PRIMAGRO Program Components on Corn (17-503 and 17-706)

Experiment Info:	
Planted:	5/17/2017
Harvest:	11/8/2017
Yield Goal:	170 bu/A
Target Fert.:	
Variety:	DKC 48-12 RIB
Population:	32,000
Row Width:	30"
Prev. Crop:	Wheat
Plot Size:	15 x 265
Replications:	4

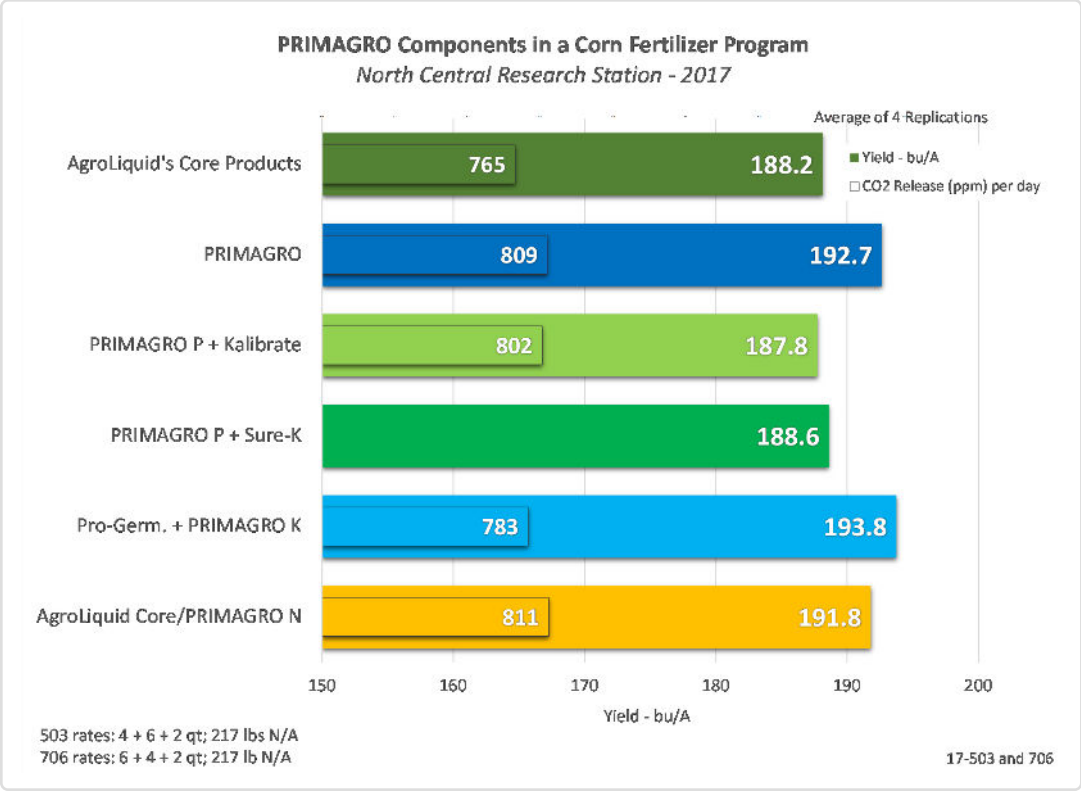
Soil Test Values (ppm):	
pH:	7.1
CEC:	10.7
%OM:	2.6
Bray P1:	8
Bicarb P:	6
K:	105
S:	17
%K:	2.5
%Mg:	22.9
%Ca:	73.6
%H:	0
Zn:	0.7
Mn:	4
B:	0.4

Objective:

To determine the benefits of each component in the PRIMAGRO fertilizer line.

AgroLiquid's PRIMAGRO line contains a N, P and K product. This trial was established to compare a full PRIMAGRO program to a full AgroLiquid core products program containing Pro-Germinator, Kalibrate and High NRG-N. Additional treatments than removed one component of the AgroLiquid program and replaced it with the matching component from the PRIMAGRO line. For example, Pro-Germinator was removed from the program and replaced with PRIMAGRO P.

This trial was conducted in two locations at the NCRS. Average yield from the two sites appear on the chart below. In addition to yield evaluations, Dr. Massri evaluated the microbial respiration activity levels, determined by measuring the amount of CO_2 generated in the specific combinations of beneficial microbes and carbon compounds in PRIMAGRO.The values for these from one site are located on the chart below. More details of his field work can be found in the report titled Innovative measurement techniques for assessment of microbial activity respiration of PRIMAGRO in field conditions



Yield: (NSD), CV:5.9%

Conclusions:

- The average of these two trials, the full PRIMAGRO program out yielded the full AgroLiquid by over 4 bu/A.
- Replacing the phosphorus component did not provide any yield benefit compared to the AgroLiquid treatment.
- Using PRIMAGRO K in place of Kalibrate provided the highest yield of 193.8 bu/A.
- The use of PRIMAGRO N in place of High NRG-N also increased corn yield over the AgroLiquid program.
- The addition of any PRIMAGRO component within the fertilizer program increased the daily CO_2 release.
- The inclusion of a PRIMAGRO product in the treatment resulted in elevated CO_2 release which indicates more biological activity in the soil.