

DID YOU HAVE ENOUGH FERTILITY OR NITROGEN FOR YOUR CORN CROP?

In travelling through southeast Nebraska recently I noticed several fields of corn that had a yellow or light green color to them. A number of these fields may have areas that were nitrogen deficient. Some of the yellowing is showing up on terrace channels in upland fields. Nitrogen may have leached well below the root zone and was not available to the corn plant. Other fields may have had wet areas that were saturated and nitrogen was lost through denitrification, with nitrogen gas escaping into the atmosphere.

If you have these areas in your fields, you may want to conduct a corn stalk nitrate test to determine if nitrogen levels were deficient in these fields. The corn stalk nitrate test is recommended to be taken from one to three weeks after black layer formation. Usually this test is conducted to determine if corn was over fertilized with nitrogen during the season, but it can also show that nitrogen may have been deficient for optimum corn grain production. An 8" stalk sample is taken from 6" to 14" above the ground. It is recommended to take 15 stalks per sample. After collecting the samples, wrap the samples in paper and immediately send the samples to a lab for nitrate analyses. Most area soil labs are equipped to conduct the stalk nitrate tests. Check with your lab to make sure they perform this test. You can access more information on the corn stalk nitrate test at: <http://cropwatch.unl.edu/use-fall-corn-stalk-tests-guide-nitrogen-rates>. If results show nitrate levels in either the low or excess range, you may want to review your nitrogen fertilizer program to determine where improvements can be made.

Has it has been a while since you have conducted soil tests for other nutrients in these fields? If so, you may want to also take extensive soil samples to evaluate their nutrient status and determine if other nutrients potentially impacted corn yields, especially in these yellow areas of the field. If you have other questions about this test, feel free to contact me at glesoing2@unl.edu or (402) 274-4755 at Nebraska Extension in Nemaha County.

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