

Experiment Info:

Planted:	5/29/2014
Harvest:	10/23/2014
Yield Goal:	30 ton/A
Target Fert.:	120-39-34
Variety:	RR202MP
Population:	48,000
Row Width:	30"
Prev. Crop:	Wheat
Plot Size:	15 X 265
Replications:	4
Liquid BC:	5/30/2014

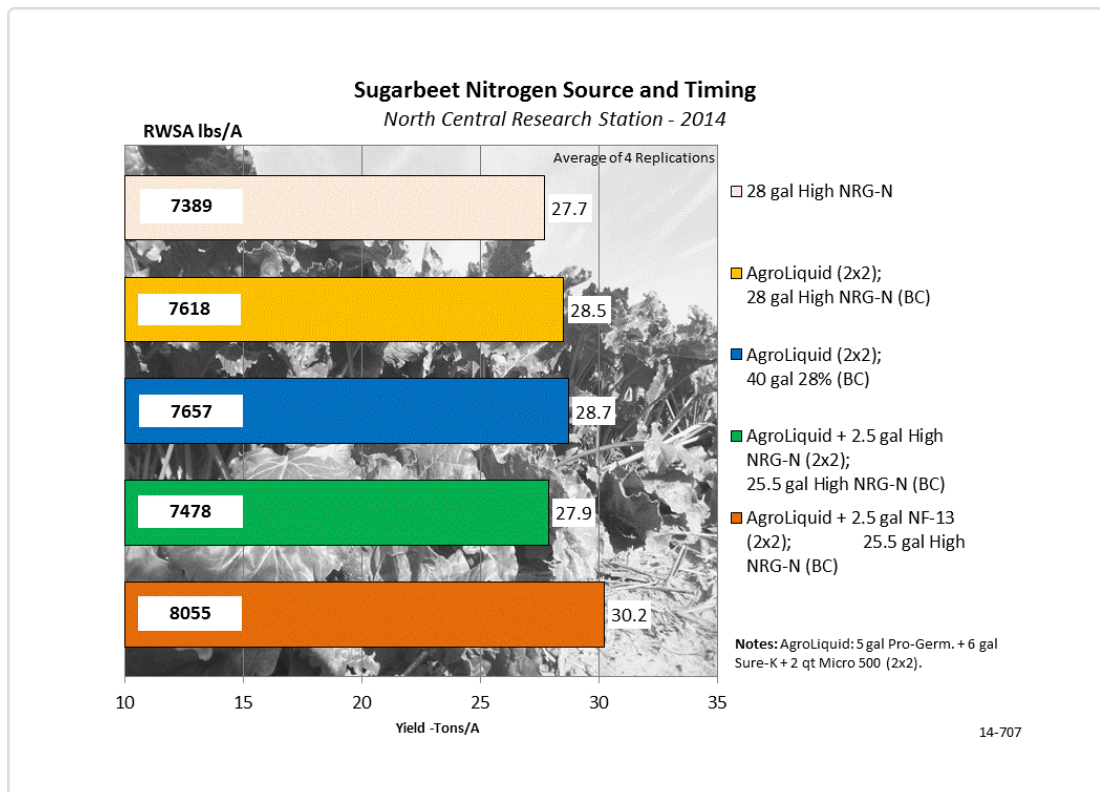
Soil Test Values (ppm):

pH:	6.6
CEC:	16.8
%OM:	2.5
Bray P1:	15
Bicarb P:	-
K:	163
S:	11
%K:	2.5
%Mg:	19.6
%Ca:	71.7
%H:	5.8
Zn:	1.4
Mn:	7
B:	0.6

Objective:

To evaluate different nitrogen sources and their timing for sugarbeets.

High NRG-N is an excellent nitrogen source for sugarbeets. This experiment compares High NRG-N at 28 gal/A and 28% UAN at 40 gal/A. Two treatments split the application of nitrogen into a small amount of 2.5 gal/A of High NRG-N or NF-13 (an experimental nitrogen product) applied with the AgroLiquid program. The remaining 25.5 gal/A was then applied as High NRG-N broadcast to be similar to the other treatments. Sugarbeets need to get off to a fast start and it was thought that the additional nitrogen placed near the seed 2x2 would be available to the young seedling to promote the fast growth. Each nitrogen treatment was applied at a rate to provide 120 lbs/A of nitrogen per acre for a 30 ton/A yield goal. Excessive rainfall and wet soils caused planting to be delayed to May 29th. Sub samples of beets were taken from each plot and submitted to Michigan Sugar for sucrose analysis. Different nitrogen products can have an effect on Recoverable White Sugar yield. Yields per ton of beets and pounds of sugar per acre appear on the chart below.



LSD(0.2) 2.1, CV: 7.4%

Conclusions:

- All 4 treatments resulted in similar sugarbeet yield.
- The NF-13 as part of the 2x2 placed fertilizer provided the highest yield at 30.2 tons/A. It also provided the highest pounds of recoverable sugar at 8055 lbs/A. Continued testing of this experimental will continue.
- A split application where 2.5 gal/A of High NRG-N placed 2x2 next to the seed did not improve yield, showing that a full broadcast treatment is just as effective.
- High NRG-N continues to be an excellent nitrogen source for sugarbeets and provides very good sugar yield with a much lower application volume compared to 28% UAN.