

Experiment Info:

Variety: Great Lakes
 4646STX-RIB

Population: 32,000

Row Spacing: 30"

Previous Crop: sugarbeets

Plot Size: 6 rows

Objective:

Compare different rates of three different nitrogen sources for effect on yield of corn.

Thumb Ag Research & Education (TARE) is a research program for agricultural crop evaluations in the Thumb area of Michigan. Research programs are overseen by a committee comprised of farmer and agribusiness representatives and conducted by Extension personnel of Michigan State University. This project is the first time AgroLiquid has participated in TARE research plots. An experiment was conducted to test three different liquid nitrogen sources at different rates applied at sidedress for effect on corn yield. The sources 28% UAN and 28% UAN + eNhance were each applied at 160, 180 and 200 lb of N per acre. High NRG-N was applied at 140 and 160 lb-N per acre. Rates were for actual pounds applied. This plot was established in a grower field East of Unionville in Tuscola County. Sidedress applications were coultter injected. Treatments and yield are in the table.

Sidedress N Comparisons in Corn: Rates and Sources

Thumb Ag Research & Education (TARE) - 2012

Yields average of 4 Replications

	N fertilizer	gal/A	lb-N/A	Bu/A	Rank
1.	High NRG-N	46.6	140	207.6	1
2.	High NRG-N	53.3	160	194.6	6
3.	28% UAN	53.3	160	193.6	8
4.	28% UAN	60	180	196.3	5
5.	28% UAN	66.6	200	194.2	7
6.	28% + eNhance	53.3	160	196.8	4
7.	28% + eNhance	60	180	203.1	2
8.	28% + eNhance	66.6	200	201.7	3

No statistically significant differences in yield at (0.05) level.

Conclusions:

- The corn yield was much higher than expected for all treatments.
- The plots that received low rates of applied nitrogen yielded as well as the plots that received the highest rates. The highest yield was obtained with the lowest applied N rate: 140 lb-N/A with High NRG-N. However, the differences were not statistically different.
- There was a second location in Huron County, but unfortunately it was ravaged by raccoons.
- This experiment is planned to be repeated in 2013, although with a lower range of N rates in an attempt to obtain yield separation.