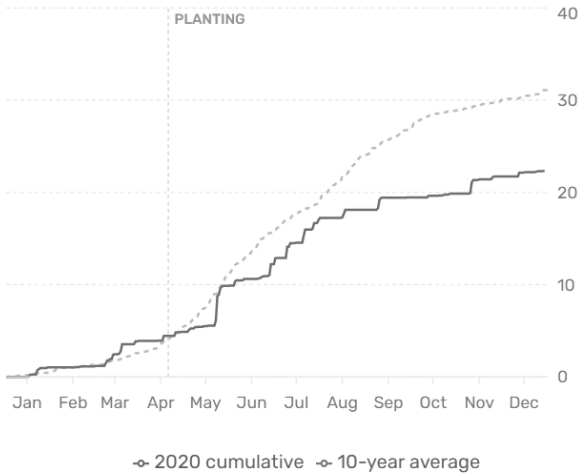
Impact of AgXplore® HumaPak™ In-Furrow Treatment

Study ID: 1050081202001
County: Hamilton
Soil Type: Hastings silt loam; Crete silt loam
Planting Date: 4/20/20
Harvest Date: 10/15-16/20
Seeding Rate: 32,500
Row Spacing (in): 36
Hybrid: DEKALB® DKC70-27 VT2
Reps: 4
Previous Crop: Soybean
Tillage: Ridge-Till
Herbicides: 5.5 oz/ac Corvus®, 32 oz/ac atrazine, 22 oz/ac Roundup®, and 1.5 lb/ac AMS on 5/6/20
Seed Treatment: Acceleron® 250
Foliar Insecticides: None
Foliar Fungicides: 8 oz/ac Delaro® aerial applied on 7/22/20
Fertilizer: 190 lb/ac N as anhydrous ammonia on 11/19/19, 4 gal/ac 7-23-4-zinc in-furrow on 4/20/20, 150 lb/ac MESZ was applied the fall of 2019
Note: 11% green snap on 7/9/20
Irrigation: Gravity, Total: 11"
Rainfall (in):



Soil Test (October 2019, 0-8" depth):

OM %	Bray P1 ppm	Bray P2 ppm	K ppm	Mg ppm	Ca ppm	pH	BpH	CEC me/100g	K%	Mg%	Ca%	H%	Nitrate-N ppm	Nitrate-N lb/ac	S ppm	Zn ppm
2.7	10	28	271	214	1852	6.4	6.8	12.9	5.4	13.8	71.8	9.0	7	17	6	1.9
2.8	10	23	282	238	2051	6.4	6.8	14.3	5.1	13.9	71.7	9.3	7	17	6	1.9
2.9	11	25	330	334	2317	6.3	6.7	17.0	5.0	16.4	68.1	10.5	9	22	5	1.3
3.1	23	56	340	294	2289	6.5	6.8	16	5.4	15.3	71.5	7.8	10	24	6	2.1

Introduction: This study evaluated AgXplore® HumaPak™ in-furrow treatment. HumaPak™ contains 8% nitrogen, 0.1% copper, and 6% humic acids derived from leonardite. HumaPak™ was applied at a rate of 32 oz/ac in-furrow. Stand counts, yield, grain moisture, and net return were evaluated.

Results:

	Harvest Stand Count (plants/ac)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Check	32,125 A*	18.4 A	252 A	884.01 A
HumaPak (32 oz/ac)	31,250 A	18.4 A	249 A	870.53 A
P-Value	0.162	0.877	0.353	0.226

*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 adjusted to 15.5% moisture.
‡Marginal net return based on $3.51/bu corn and $3.75/ac for HumaPak.

Summary: There was no difference in stand count, moisture, yield, or net return between the untreated check and the HumaPak treatment. The study will continue in future years with the treatments applied to the same areas in order to document long-term impacts.

Sponsored by: University of Nebraska Lincoln
In Partnership with: Nebraska Corn Board, Nebraska Soybean Checkoff, Nebraska Corn Growers Association, Nebraska Dry Bean Commission