

Calcium Fertilizer Additives for Corn (14-803)

Experiment Info: Planted: Harvest: 10/22/2014 Yield Goal: 175 bu/A Target Fert.: 193-40-65 Variety: DKC 49-29 RIB Population: 29,000

30"

Soybeans

15 x 530

Replications: 3
Sidedre

Row Width:

Prev. Crop:

Plot Size:

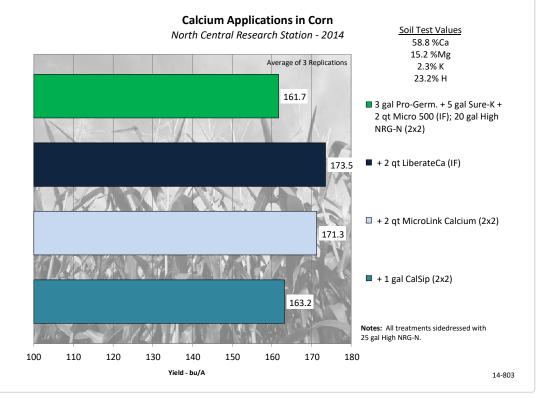
Soil Test Values (ppm):	
рН:	5.9
CEC:	9.3
%OM:	2.4
Bray P1:	19
Bicarb P:	
K:	90
S:	6
%K:	2.5
%Mg:	18.1
%Ca:	61.5
%H:	17.6
Zn:	.9
Mn:	8
B:	.2

Objective:

To evaluate different sources of calcium applied with a planter program on corn.

What is the best source of calcium to use on soils requiring additional calcium? Soil test base saturation levels for calcium on this field are 58.8%, hydrogen is 23.2% and magnesium is 15.2%. This experiment compared additions of 2 qt/A LiberateCa, 2 qt/A MicroLink Calcium or 1 gal/A CalSip to a planter application. LiberateCa is a safe product to use in-furrow and was added to the in-furrow mix of 3 gal/A Pro-Germinator + 5 gal/A Sure-K + 2 qt/A Micro 500. The remaining two products are not safe in-furrow, therefore they were added to the 20 gal/A High NRG-N that was applied 2x2.

Calcium is an essential nutrient that facilitates the transport of other necessary elements of plant growth. Treatments were based on the product equivalency of 2 qt/A LiberateCa providing 4 lbs of calcium, MicroLink Calcium providing 4 lbs calcium and CalSip providing 3.5 lbs of calcium per gallon applied. Yields for the no calcium treatment and calcium



LSD(0.2) 7.6, CV: 3.4%

Conclusions:

- Significant yield differences were realized with the addition of LiberateCa or MicroLink calcium sources.
- In-furrow placement of LiberateCa provided the largest yield advantage (11.8 bu/A) over the standard planter fertilizer comparison.
- Corn growing in soils testing low in calcium shows a strong response to additional calcium being added to the planter fertilizer program.