

Experiment Info:

Planted:	5/2
Variety:	Crystal RR827
Population:	48,000
Row Spacing:	30"
Previous Crop:	Wheat
Plot Size:	15' x 290/300'
PRE:	5/4
Harvested:	11/4

Soil Test Values (ppm):

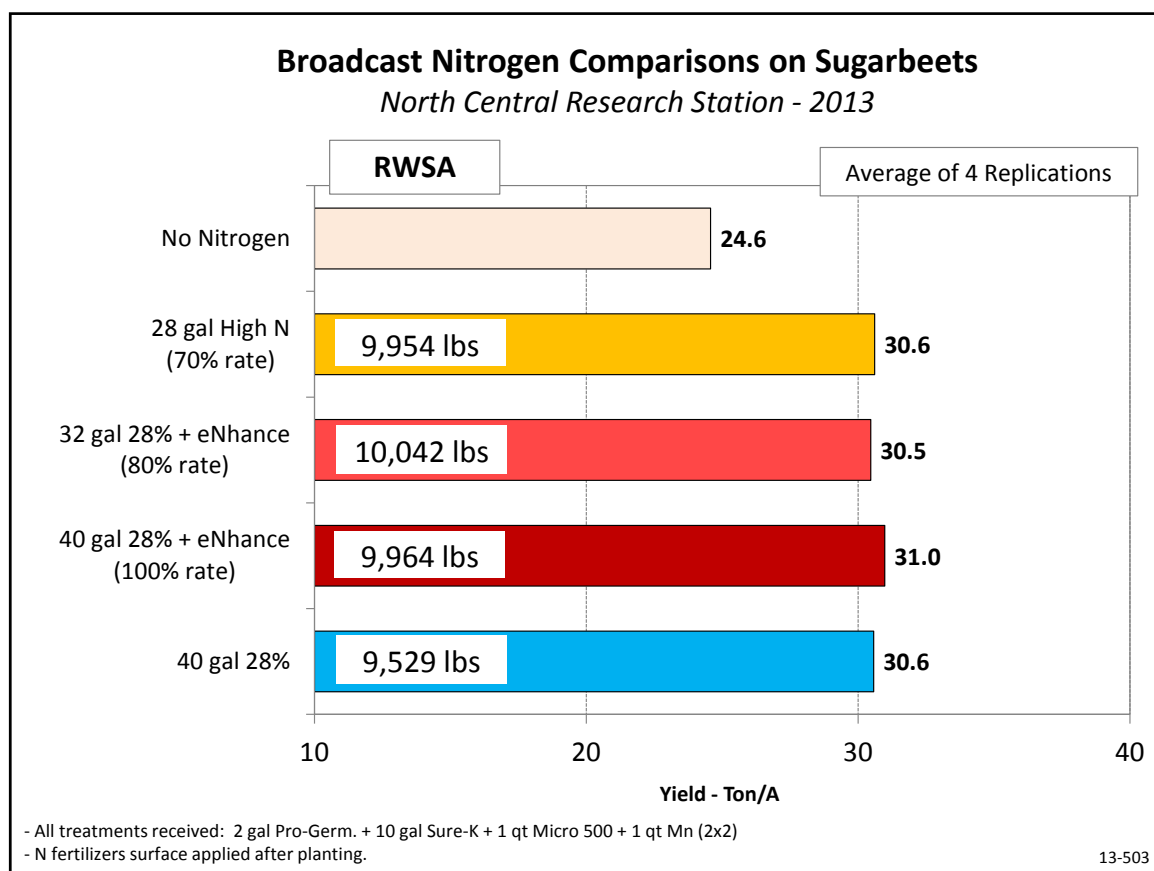
pH:	7.2
CEC:	8.5
% OM:	1.8
Bicarb P:	24
K:	72
S:	9
% K:	2.2
% Mg:	26.3
% Ca:	70.2
% H:	0
% Na:	1.3
Zn:	1.3
Mn:	6
B:	0.6

Yield Goal:	30 tons
Target Fertilizer Rate:	120-0-154

Objective:

To compare broadcast Nitrogen sources on sugarbeets.

One of the major nutrient needs of sugarbeets is nitrogen. However, adding more nitrogen than is needed will encourage leaf growth and decrease sucrose content of the root. Nitrogen should be applied to achieve optimum canopy development for the beginning of the growing period. Then soil nitrogen levels should back off toward the end of the season to acquire the highest sucrose yield. Recoverable white sugar per acre (RWSA) is the term for sucrose yield and the major factor for quality payments to growers. In this experiment High NRG-N was compared to 28% UAN + eNhance and 28% UAN. The rates used were 28, 32 and 40 GPA respectively. Treatments were broadcast applied after planting.



Conclusions:

- No significant difference in yield was observed between the 4 comparisons.
- The higher amount of 28% UAN did have the lowest recoverable white sugar per acre. It has been seen in the past that higher nitrogen applications can result in less recoverable white sugar per acre possibly because of the excess nitrogen.
- High NRG-N and 28% UAN + eNhance can provide the same yield as higher rates of 28% alone while applying fewer pounds of nitrogen. Efficiency of the nutrients is the key to using less total pounds of N.
- A rate of 32 gal of 28% + eNhance provided the highest recoverable white sugar per acre.