auger or spade, and a clean pail. (If you're also having the soil analyzed for zinc, be sure to use a plastic container to avoid contamination from galvanized buckets or material made of rubber.) You will also need soil sample containers and a soil information sheet from your local Extension office or fertilizer dealer. You can also order soil sample bags online from K-State Research and Extension at <https://www.agronomy.k-state.edu/services/soiltesting/>

Draw a map of the sample area on the information sheet and divide your fields into uniform areas. Each area should have the same soil texture, color, slope, and fertilization and cropping history.

From each area, take a sample of 15-20 cores or slices for best results. At the very minimum, 10-15 cores should be taken per sample. Always move any surface residue away from where you will take the sample especially when testing for organic matter. Mix the cores thoroughly in a clean container and fill your soil sample container. For available nitrogen, chloride, or sulfur tests, a subsoil sample to 24 inches is necessary. If you can't sample that deep due to dry soil, indicate what the average sampling depth was, i.e. 16 inches.

When to sample and what to test. Levels of immobile nutrients in the soil tend to change gradually over time. This means fertilizer needs can be predicted for several years from a single soil test for immobile nutrients. Test for mobile nutrients such as sulfate, nitrate, and chloride before responsive crops are planted. Soil samples for nitrate testing should be collected in the late fall or early spring before significant mineralization has occurred.

Avoid sampling in old fencerows, dead furrows, low spots, feeding areas, or other areas that might give unusual results. If information is desired on these unusual areas, obtain a separate sample from the area.

Be sure to label the soil container clearly and record the numbers on the soil container and the information sheet.

Air-dry the samples as soon as possible for the available nitrogen test. (Air drying before shipment is recommended, but not essential, for all other tests.) Do not use heat for drying.

Fill out the information sheet obtained from your Extension office, or obtain it at <https://www.agronomy.k-state.edu/services/soiltesting/>

Take the samples to your local Research and Extension office for shipping. Samples may also be sent directly to the lab by placing them in a shipping container. Information sheets should be included with the package. Shipping labels can be printed from the Soil Testing Lab website listed below. Mail the package to:

Soil Testing Laboratory  
2308 Throckmorton PSC  
1712 Claflin Road  
Manhattan, KS 66506-5503

A listing of the types of soil analysis offered, and the costs is available on the Soil Testing Lab web site. You can also contact the lab by email at [soiltesting@ksu.edu](mailto:soiltesting@ksu.edu) and by phone at 785-532-7897.

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