AGRO-CULTURE LIQUID FERTILIZERS

Planter Fertilizer Placement on Sugarbeet (14-718)

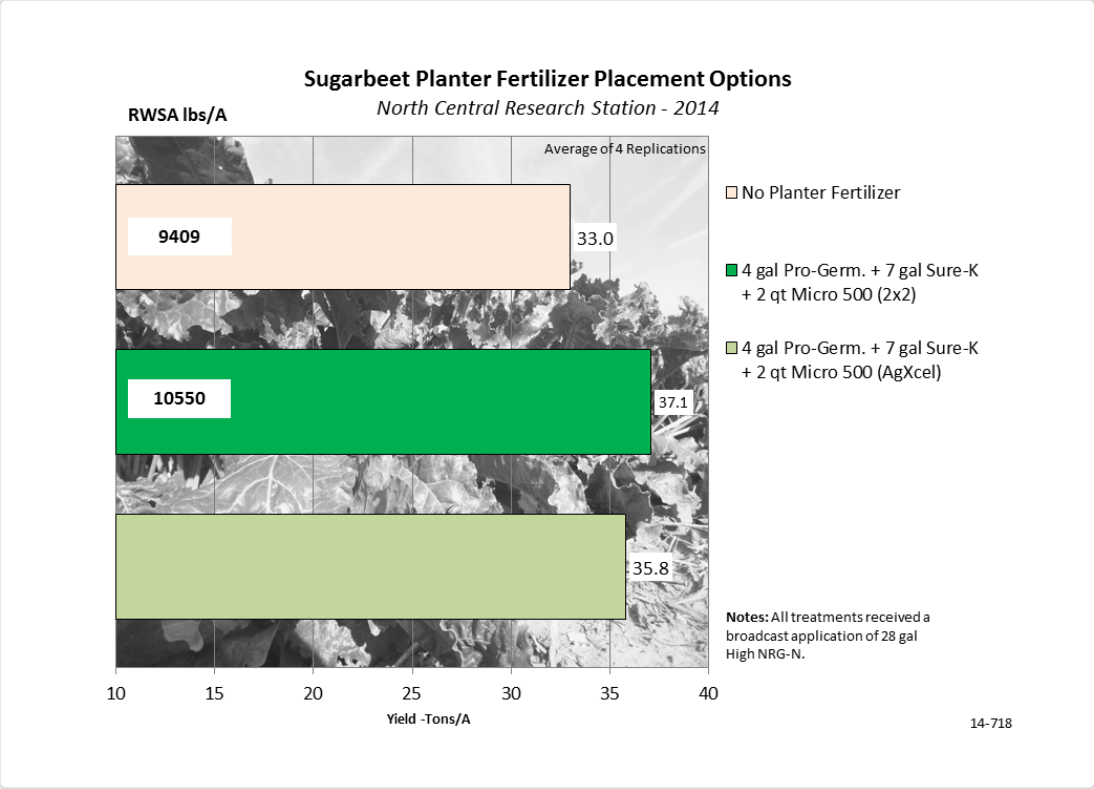
Experiment Info:	
Planted:	5/5/2014
Harvest:	10/24/2014
Yield Goal:	30 ton/A
Target Fert.:	120-49-91
Variety:	RR202MP
Population:	51,000
Row Width:	30"
Prev. Crop:	Oats
Plot Size:	15 x 210
Replications:	4
Liquid BC:	5/10/2014

Soil Test Values (ppm):	
pH:	6.9
CEC:	16.2
%OM:	3.1
Bray P1:	13
Bicarb P:	-
K:	131
S:	9
%K:	2.1
%Mg:	23
%Ca:	74.6
%H:	0
Zn:	1.3
Mn:	3
B:	0.5

Objective:

To compare planter fertilizer placement options for sugarbeet.

Sugarbeets are typically planted very early in the season and the need for planter placed fertilizer is essential to get the young plants off to a healthy start in the cooler soils that they face. They are also a very sensitive seed and fertilizer placed in-furrow where it can be most beneficial is risky. In order to place a small amount of nutrients in-furrow and yet apply the nutrient need of the crop at time of planting, AgXcel has developed a system to split apply the total fertilizer amount into two placements. Agro-Culture Liquid Fertilizers has worked with this split application system for two years now with trials on various crops. In this experiment the AgXcel placement is 3 gal/A in-furrow and the remaining 8.5 gal/A 0x1 on the soil surface behind the closing wheels. This treatment is compared to a standard 2x2 placement and no planter fertilizer. Sub samples of harvested sugarbeets were taken and sent to Michigan Sugar for sucrose analysis. Recoverable White Sugar per Acre (RWSA) as lbs/A for two of the treatments are shown on the yield bars in the yield chart below.



LSD(0.05) 2.3, CV: 5.4%

Conclusions:

- Both planter fertilizer treatments had a significant yield advantage over the no planter fertilizer showing that either placement of fertilizer is beneficial to the sugarbeet.
- The 2x2 placement had a small yield advantage over the AgXcel.
- Yields were very high for this experiment and exceeded the 30 ton/A yield goal. Pounds of sugar produced was also very high with 1100 more pounds of sugar produced with the addition of planter fertilizer.