



# ILLINOIS AMINO SUGAR NITROGEN SOIL TEST

The Illinois Amino Sugar Nitrogen Test is a developing tool that we hope will more accurately predict the amount of additional nitrogen needed by a corn crop. Dr. Richard Mulvaney and Dr. Saeed Khan of the University of Illinois developed this procedure, and they are interpreting the research data that continues to be generated.

**SAMPLING TIME** - The soil can be sampled from fall through early spring.

**SAMPLING DEPTH** - The soil should be sampled 0-12" to use the 2002 interpretations. Dr. Khan states that 0-7" cores may be used, but that the critical value is then raised to 270-280 ppm nitrogen.

**SAMPLE QUANTITY** - Limited research has been done on field variability of the Illinois Nitrogen Test. It appears that the sample intensity used to determine pH, P and K will be adequate for this nitrogen test.

**SAMPLE HANDLING** - Under warm, moist conditions the amino sugar compounds may change rapidly. Samples should be sent directly to the laboratory. If analysis is delayed, the soils should be air-dried or kept frozen until the laboratory can process them.

**INTERPRETATION** - The current 2002 interpretations are very basic. An Illinois Soil Test above 240 ppm N (on 0-12 inch cores) will not show response to additional nitrogen inputs. Below 240 ppm N there should be a response, but the amount of nitrogen to apply has not been correlated to the test result.

The Illinois Nitrogen Soil Test is still in its infancy, but data suggests that it may be an excellent routine analysis in the future. A web search will provide additional information about this test, and any new developments. A & L Great Lakes Laboratories is ready to analyze your soils using the Illinois Soil Nitrogen Test, and we have validated our procedure using soils from the University of Illinois study.

## FACT SHEET

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