

## Test Nitrogen Levels this Fall, Begin Planning for Spring Fertilization

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Producers will be applying nitrogen fertilizer to fields going into corn or sorghum next year. High fertilizer prices and tight profit margins make it imperative to apply only as much nitrogen as needed for optimum economic yield. Soil sampling for soil nitrogen levels following harvest will determine nitrogen levels already present in the soil so the producer can apply only the amount required.

Fall is a convenient time for farmers to test nitrogen levels because they have the winter to develop a fertilizer plan before spring planting. "The purpose of nitrogen testing isn't to determine whether or not nitrogen exists in the soil, but to determine how much nitrogen is available for plant use," according to Charles Shapiro, extension soils specialist. "Nitrogen carry-over should be relatively high this year due to the drought," Shapiro said. "In situations where yields were low, a lot of the nitrogen didn't get used."

One benefit of high carry-over nitrogen is it is available for crop uptake next year and can be used to modify fertilizer recommendations. There are some environmental conditions that would reduce soil nitrogen in the spring compared to the fall, but if conditions do not get excessively wet, then the fall soil tests should be valid.

The fall moisture received over much of southeast Nebraska this fall may actually have a positive effect on nitrogen levels. Moisture levels, especially in the upper portion of the root zone were sufficient in many areas to cause increased soil microbial activity this fall. The increased microbial activity results in higher rates of mineralization of organic matter thus increasing the amount of plant-available forms of nitrogen.

It is important to take soil samples correctly. Soil probes are inexpensive and I would encourage every producer to buy a probe so it is available throughout the year. If you don't have a probe to pull soil samples you can borrow one from the extension office by leaving a deposit that is returned when you bring the probe back (call ahead as we have a limited supply of "loaners"). We also have sample boxes and information forms for the soil testing laboratory at UNL.

Each distinct soil (upland, sidehill, bottom land) should be sampled and analyzed separately. Collect 10-15 cores from each unique soil type and sample depth to create a composite sample for testing. The topsoil should be sampled down to the eight-inch depth. When testing for carryover nitrate nitrogen, at least one (preferably two) subsoil samples are needed in order to get an accurate estimate of the total nitrate in the root zone. Most commonly, the first subsoil sample will be taken from the 8- to 24-inch

depth and if a second subsoil sample is taken, it may extend down to the 36-inch or even the 48-inch depth. Be certain to mark the depths on the form and on the sample boxes.

Most often, people will test the topsoil sample for pH, Phosphorus, Potassium and Organic Matter and nitrate. Plus one or two subsoil samples usually (8- to 24-inches) and (24- to 36-inches). Select Option 3 on the UNL Soil Sample Information Sheet—cost is \$16.00.

If recent topsoil tests have been taken, one could opt to test only for carryover nitrate-nitrogen in the topsoil plus up to two subsoil depths. Select Option 5 on the UNL Soil Sample Information Sheet—cost is \$8.

You may bring the sample boxes, completed information sheet and a check for the testing fee to the extension office and we will deliver the samples to the University testing lab for you. If the producer completes the information form, UNL will make fertilizer recommendations based on the previous crop history and the soil test results for up to three possible crops and/or yield estimates.

**FOR MORE INFORMATION**  
UNL Extension NebGuide G174, "Fertilizing Suggestions for Corn," available online at <http://www.ianrpubs.unl.edu/sendIt/g174.pdf> or at local extension offices.

## Free Soybean Cyst Nematode Sample Kits Available

While soybean rust has been in the spotlight since November 2004, soybean cyst nematodes (SCN) cause the greatest losses to U.S. and Nebraska soybean producers. In many cases, producers are not familiar with SCN or only look for it when there is a problem in a soybean field and all other possibilities have been eliminated.

To increase the awareness of SCN and better define its distribution, the Nebraska Soybean Board provided funding for free sampling kits (\$20 value) to be distributed through extension offices to farmers in counties where soybeans are grown.

Each kit contains a bag for you to submit a sample to the Plant & Pest Diagnostic Clinic at the University of Nebraska-Lincoln and directions for collecting a soil sample. You will need to collect a soil sample and submit it to the clinic by December 31, 2006 to take advantage of the free offer.

You can sample for SCN any time during the year.

After harvest is a good time to sample if a field didn't yield as expected and you can't attribute the lower yields to any other factor such as weather, flooding, insect infestations or weed pressure. During the growing season, if you notice areas in a field where the soybeans don't look as healthy and it can't be explained by any of the factors above, it is also a good time to sample.

Since there is a limited quantity of these kits available, they will be distributed on a first-come, first-served basis to farmers stopping by the extension office to pick them up. To benefit as many farmers as possible, limit one kit per farm operation.

