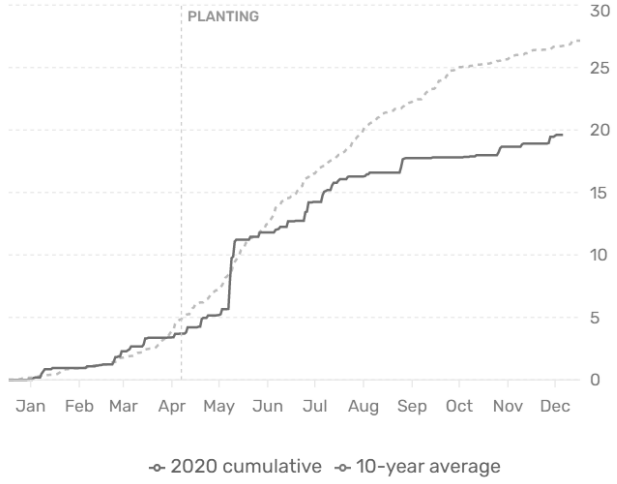
Impact of Ethos® XB Fungicide and Insecticide with In-Furrow Starter on Corn

Study ID: 1120019202003
County: Buffalo
Soil Type: Hord silt loam
Planting Date: 4/21/20
Harvest Date: 10/5/20
Population: 34,000
Row Spacing (in): 30
Hybrid: Channel® 216-36 DG VT2RIB
Reps: 8
Previous Crop: Corn
Tillage: Strip-till
Herbicides: ***Pre:*** 1.5 qt/qc Degree Xtra®, 3 oz/ac mesotrione, 32 oz/ac Roundup PowerMAX®, 1% COC, 8.5 lb AMS per 100 gal water ***Post:*** 1.5 qt/ac Resicore®, 1 pt/ac atrazine, 32 oz/ac Roundup PowerMAX®, 8.5 lb AMS per 100 gal water

Fertilizer: 5 gal/ac 10-34-0 and 15 gal/ac 28% UAN with strip-till; 3 gal/ac 10-34-0 in-furrow and 12 gal/ac 32% UAN surface dribble starter; 44 gal/ac 32% UAN sidedress
Note: Green snap on 7/9/20
Irrigation: Pivot
Rainfall (in):



Soil Tests (October 2019):

pH	Soluble Salts	Excess Lime	% OM	Nitrate (ppm)	Nitrate (lb/ac)	P (ppm)
7.8	0.17	Low	2.7	3.8	11	26

Introduction: This study evaluated 4 oz/ac Ethos® XB in-furrow fungicide and insecticide added to 3 gal/ac 10-34-0 starter fertilizer. Ethos® XB product information is at right. Stand counts, moisture, yield, and net return were evaluated.

Product information from:
https://www.cdms.net/ldat/ldCGE005.pdf

ETHOS® XB

INSECTICIDE / FUNGICIDE

For mixing directly with liquid fertilizer to control listed soil pests.

EPA Reg. No. 279-3473 **EPA Est. 279-NY-1**

ACTIVE INGREDIENTS:	**By Wt.**
Bifenthrin *	15.67%
Bacillus amyloliquefaciens strain D747 **	5.00%
Other Ingredients	79.33%
Total:	100.00%

*Cis isomers 97% minimum, trans isomers 3% maximum
** Contains a minimum of 1x 10^{10} colony-forming units (cfu) per milliliter of product.
This product contains 1.5 lbs bifenthrin per gallon.

Results:

	Early Season Stand Count (plants/ac)	Harvest Stand Count (plants/ac)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Check	33,375 A*	29,417 A	19.9 A	249 A	872.99 A
4 oz/ac Ethos® XB	33,125 A	29,875 A	19.9 A	251 A	872.91 A
P-Value	0.598	0.686	0.543	0.554	0.996

*Values with the same letter are not significantly different at a 90% confidence level.
†Bushels per acre corrected to 15.5% moisture.
‡Marginal net return based on $3.51/bu corn and $8.60/ac Ethos® XB.

Summary: The use of Ethos® XB did not result in different corn stand, moisture, yield, or net return.

Sponsored by: University of Nebraska Lincoln

In Partnership with: Nebraska Corn Board; Nebraska Soybean Checkoff; Nebraska Corn Growers Association; Nebraska Dry Bean Commission