Corn Planter Applied Sulfur Fertilizer Options for Corn (13-716)

Planted: 5/3 Variety: DKC53-78 Population: 4 Row Spacing: 30" Previous Crop: Soybeans Plot Size: 15' x 210' Replications: 4 PRE: 5/4 Sidedress: 6/15 Harvested: 10/3

Soil Test Values (ppm):	
рН:	7.6
CEC:	14.8
% OM:	3.7
Bicarb P:	5
K:	73
S:	7
% K:	1.3
% Mg:	21.7
% Ca:	76.8
%H:	0
% Na:	0.2
Zn:	0.8
Mn:	2
B:	0.5

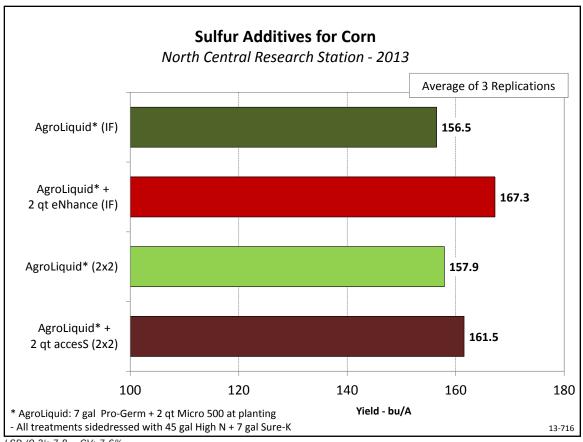
Yield Goal: 175bu

Target
Fertilizer Rate: 192-105-135

Objective:

To evaluated planter applied sulfur options in corn.

Environmental air cleanup has greatly decreased the amount of free sulfur a corn crop receives each year. Because of this, growers should apply sulfur in order to research optimum yield. Agro-Culture Liquid Fertilizers has 3 sulfur options that can be used for planter applications. The first option is eNhance, which is 8.7% sulfur and also contains Manganese and Zinc. This product is safe for in-furrow applications on corn up to 3 qt/A. The other two options are accesS (17% sulfur) and S-Calate (14% sulfur). Neither of these products are recommended for in-furrow applications, but are safe for a 2x2 application. The difference between the two has to do with the soil requirements for calcium. In soils that have lower calcium levels, use S-Calate, as it contains 1% calcium. This experiment compares an in-furrow fertilizer program with and without the addition of 2 qt/A eNhance and a 2x2 fertilizer program with and without the addition of 2 qt/A access. Yield results appear on the chart below.



LSD (0.2): 7.8 CV: 7.6%

Conclusions:

- Both sulfur sources, eNhance and accesS, increased yield over the comparable no-sulfur treatment. However, the yield increase with eNhance was statistically significant.
- There was no yield difference observed between the same fertilizer program applied in-furrow or 2x2.
- Highest yield was reached with an in-furrow application of 2 qt/A eNhance, with a 10 bu/A yield increase over the no sulfur treatment.
- It should be noted that current recommendations of accesS is closer to 2 gal/A. However, this experiment applied equal rates of both products for evaluation.