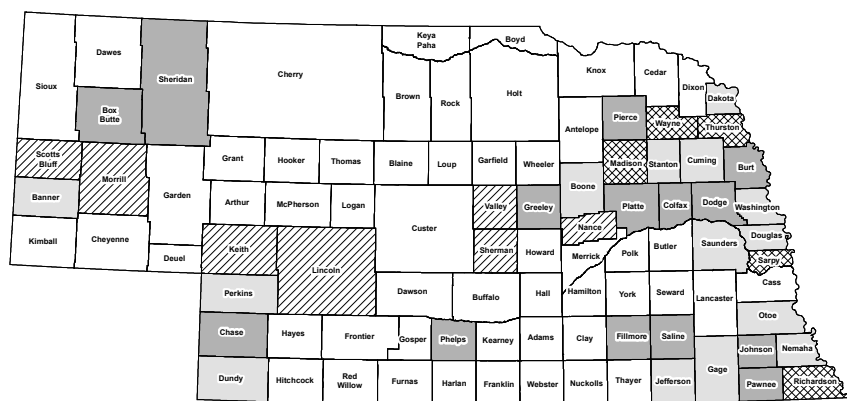
**FOR MORE INFORMATION**  
UNL Extension NebGuide G1383, "Soybean Cyst Nematode Biology and Management," available at the extension office online at <http://www.ianrpubs.unl.edu/sendIt/g1383.html>

## Farming No-Till Increases for Major Nebraska Crops, Better for Environment, Fuel Saved

The planting of corn and soybeans "no-till" is estimated to have increased by about 12 percent in the last two years (2004 to 2006) according to observations by Natural Resources Conservation Service and extension staff.

"In about 40 counties, staff reviewed several hundred sites totaling nearly four million acres of corn and 2.5 million acres of soybeans after planting last spring. That's a pretty good indicator that farmers are seeing the benefits of planting no-till," said Steve Chick, NRCS State Conservationist. No-till planting means the soil is left undisturbed from the previous year and the new crop is planted directly through the residue into the soil in the spring.

Smaller, but still significant no-till farming gains were found in wheat and sorghum crops. There was an estimated six percent increase in wheat planted no-till and a seven percent increase in sorghum planted no-till. Most of the wheat gains were in fall-planted wheat in southeast Nebraska.



**Legend**  
No-Till as a percentage of total planted corn acres  
0 - 25 26 - 49 50 - 74 75 - 100 Not Surveyed

"These numbers are not scientifically collected, but are an indicator of what we hope is a bigger trend statewide," said Chick. "There isn't any other data like this available. Staff time commitments just didn't permit us to collect data from all 93 counties this year," he said.

Another great benefit of no-till is the fuel savings. For example, our figures show a 500,000 acre increase in no-till corn planted over the two years in the 40 counties. "Total corn acres planted remained about the same. Depending how those acres were planted the year before the minimum fuel savings

would be 470,000 gallons. At \$2.50 a gallon, that's a savings of \$1.2 million to those farmers," said Chick.

"There are more benefits like the build-up of organic material in the soil, less soil erosion and less time of the farmer spent planting," said Chick.

"It's important to recognize these gains now at harvest time. Leaving this year's crop residue on the soil surface is the start of the "no-till" season. Any cultivation from here on destroys these gains," said Chick.

Source: Natural Resources Conservation Service

## Computerized Farm Financial Recordkeeping Workshops

After a two-year hiatus, Computerized Farm Financial Recordkeeping workshops will once again be offered by University of Nebraska-Lincoln Extension in Lancaster County.

Over the years, Computerized Financial Recordkeeping workshops have been one of the most popular in-depth extension programs offered. Between 1998 and 2004, workshops were held in 20 locations in southeast Nebraska, training one or more people from over 280 farming operations. Survey results of past participants show well over 80% believe they have learned to keep a more complete set of financial records and nearly 90% believe they learned to keep a more accurate set of records as a result of attending the training.

Watch for more information on dates and locations in the January Neblin.

## Public Notice

The Lancaster County Board of Commissioner seek members of the community to serve on the Lancaster County Extension Board. The vacancies will be filled with terms beginning in January 2007.

Extension Board members represent and assist University of Nebraska Extension staff in Lancaster County with priority issue areas that include Agricultural Profitability and Sustainability; Children, 4-H, Youth and Families; Food Safety, Health and Wellness, strengthening Nebraska Communities and Water Quality and Environment. The Board meets monthly.

Registered Lancaster County voters interested in serving a three-year term should complete an application for an appointment by November 1, 2006. Additional information and an application can be obtained from the Lancaster County Extension office, 444 Cherrycreek Road, Suite A, Lincoln, NE 68528-1507, or phone 441-7180. Online applications are available at <http://interlinc.ci.lincoln.ne.us/cnty/commiss/boardapp.pdf>