

LANDMARK MAXX

2019 CROP RESEARCH









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^{*}The data collected for this book is from crop year 2018 and 2019.





DECISIONS

It's important to have the right information when making an important decision like seed selection. The agronomy staff at Mercer Landmark are trusted advisors, utilizing the latest technology and resources to help you select the right corn hybrid, soybean variety or wheat variety for your farm that will help you maximize yields and profits. Truly making a difference on your farm!

Below is an example of one portion of the seed selection tool in R7 by Winfield United. Ask your Mercer Landmark agronomist to tell you more.

Yield Environment Low (3)		Yield Environ Medium (2		Yield Environment High (2.5)		
5073SS/RIB	184.0	5073SS/RIB	257.3	5073SS/RIB	286.	
NK1191-3111	181.7	DKC62-20RIB	247.2	DKC62-52RIB	279.	
5290SS/RIB	178.6	4997VT2P/RIB	246.8	4997VT2P/RIB	278.	
5290DGVT2P/	178.1	DKC62-52RIB	246.2	DKC60-87RIB	277.	
DKC62-52RIB	177.7	DKC60-87RIB	242.6	DKC62-20RIB	275.	
4997VT2P/RIB	176.1	P1197AMXT	241.6	P1197AMXT	275.	
DKC62-20RIB	175.5	MY09B16	240.0	5290SS/RIB	273.	
DKC60-87RIB	174.1	DKC63-21RIB	239.6	DKC63-21RIB	270.	
4895SS/RIB	172.8	5290SS/RIB	239.4	5290DGVT2P/	268.	
DKC58-34RIB	172.1	5290DGVT2P/	237.8	MY09B16	268.	
DKC63-21RIB	171.8	4895SS/RIB	235.7	4895SS/RIB	267.	
MY09B16	171.8	6110VT2P/RIB	233.1	P0825AMXT	265.	
P1197AMXT	171.8	NK0962-3220A	230.7	5277AS3220	265.	
NK0962-3220A	170.6	MY13C17RA	229.5	P0919AM	264.	
MY13C17RA	167.9	P0919AM	228.9	NK0962-3220A	263.	
MY11B25RA	166.1	DKC58-34RIB	228.6	MY12G35RA	262.	
6110VT2P/RIB	165.2	MY10Y47RA	226.3	DKC58-34RIB	261.	
MY12G35RA	162.7	5277AS3220	225.7	MY13C17RA	261.	
4895VT2P/RIB	162.4	P0825AMXT	225.7	MY10Y47RA	258.	
NK0886-3010	162.4	MY12G35RA	225.1	6110VT2P/RIB	257.	
MY10Y47RA	161.9	MY11B25RA	224.0	MY11B25RA	255.	
5277AS3220	160.0	4895VT2P/RIB	222.1	NK0886-3010	253.	
P0825AMXT	159.2	NK0886-3010	217.1	4895VT2P/RIB	252.	
P0919AM	157.2	NK1284-3122	215.9	NK1284-3122	252.	
NK1284-3122	154.5	NK1191-3111	213.8	NK1191-3111	242.	







Corn population/ Yield

Brand	Variety	Location	Yield
Croplan	4971	Rockford, OH	241.49
Golden Harvest	GS1030	Rockford, OH	236.89
Mycogen	MY11B25	Rockford, OH	230.23
Mycogen	MY12H25	Rockford, OH	226.14
Croplan	6065	Rockford, OH	222.64
Mycogen	MY12G35	Rockford, OH	189.27
Croplan	4644	Rockford, OH	180.74
Mycogen	MY049Y97	Rockford, OH	178.22
Mycogen	MY00J47	Rockford, OH	170.67
Dekalb	57-99	Pauling, OH	182
Pioneer	P0414	Pauling, OH	168





Yield

Location



Dekalb Dekalb Becks	62-20 62-20 6127	Saint Henry, OH Saint Henry, OH Saint Henry, OH	259.7 259.2 243.5
Becks	6127	Saint Henry, OH	242.4
Dekalb	57-99	Adams Co, IN	238.94
Croplan	4997	Adams Co, IN	234.84
Croplan	4791	Adams Co, IN	230.74
Dekalb	62-53	Adams Co, IN	229.92
Dekalb	58-29	Adams Co, IN	229.11
Dekalb	64-35	Adams Co, IN	222.54
Dekalb	55-85	Adams Co, IN	221.75
Croplan	5252	Adams Co, IN	220.11
Dekalb	61-55	Adams Co, IN	219.29
Dekalb	62-20	Adams Co, IN	216.84
Mycogen	06R36	Adams Co, IN	212.74
Dekalb	63-68	Adams Co, IN	206.98
Croplan	5335	Adams Co, IN	206.19
Dekalb	63-60	Adams Co, IN	184.10

