



Effects of In-Furrow Applications of Pro-Germinator on Corn Yield (15-306)

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:	Corn / Lab Lab
Plot Size:	15 x 180/210/130
Replications:	5
SD (V5)	6/4/2015

Soil Test Values (ppm):

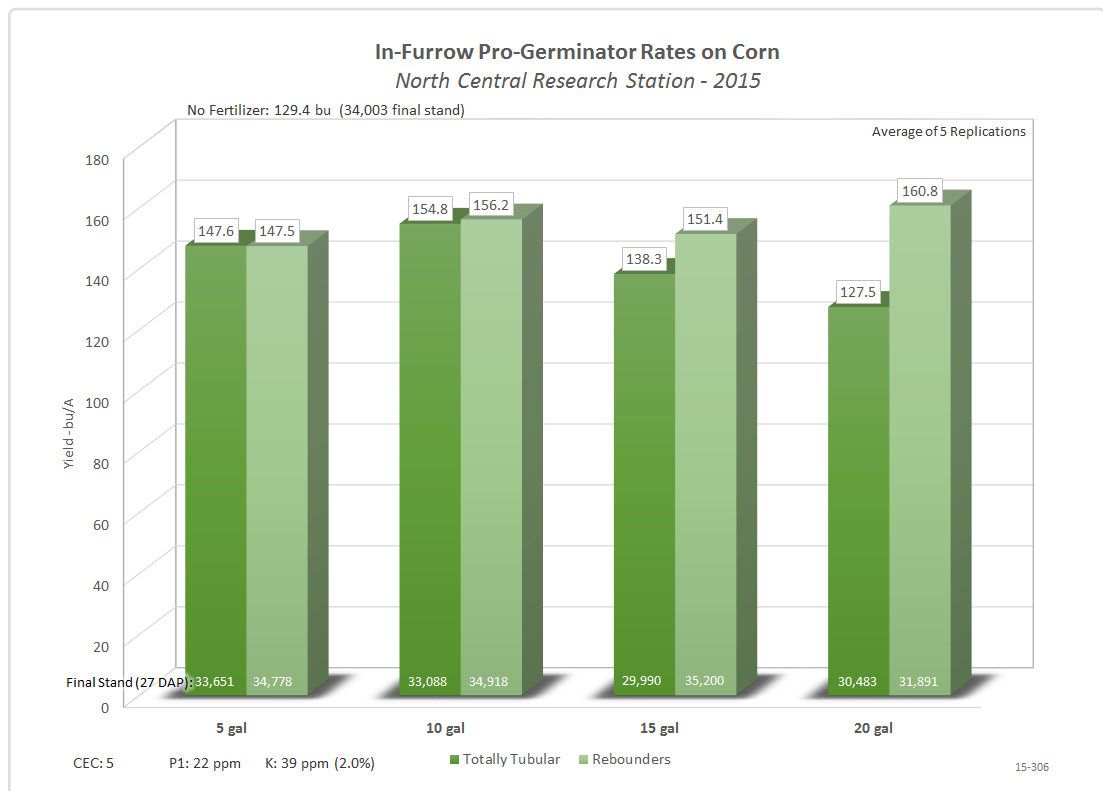
pH:	7
CEC:	6
%OM:	1.1
Bray P1:	23
Bicarb P:	7
K:	41
S:	11
%K:	1.8
%Mg:	16.4
%Ca:	80.5
%H:	0
Zn:	0.8
Mn:	5
B:	0.5

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. Pro-Germinator 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. Analysis of effects on emergence can be reviewed in the report "Effects of In-Furrow Applications of Germinator on Corn Emergence".

Corn yield results appear on the chart below.



LSD(0.2)15.5, CV: 13.8%

Conclusions:

- All fertilizer treatments increased corn yield over the no in-furrow fertilizer check.
- Going along with the AgroLiquid recommendations, best yields were observed when in-furrow applications were kept within the 10 gal/A total rate.
- At 15 gal/A and above, in-furrow applications with Rebounders were provided higher yield than Totally Tubular.
- The 20 gal/A rate applied with the Rebounders provided the top yield even with the lower stand, this is likely due to additional 20 pounds of nitrogen provided with the high Pro-Germinator rate.