

# Impact of Cultivace FREE pHOS 24 Starter Fertilizer

**Study ID:** 0718185202101

**County:** York

**Soil Type:** Hastings silt loam 0-1% slope; Uly-Hobbs silt loam 11-30% slopes

**Planting Date:** 4/29/21

**Harvest Date:** 10/14/21

**Seeding Rate:** 32,000

**Row Spacing (in):** 30

**Hybrid:** Pioneer® P1185Q

**Reps:** 6

**Previous Crop:** Corn

**Tillage:** Spring tillage, Row cultivation

**Herbicides: Pre:** 2 qt/ac Medal® II ATZ and 5 oz/ac Cavallo™ at planting on 4/29/21

**Seed Treatment:** 4 oz/ac ETHOS® XB and 4 oz/ac Batallion™ in furrow on 4/29/21

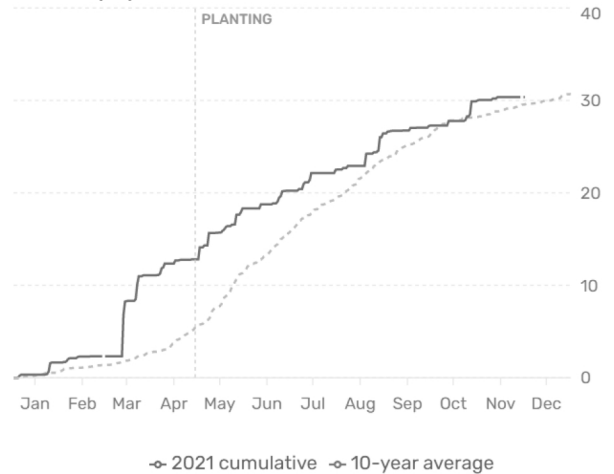
**Foliar Insecticides:** 8 oz/ac Lorsban™ on 7/16/21

**Foliar Fungicides:** 15.2 oz/ac XYWAY™ applied in-furrow on 4/29/21

**Fertilizer:** 190 lb N/ac as anhydrous ammonia and 200 lb/ac MESZ®

**Irrigation:** Pivot, Total: 6"

**Rainfall (in):**



## Soil Tests: (October 2020)

pH	BpH	OM LOI %	Nitrate – N ppm N	Mehlich P-III ppm P	Ammonium Acetate (ppm)				CEC me/100g	% Base Saturation				
					K	Ca	Mg	Na		H	K	Ca	Mg	Na
6.6		3.4	5.7	22	390	2023	306	41	13.8	0	7	73	18	1
6.8		3.2	6.2	14	355	2193	317	46	14.7	0	6	74	18	1

**Introduction:** The purpose of this study is to evaluate the impact of FREE pHOS 24 starter fertilizer compared to a standard 10-34-0 starter. FREE pHOS 24 has an analysis of 8-24-0-0.25 Zn. Both starter fertilizers were applied at a rate of 3 gal/ac in-furrow at planting.

## Results:

	Early Season Stand Count (plants/ac)	Harvest Stand Count (plants/ac)	Stalk Rot (%)	Greensnap (%)	Moisture (%)	Yield (bu/ac)†
10-34-0	31,000 A*	30,300 A	1 A	3 A	16.7 A	272 B
FREE pHOS 24	31,300 A	31,000 A	2 A	1 A	16.7 A	276 A
P-Value	0.745	0.184	0.749	0.338	0.476	0.012

\*Values with the same letter are not significantly different at a 90% confidence level.

†Yield values are from cleaned yield monitor data. Bushels per acre corrected to 15.5% moisture.

## Summary:

- There were no differences in stand count and stalk quality between the two starter fertilizers evaluated.
- Yield was 4 bu/ac higher with the FREE pHOS 24 fertilizer compared to the 10-34-0 starter fertilizer.