Variety







Nitrogen Stabilizer



NH3 + N-Serve Applied: 4-21

203.9 Bushels/A 19.5% moisture 28% UAN Applied: 6-15

176.0 Bushels/A 22.0% moisture



Instinct®

Optinyte technology

NITROGEN STABILIZER



GET THE MOST FROM YOUR SPRING APPLIED NITROGEN INVESTMENT

Saturated fields can lose as much as 10 percent of their nitrogen in 3 days plus 10 percent each additional day (30 percent in 5 days) from denitrification.

N-Serve® and Instinct® II nitrogen stabilizers are proven to keep more nitrogen available during key corn growth stages — improving nitrogen retention and optimizing yield potential.

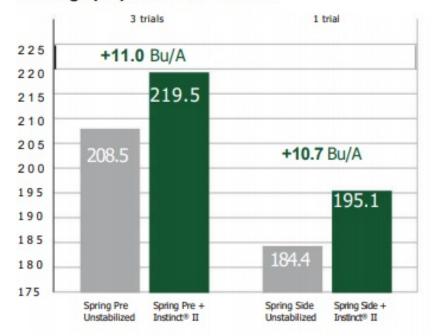






200 lbs N + 37 oz Instinct II Union County, Ohio

Instinct® II effect on corn yield in Ohio -Average preplant and sidedress



AWARD-WINNING TECHNOLOGY

- Instinct[®] nitrogen stabilizer was named a winner of the US EPA Presidential Green Challenge Award
- The only nitrogen stabilizer to win the recognition.
- In 2017, Optinyte[™] technology was presented with the Iowa Water Quality Initiative Award.





Corn Nitrogen Stabilizer

Treatment	Variety	Timing	Location	Yield	Yield
					Difference
Agrotain Ultra	Invision 58G00	V5	Willshire, OH	210.98	+7.29
Anvol FS	Invision 58G00	V5	Willshire, OH	224.33	+20.69
Agrotain Ultra	Invision 58G00	V5	Willshire, OH	222.24	+18.55
Anvol FS	Invision 58G00	V5	Willshire, OH	218.07	+14.38
Untreated Average	e				203.69







Corn Y Drops Trials

Treatment	Variety	Timing	Location	Yield	Yield Difference
15 gal of 28% Y-Drop Applied	Channel	Tassel	Willshire, OH	225.3	+16.58
Untreated				208.72	

^{*}all corn treated with 13.7oz of Trivapro and 1qt Max IN ZMB.







Corn Fungicide Results

*timing of these fungicide applications was during tassel.

Treatment	Variety	Location Y	ield Diff	Yield erence
Trivapro 13.7 oz, Max IN ZMB 1 qt	Specialty 42A843 VT2	Ohio City, OH	241.3	+42.9
Untreated			198.4	
Trivapro 13.7 oz, Max IN ZMB 1 qt	Specialty 42A843 VT2	Van Wert, OH	251.8	+27.5
Untreated			224.3	
Trivapro 13.7 oz Untreated	Pioneer P0825AM	Adams Co, IN	257 226	+31
Trivapro 13.7 oz Untreated	Stewart 8E623	Rockford, OH	304 266	+38
Delaro 8 oz Untreated	Pioneer 0506	Elgin, OH	189.6 179.8	+9.8
Aproach Prima 6.8 of Grizzly Too 2 oz, Masterlock 6.4 oz	oz, Pioneer 0414	Paulding, OH	174.43	+14.92

Untreated









Untreated

Trivapro Treated

Corn Fungicide results

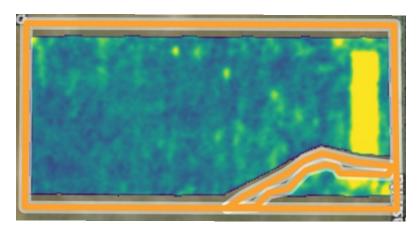




This field is located in Chattanooga, OH.
The treated acres (on the left) yielded 257 bu/acre.
The untreated acres (on the right) yielded 226 bu/acre.

^{*}All fields treated with 13.7oz Trivapro.





This field is located in Rockford, OH.

The treated acres (green and blue) yielded 304 bu/acre.

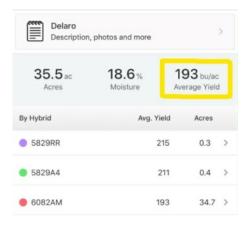
The untreated acres (yellow) yielded 266 bu/acre.

