



Calcium Source Comparison on 15"- Row Soybeans (16-802)

Experiment Info:

| | |
|---------------|------------|
| Planted: | 5/27/2016 |
| Harvest: | 10/11/2016 |
| Yield Goal: | 60 bu/A |
| Target Fert.: | 0-33-147 |
| Variety: | 20RD20 |
| Population: | 165,000 |
| Row Width: | 15" |
| Prev. Crop: | Corn |
| Plot Size: | 15 x 530 |
| Replications: | 3 |
| LBC | 05/27/2016 |
| FOL | 07/13/2016 |

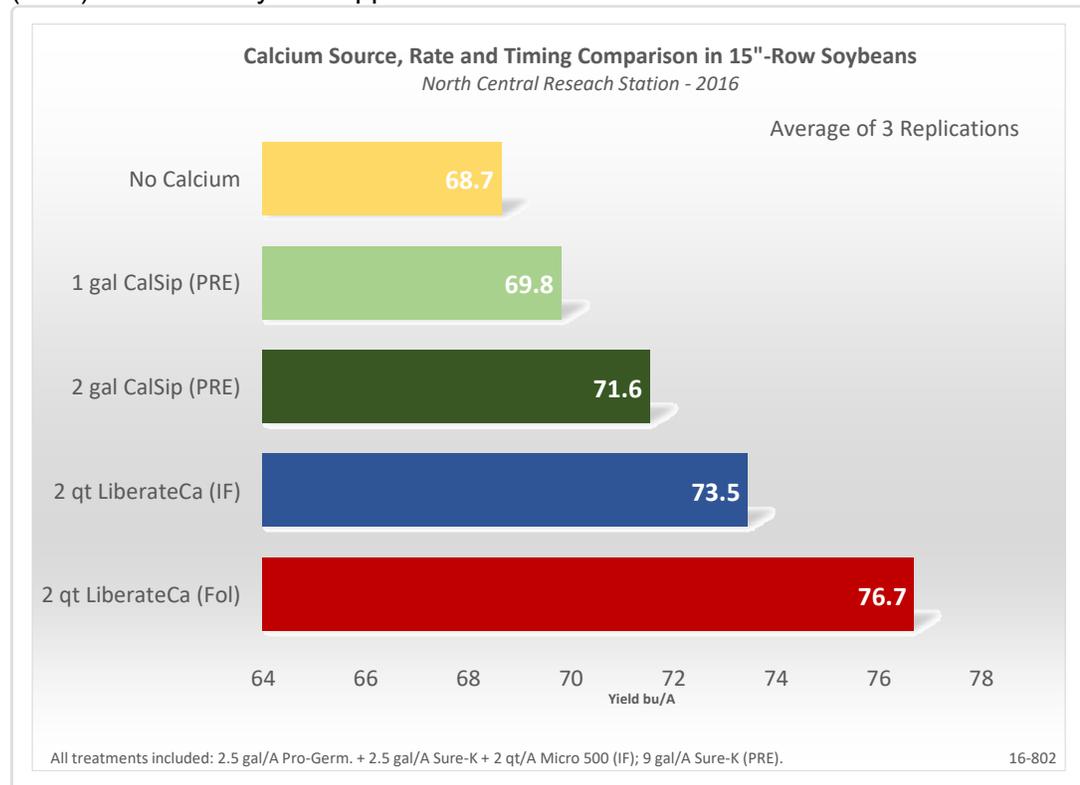
Soil Test Values (ppm):

| | |
|-----------|------|
| pH: | 6 |
| CEC: | 10.1 |
| %OM: | 2.3 |
| Bray P1: | 13 |
| Bicarb P: | |
| K: | 60 |
| S: | 6 |
| %K: | 1.5 |
| %Mg: | 15.6 |
| %Ca: | 67.4 |
| %H: | 15.2 |
| Zn: | 1 |
| Mn: | 4 |
| B: | .3 |

Objective:

To compare AgroLiquid sources of calcium in a pre-emergence, in-furrow or foliar method of application.

Calcium helps facilitate the transport of other necessary nutrients of plant growth and is one of the primary nutrients responsible for grain development. When soils test low for calcium availability, a supplemental form should be considered as part of a fertility program. AgroLiquid has two products that can supply efficient forms of calcium to a soybean crop. In this experiment a rate of 1 or 2 gal/A of CalSip was applied as a pre-emergence broadcast spray after planting. Also a 2 qt/A rate of LiberateCa was applied in-furrow with the planter or as a foliar application at V5 growth stage. LiberateCa is a good source of calcium that can be mixed with phosphorus and applied in-furrow. The remaining nutrient program consisted of 2.5 gal/A Pro-Germinator + 2.5 gal/A Sure-K + 2 qt/A Micro 500 (IF) and 9 gal/A Sure-K (PRE). Treatment yields appear in the chart below.



LSD(0.2)3.2 CV: 5%

Conclusions:

- LiberateCa applied as a foliar at 2 qt/A showed the largest yield increase of 8 bu/A over no calcium applied.
- The pre-emergence applications of CalSip is an efficient means of application, the 2 gal/A rate provided a yield advantage of 2.9 bu/A, however a band application of 2 qt/A near the row showed to be a better return for dollars spent.
- Both applications of LiberateCa had a significant yield advantage over a no calcium application, proving that an addition of calcium to low testing soils can increase yields.