Experimental Phosphorus Products in Corn

Irrigation Research Foundation, Yuma, CO

Experiment Info	
Planted:	05/11/22
Harvested:	10/14/22
Yield Goal:	
Variety:	NK0472
Pop.:	32,000
Row Width:	30in
Prev. Crop:	Corn
Plot Size:	
Reps:	2

Soil Test (ppm)	
pH:	6.7
CEC:	11
%OM:	1.1
Bray P1:	46
Bicarb P:	
K:	430
S:	16
%K:	10
%Mg:	23
%Ca:	65
%H:	0
Zn:	2.3
Mn:	80
B:	0.9

Objective:

AgroLiquid is consistently looking for new opportunities to fill gaps in the fertilizer market. Phosphorus can be applied in many ways and is needed in both starter and slow-release forms. In this experiment, two experimentals, TDP-19 (a slow-release version) and UP-20 (a starter version), are tested against existing products, ProGerminator and springUP, to determine product efficacy differences.

	IN-FURROW PROTOCOL	MOISTURE	BUSHELS PER ACRE	AVERAGE MOISTURE	AVERAGE BUSHELS PER ACRE
NO STRIP-TILL FERTILIZER	PRO-GERMINATOR @ 5 gal./A. applied IN-FURROW	16.5	147.4	16.1	146.2
		15.6	145.0		
	PRO-GERMINATOR @ 5 gal./A. + SPRING UP @ 2 gal./A. applied IN-FURROW	15.6	151.2	15.6	151.5
		15.6	151.7		
	TDP-19 @ 5 gal./A. applied IN-FURROW	15.9	142.8	15.9	146.6
		15.8	150.4		
IRF STANDARD STRIP-TILL	Up-20 @ 3 gal./A. applied IN-FURROW	16.0	145.7	16.0	147.8
		15.9	149.9		
	PRO-GERMINATOR @ 3 gal./A. applied IN-FURROW	15.9	148.4	16.0	152.9
		16.1	157.4		
	SPRING UP @ 3 gal./A. applied IN-FURROW	15.5	142.4	16.0	148.1
		16.4	153.7		

Conclusions:

TDP-19 performed slightly better than ProGerminator but likely did not differentiate itself statistically.

UP-20 yielded slightly less than springUP and significantly less than ProGerminator.

ProGerminator and springUP combination stood above ProGerminator alone by over 5bu/A which further proves the importance of early season phosphate.