^{*}Treated with 13.7oz of Trivapro.



Corn fungicide data

Below is some data from the digital software platform, <u>Climate FieldView</u>. This tool is used to get all of your data in one place, reveal crop performance and field health, and variable rate prescriptions.







This plot was located in Payne, OH.





Return on Investment

Corn fungicide



18.08 (5-year average bushel increase with fungicide).

X \$4.26 (Current Jan. price)

\$77.02

\$15.00 (average cost of Corn fungicide).

- \$7.00 (Application).

\$55.02 Per acre net profit from Fungicide



Soybean Plant Health



Treatment 4oz Priaxor	Variety	Timing	Location	Yield	Yield Difference	
1qt MAX IN Manganese & MAX IN Copper 8 oz	Asgrow 36X6	R1 & R3	Convoy, OH	69.9	+8.85	
4oz Priaxor 1qt MAX IN Manganese 8oz MAX IN Copper and 1 pass of Toggle 40 oz	Asgrow 36X6	R1 & R3		65.59	+4.54	
4oz Priaxor 1qt MAX IN Manganese & MAX IN Copper 8 oz and 2 pass of Toggle 40 o	Asgrow 36X6	R1 & R3		64.19	+3.14	
Untreated	Asgrow 36X6			61.05		
4oz Priaxor 1qt MAX IN Manganese 8oz MAX IN Copper	Croplan 3300	R1 & R3	Convoy, OH	64.28	+6.04	
4oz Priaxor 1qt MAX IN Manganese 8oz MAX IN Copper 1 pass of Toggle 40 oz	Croplan 3300	R1 & R3		59.93	+1.69	
4oz Priaxor 1qt MAX IN Manganese 8oz MAX IN Copper 2 pass of Toggle 40 oz	Croplan 3300	R1 & R3	Convoy, OH	63.98	+5.74	
Untreated	Croplan 3300			58.24		









Soybean Variety Plots

Brand Variety		Location	Yield
Croplan	RX2700	Adams Co, IN	72.87
Asgrow	27X7	Adams Co, IN	69.23
Asgrow	34X9	Adams Co, IN	66.18
Croplan	3500	Adams Co, IN	62.95
Asgrow	32X8	Adams Co, IN	61.62
Mycogen	5KB42R2	Adams Co, IN	61.41
Asgrow	30X8	Adams Co, IN	61.41
Asgrow	38X8	Adams Co, IN	61.34
Croplan	RX3360	Adams Co, IN	61.34
Croplan	RX3100	Adams Co, IN	61.34
Asgrow	40X8	Adams Co, IN	61.2
Mycogen	5N286R2	Adams Co, IN	56.62
Mycogen	5N306R2	Adams Co, IN	56.56
Asgrow	33X8	Adams Co, IN	54.94
Asgrow	26X8	Adams Co, IN	47.37
Asgrow	38X8	Rockford, OH	84.22
Asgrow	32X8	Rockford, OH	75.04
Asgrow	33X8	Rockford, OH	73.96
Beck's	3779X2	Rockford, OH	69.10



Soybean R3 Fungicide Trials

Treatment	Variety	Timing	Location	Yield	Yield Difference
10.5oz Quilt Xcel 1.6oz Grizzly Too	Asgrow 32X6	R3	Portland, IN	71	+10
Untreated	Asgrow 32X6			61	
13.7oz Trivapro 13.7 1.6oz Grizzly Too	Asgrow 36X6	R3	Chickasaw, OH	69	+9
Untreated	Asgrow 36x6			60	
8oz Delaro 8oz Delaro 8oz Delaro 8oz Delaro	Asgrow 32X6 Asgrow 32X6 Asgrow 32X6 Asgrow 32X6	R3 R3 R3 R3	Celina, OH Celina, OH Celina, OH Celina, OH	88.42 86.84 88.07 88.77	+14.42 +12.84 +14.07 +14.77
Treated average	Asgrow 32X6			88.03	+14.03
Untreated	Asgrow 32X6			74	



