

## SAMPLE HANDLING PROCEDURES FOR NITRATE TESTING

Nitrate testing requires proper handling of samples for best results.

It is important that the samples start their drying process or are stored in a cool location by the end of the day that they are taken. This needs to be done to slow the microbial processes in the soil that could cause a change in test values.

### *Timing of Sampling*

Nitrate Sampling can be done at any time but to get information that is useful it should be done a week to 10 days before you would be ready to do a side-dress application of nitrogen if necessary. Rainfall, temperature, rotation, amount of residue, amount and placement of nitrogen are all factors that can affect the amount of nitrate that will be measured.

### *Depth of Sampling*

CropSmith recommends collecting samples at two depths: 0-12 inches, and 12-24 inches. This gives the best information to help guide in-season nitrogen applications.

### *Targeted Sampling*

Nitrate sampling can have a high amount of field variability. We recommend taking at least 5-7 cores per sample. Each composite sample should be from an area with similar characteristics, (such as "high yielding" "similar ISNT values" "landscape position")

### *Shipping and Handling*

Wet samples shall be refrigerated or frozen for storage before shipping. Samples should be shipped so that they are received in the lab within two days. Samples can be packed in inexpensive Styrofoam coolers if temperatures during shipping are expected to be high.

Cooled samples should not be shipped at the end of a week to avoid weekend delay in delivery.

### *Information to Include*

Please include field information for samples, this would include:

- Your Name (billing information if we have not previously billed you or the customer.)
- Farmer Name if different
- Field Name
- Crop Rotation
- Amount, type and placement of N applied so far this season

Please also label each bag with field ID and depth of sample

### *Cost*

2011 cost per sample is \$5.50 per sample. 0-12 and 12-24 inch for one location is two samples.

Field sampling is available on a per field charge plus mileage for fields over 50 miles from our Farmer City Lab.

### *Contact*

For more information contact Tim Smith: [tsmith@cropsmith.com](mailto:tsmith@cropsmith.com) (217) 621-6117

Ship to: CropSmith Inc.

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