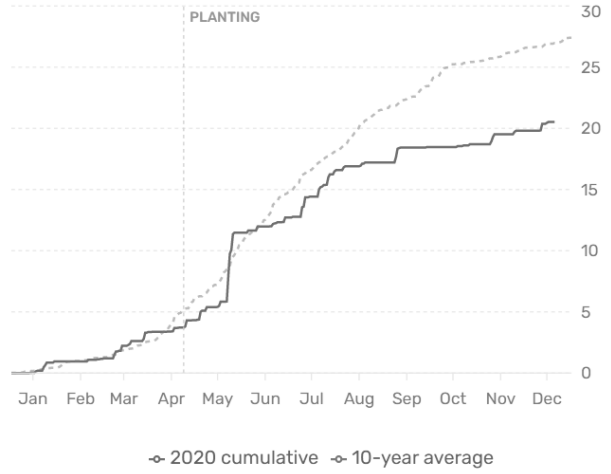
Impact of Ag Concepts® AgZyme® with In-Furrow Starter

Study ID: 1120019202001
County: Buffalo
Soil Type: Uly silt loam 6-11% slopes; Holdrege silt loam 6-11% slopes; Coly silt loam 6-11% slopes
Planting Date: 4/23/20
Harvest Date: 10/21/20
Seeding Rate: 34,000
Row Spacing (in): 30
Hybrid: Channel® 213-19VT2RIB
Reps: 7
Previous Crop: Corn
Tillage: Strip-Till
Herbicides: ***Pre:*** 1.5 qt/ac Degree Xtra®, 3 oz/ac mesotrione, 1% COC, and 8.5 lb AMS per 100 gal water ***Post:*** 1.5 qt/ac Resicore®, 1 pt/ac atrazine, 32 oz/ac Roundup PowerMAX®, and 8.5 lb AMS per 100 gal water
Foliar Insecticides: None
Foliar Fungicides: Delaro® at VT

Fertilizer: 33-40-0-11S-1Zn through strip-till; 3 gal/ac 10-34-0 in-furrow and 12 gal/ac 32% UAN as starter on 4/23/20; 51 gal/ac 32% UAN through fertigation
Note: Green snap on 7/9/20
Irrigation: Pivot
Rainfall (in):



Soil Tests (April 2020):

pH	Soluble Salts	Excess Lime	% OM	Nitrate	Nitrate	P	K	S	Zn	Fe	Mn	Cu
				ppm	lb/ac	----------ppm----------						
6.6	0.16	None	3.6	8.5	26	35	336	7.6	1.77	15.1	3.7	0.4

Introduction: The objective of this study was to evaluate Ag Concepts® AgZyme®. The product information notes the product will activate the microbial potential of the soil to increase nutrient uptake. The study evaluated 3 gal/ac 10-34-0 in-furrow at planting (check) compared to 3 gal/ac 10-34-0 with 12.8 oz/ac AgZyme® in-furrow at planting. Stand counts, moisture, yield, and net return were evaluated.

Results:

	Early Season Stand Count (plants/ac)	Harvest Stand Count (plants/ac)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Check	32,952 A*	30,571 A	15.2 A	248 A	868.98 A
12.8 oz/ac AgZyme®	33,381 A	30,714 A	15.1 A	249 A	863.49 A
P-Value	0.306	0.884	0.308	0.207	0.209

*Values with the same letter are not significantly different at a 90% confidence level.
†Bushels per acre adjusted to 15.5% moisture.
‡Marginal net return based on $3.51/bu corn and $11/ac for AgZyme.

Summary: The use of Ag Concepts® AgZyme® did not result in differences in stand counts, corn moisture, yield, or net return.

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