Soybean R3 Fungicide Trials



Treatment	Variety	Timing	Location	Yield	Yield Difference
13.7oz Trivapro Untreated	Dairyland 3250R2	R3	Rockford, OH	84.39 70.18	+14.21
4oz Priaxor 13oz Quilt Xcel Untreated	Specialty	R3	Rossburg, OH	73 63 55	+18 +8
8oz Delaro Untreated	Asgrow 32x8	R3	Middle Point, OH	68 62	+6
13.7 oz Trivapro Untreated	Asgrow 36x6	R3	Middle Point, OH	64 61	+3
13.7oz Trivapro 1.6oz Grizzly Too 1qt MAX IN beans Untreated	Asgrow 33X8	R3	Ohio City, OH	76 67.5	+8.5
13.7oz Trivapro Untreated	Ponds 3.3	R3	Middle Point, OH	75 64	+11
13.7 oz Trivapro Untreated	Pioneer P31T11R	R3	Paulding, OH	67.7 65.5	+2.20
8oz 2 passes Delaro Untreated	Pioneer 3.7	V3/R3	Elgin, OH	62 59	+3
13.7oz Trivapro Untreated	Asgrow 3.2	R3	Middle Point, OH	70 60	+10

Overall Treated Average

+8.4



Soybean Fungicide and Insecticide Results

Treatment 5oz Preemptor SC	Variety	Timing	Location	Yield	Yield Difference
& 50z Hero Untreated	Becks 338L4	R3	Van Wert, OH	72.5 60.8	+11.7
5oz Preemptor SC & 5oz Hero Untreated	Becks 366L4	R3	Van Wert, OH	72.3 51.8	+20.5
5oz Preemptor SC &5ozHero Untreated	Becks 3664L4	R3	Van Wert, OH	70.7 60.1	+10.6
5oz Preemptor SC & 5ozHero Untreated	Becks 3664L4	R3	Van Wert, OH	67.3 59.9	+7.40
5oz Preemptor SC & 5oz Hero Untreated	Becks 382L4	R3	Van Wert, OH	70.6 59.9	+10.7
5oz Preemptor SC & 5oz Hero Untreated	Becks 338L4	R3	Van Wert, OH	72 66	+6

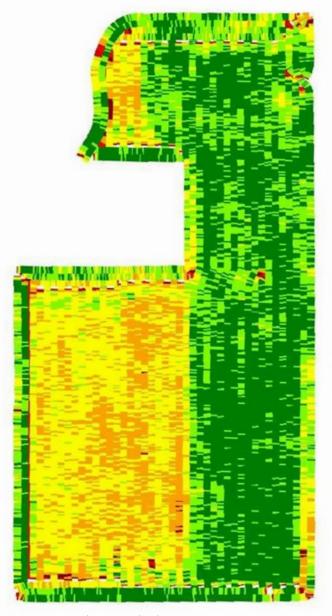
^{*}The second trial had Boron, Zinc, and Manganese added to the Preemptor/Hero tank mix.

Overall Treated Average

+11.15



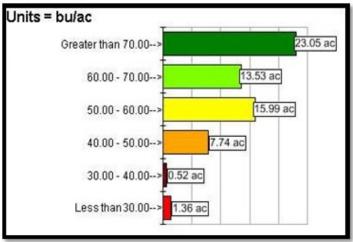
Soybean Fungicide and Insecticide Yield Results



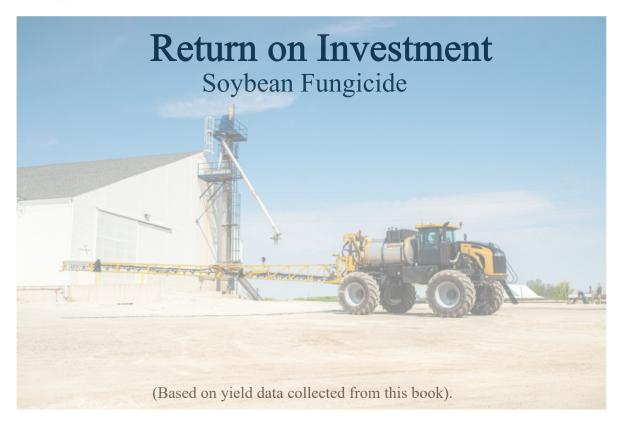
Untreated: 59.75 bu/ac Treated: 70.9 bu/ac

This soybean fungicide trial was located in Van Wert County, Ohio. (This is the trial that is listed on the page to the left). This trial had Preemptor SC fungicide and Hero insecticide with the use rate of 5oz of each per acre.

Below is the legend for reading the Climateview imagery located to the left.







4.69 (5-year average bushel increase with fungicide).

X \$8.94 (Current Jan. price).

\$41.92

-\$15.00 (average cost of bean fungicide).

