



Effects of In-Furrow Applications of Kalibrate on Corn Emergence (15-305)

Experiment Info:

Planted:	5/6/2015
Harvest:	10/8/2015
Yield Goal:	200 bu/A
Target Fert.:	220-34-138
Variety:	DKC 49-72 RIB
Population:	36,400
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 180/210/130
Replications:	5
SD (V5)	6/4/2015

Soil Test Values (ppm):

pH:	7.1
CEC:	5
%OM:	1.3
Bray P1:	22
Bicarb P:	7
K:	39
S:	6
%K:	2
%Mg:	17
%Ca:	79.7
%H:	0
Zn:	0.8
Mn:	3
B:	0.4

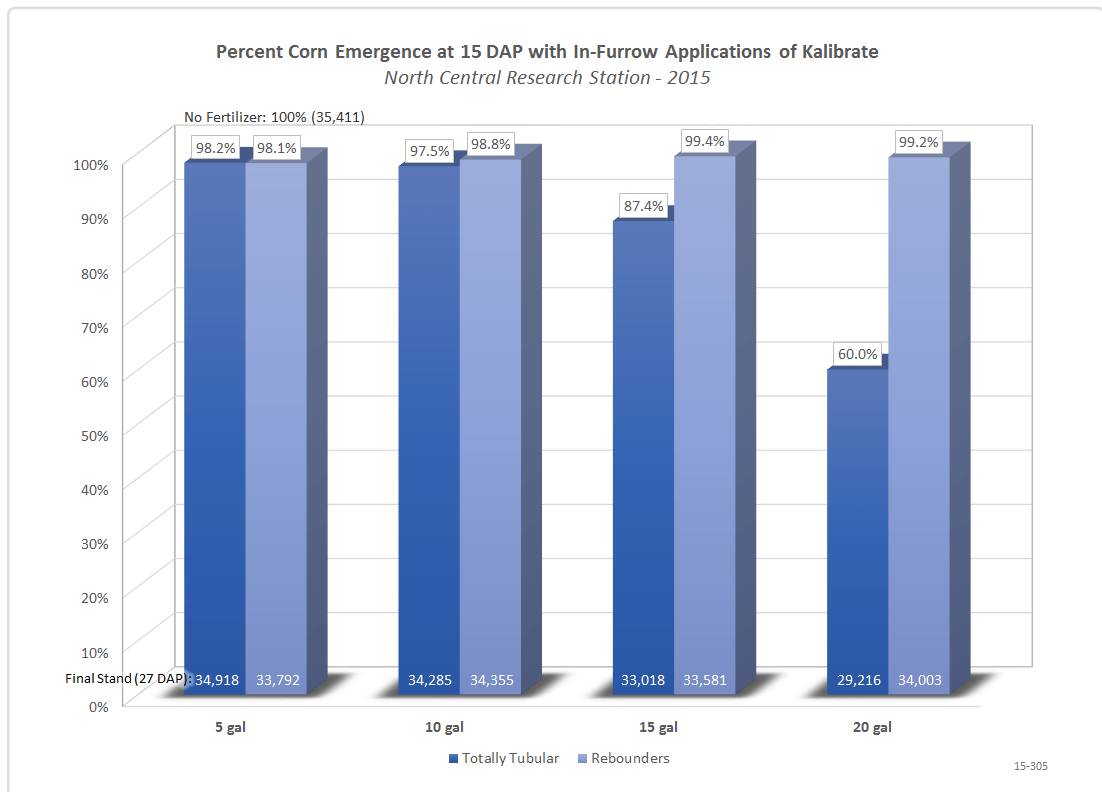
Objective:

To evaluate the effects in-furrow applications and fertilizer rates have on corn emergence.

This experiment was established focusing, not necessarily on the agronomic or economics of in-furrow programs, but rather seed safety. Kalibrate was applied at 4 different rates per acre: 5 gal, 10 gal, 15 gal and 20 gal/A. Each rate was applied using two different in-furrow methods of application. First, Totally Tubular where fertilizer is placed in the bottom of the seed trench and the seed is placed on top and second, with Rebounders where most of the fertilizer is placed to the side of the seed trench, keeping most contact away from the seed.

Plants were counted at 15 days after planting (DAP) and again at 27 days after planting. The chart below shows data that was collected. Final stand at 27 DAP is along the base of each of the treatment bars. The percent of that final stand that was emerged at 15 DAP is represented in each of the bars. These are compared to a no fertilizer check listed along the top of the chart.

Yield results can be reviewed in the report "Effects of In-Furrow Applications of Kalibrate on Corn Yield".



LSD(0.2) 7.2, CV 42.3%

Conclusions:

- The 5, 10, and 15 gal/A rate of Kalibrate with both the Totally Tubular and Rebounder fertilizer placement options had a final stand similar to the no fertilizer check treatment. There may have been a slight loss at the 15 gal/A rate, but no difference between the in-furrow options.
- At the 20 gal/A rate, stand loss was recorded with the Totally Tubular option, but no difference was seen with the Rebounders.
- Corn emergence at 15 DAP was not effected by either in-furrow option at the 5 and 10 gal/A rates.
- Compared to a similar study done with Pro-Germinator (see Effects of In-Furrow Applications of Kalibrate on Corn Emergence), Kalibrate provided similar safety in this experiment.