

Effects of In-Furrow Fertilizer Rate on Soybean Stand in 30"-Rows (14-504)

Experiment Info:

Planted:	5/24/2014
Harvest:	10/23/2014
Yield Goal:	60 bu/A
Target Fert.:	0-0-135
Variety:	20RD20
Population:	142,000
Row Width:	30"
Prev. Crop:	Corn
Plot Size:	15 x 290/310
Replications:	4

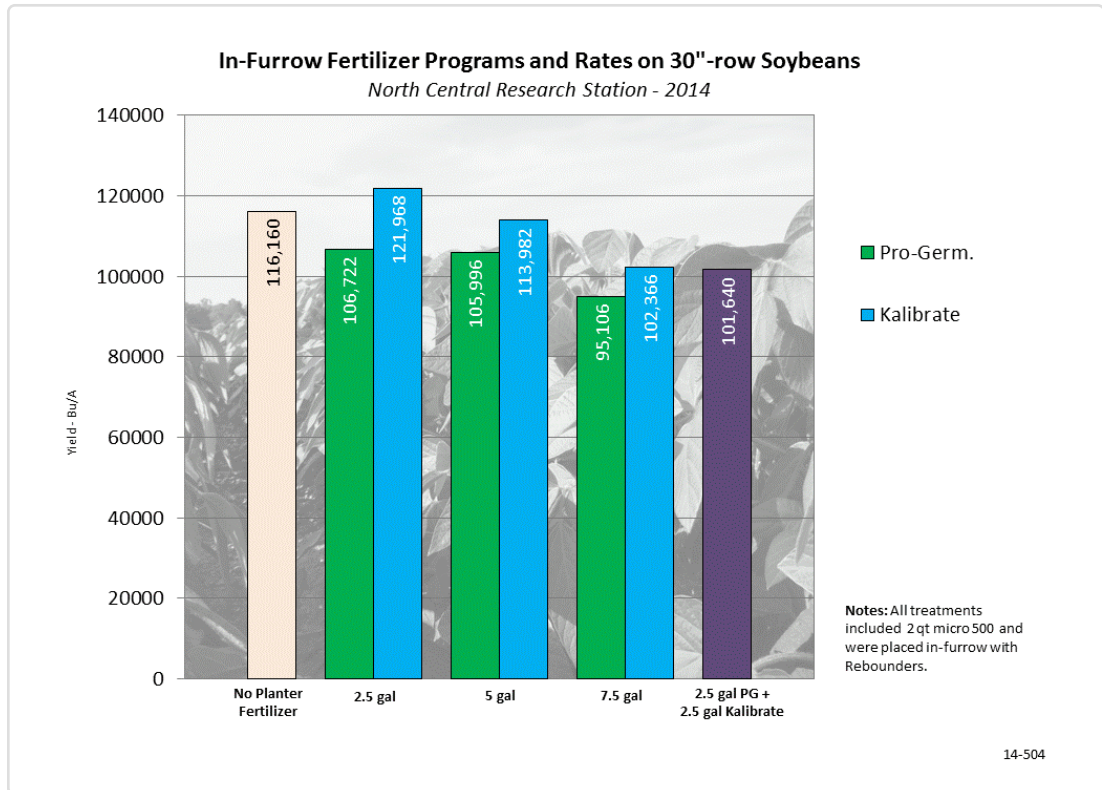
Soil Test Values (ppm):

pH:	7
CEC:	7.5
%OM:	1.6
Bray P1:	50
Bicarb P:	18
K:	71
S:	6
%K:	2.4
%Mg:	24.8
%Ca:	71.8
%H:	0
Zn:	1.5
Mn:	8
B:	0.6

Objective:

An evaluation of in-furrow fertilizers at different rates to measure the effects on the established stand of 30"-row soybeans.

Placement of fertilizer in-furrow on 30"-row soybeans is risky, especially on light soils or in low moisture conditions. However, it is understood that there are many soils and growing conditions that this is an acceptable practice. This experiment was established to look at two products, Pro-Germinator and Kalibrate at three rates, 2.5, 5 and 7.5 gal/A and what effects they have on soybean stand. An additional treatment of a combination of the two products was also tested. All treatments included 2 qt/A Micro 500 and were placed in-furrow with Rebounder seed firmers. Stand counts were taken 23 days after planting and can be compared to the untreated check. There was no difference in soybean yield and this data is not shown. Stand count results appear on the chart below.



LSD(0.2) 10,401, CV: 13.2%

Conclusions:

- In-furrow rates at 2.5 and 5 gal/A of Pro-Germinator decreased soybean stand by 10,000 plants/A.
- Kalibrate at 2.5 and 5 gal/A did not show a significant loss in established stand.
- The 7.5 gal/A of either fertilizer source applied in-furrow significantly lowered the soybean stand. Pro-Germinator decreased stand more than Kalibrate.
- Although there was stand loss, soybeans can compensate when it comes to yield.