

# 3 Year In-Furrow Phosphorus Comparisons

## **Experiment Info:**

Planted:	5/10/2023			
Harvest:	10/31/2023			
Yield Goal:	220 bu/A			
Target Fert.:				
Variety: P0035 AM				
Population:	33,000			
Row Width:	30"			
Prev. Crop:	Wheat			
Plot Size:	25 x 210			
Replications:	4			

#### Soil Test Values (ppm):

pH:	7.3
CEC:	15.8
%OM:	3.5
Bray P1:	7
Bicarb P:	13
K:	95
S:	6
%K:	1.5
%Mg:	23.6
%Ca:	74.7
%H:	0
Zn:	0.7
Mn:	2
B:	0.4

# **Objective:**

To evaluate common phosphorus sources for effect on yield when applied in-furrow at planting as a pop up fertilizer.

Field conditions were ideal for each of the three spring broadcast applications of 100 lbs/A MAP + 150 lbs/A potash. Corn was planted at 33,000 population at seed depth of 2" with 3 gal/A of each product listed below placed in-furrow using SmartFirmer® with splitter fertilizer attachment. A check treatment of no in-furrow phosphorus was added as a comparison. All treatments also received 2 qts/A of Micro 500 placed in-furrow with the phosphorus product. All treatments also received 20 gal/A High NRG-N planter application and 46 gal/A 28% /eNhance + 2 gal/A Kalibrate as a Y-Drop sidedress application at V7. Details of the experiment information and soil test values shown to the left are for the 3rd year or 2023 season. Yields of each treatment were averaged together for the second and third years of information.

3 Year In-Furrow Phosphorus Comparison				
Treatments	1st year	2 year avg	3 year avg	
No Planter Phosphorus	205.8	201.1	201.3	
3 gal/A Riser	213.6	205.8	205.5	
3 gal/A 9-18-9	216.1	207.5	207.8	
3 gal/A Nachurs 6-24-6	217.8	207.5	207.0	
3 gal/A 10-34-0	219.1	208.6	206.9	
3 gal/A springuP	221.5	210.3	208.3	
3 gal/A Pro-Germinator	220.9	210.9	207.5	

### **Conclusions:**

- Both Pro-Germinator and springuP performed with top yields each of the 3 years.
- The three year data shows that Pro-Germinator and springuP can be used as a "pop up" at a 3 gal/A rate. Large amounts of research would show that a "planter program" using AgroLiquid phosphours + potassium + micro nutrients would be a better choice for top yields.