Ca and Mg Options in Corn (2016)

Ron Mulford, U of MD - Quantico, MD

Experiment Info:	
Planted:	
Harvest:	10-18-2016
Yield Goal:	230
Target Fert.:	
Variety:	
Population:	
Row Width:	30"
Prev. Crop:	Soybean
Plot Size:	10' X 30'
Replications:	4

Soil Test Values (ppm):	
pH:	6.5
CEC:	4.4
%OM:	1.3
Bray P1:	81
Bicarb P:	
K:	116
S:	7
%K:	7
%Mg:	22
%Ca:	63
%H:	8
Zn:	2.15
Mn:	32
B:	0.33

Objective:

Evaluate the efficacy of Calcium and Magnesium as additions to a planter fertilizer program in corn.

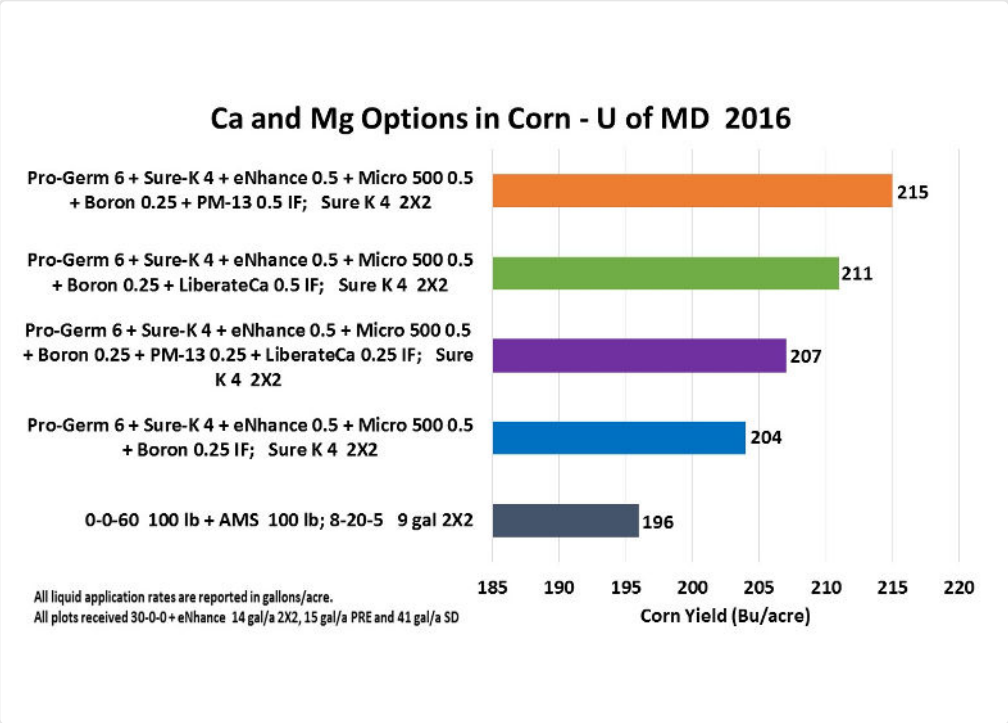
PM-13 is an experimental magnesium fertilizer designed to provide magnesium nutrition to crop plants. It is also compatible with other AgroLiquid products including those containing phosphorous such as Pro-Germinator.

This report is part of a larger study conducted by Ron Mulford at the University of Maryland Poplar Hill.

An AgroLiquid planter fertilizer program was applied alone or in combination with PM-13, Liberate Ca or both.

The conventional phosphate + potash treatment is based on University of Maryland standard recommendations.

Magnesium level in this trial was 114 ppm and calcium level was 563 ppm (Mehlich 3)



LSD 0.1 = 9.8

Conclusions:

- Plots treated with magnesium, calcium, or both had increased yields over plots not receiving those nutrients.
- High rates of either nutrient appear trended to be more beneficial than lower rates of both nutrients although the yield differences among those three treatments were not statistically different.