\$7.00 Application Fee

\$19.92 Per acre net profit From fungicide



Over the years

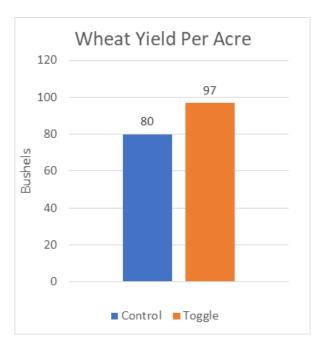
Test Plots	2014	2015	2016	2017	2018	5 year average
Soybean Fungicide	4.98	2.2	2.7	5.85	10.4	4.69
Soybean Fungicide & Insecticide	4.429	N/A	3.81	7.7	11.15	6.77
Corn Fungicide	4.77	10.2	10.31	37.79	27.35	18.08
Corn Nitrogen Stabilizer	7.82	17.2	-0.035	2.52	15.23	8.56



Wheat Plant Health

Treatment	Variety	Timing	Location	Yield	Yield Difference
Toggle 1 qt Untreated	Pioneer 25R25	Feekes 5	Paulding, OH	110 80	+30
Toggle 1 qt Untreated	Pioneer 25R25	Feekes 5	Paulding, OH	85 80	+5







Fungicide Improves Alfalfa



Above is a trial that was conducted in Southern Mercer county. The whole field was treated after the first and second cutting, then was treated again after the third cutting, and an untreated area was left as a check. The untreated check is pictured above.

This demonstrates how fungicide improve plant health, and tonnage and feed quality.

Please contact your Mercer Landmark sales agronomist for more details.



Precision Agronomy



Mercer Landmark utilizes the latest software and technology to analyze the site-specific data collected on your farm.

We have built flexibility and options into our program, that allow us to tailor to your specific yield goals, soil types, hybrids, application timing and product selection.

Contact your local branch agronomist or Precision Ag. Manager, **Jason Diller**, to see how our precision program can help maximize your inputs.



Precision Ag. Manager: Jason Diller

Cell: (419) 733-5518 Office: (419) 965-2121 Fax: (419) 965-2785

Jason@mercerlandmark.com

Seed Benefits

At Mercer Landmark we believe that you reap what you sow, which is why we provide the highest quality products from the brands you can trust. Dekalb-Asgrow, Croplan, Mycogen, Credenz and NK; combined with the right treatments and inoculants give your seed a fighting chance against diseases and insects.

Why Treat Your Seed?

- Start your seed off right by fighting off the diseases and insects that affect emergence.
- Defend against seed-rot, seed-borne or soilborne pathogens.
- Help protect when planting in adverse conditions.
- Boost performance once emergence has occurred.
- We apply the inoculants and treatments to best suit your needs, and the finished result is a safe, quality product that maintains superior seed quality that you can be proud to put in your field.

Why Buy in Bulk?

- Bulk seed allows you to increase the time spent in the field and decrease prep time and time between fills. With no extra steps and quicker turn around you can beat the rain.
- Our sales staff will help you in selecting varieties that best suit your field and its potential.
- Seed can be picked up at the bulk facility or your branch location.









ACHIEVEMENTS

We currently have two Mercer Landmark locations that have been **4R** Certified as well as many Certified Crop Advisors.

The two certified branches are Payne and Glenmore. The **4R** Certification is an award the branch receives because they have done an outstanding job of following the 4R nutrient stewardship principles.

Right Time



Right Time

Makes nutrients available when crops need them most.

Right Rate

Matches amount of fertilizer to crop needs







Right Source



Right source

Matches fertilizer type to crops needs.

Keeps nutrients where crops can use

them.

Right Place

Although goals will vary among farm operations and even among fields, the following are commonly identified grower goals:

Improve net farm



income and regional economic development.



Improve the quality of farm family housing, diet and education.



Reduce losses of nutrients to the environment.

Meet the Team



CEO Heath Barnes



Agronomy **Division Manager** Dan Recker



Agronomy Sales and Marketing Director Greg Culp



Regional Sales Agronomist Eldon Sell



Seed Manager Tracy Flore



Payne Branch Manager Bob Baer



Payne/Convoy Sales Agronomist Mark Rekeweg



Payne Sales Agronomist Rex Oskey



Payne Sales Agronomist Jacob Lewis



Payne Sales Agronomist Ben Stoller



Convoy Branch Manager Cody Mabis



Convoy Sales Agronomist Rick Mollenkoph



Convoy/ Glenmore Sales Agronomist Dylan Rose



Middle Point Branch Manager Norm Casterline



Middle Point Sales Agronomist Brad Miller



Elgin Branch Manager Monty Heiby



Elgin Sales Agronomist Branch Manager John Burd



Glenmore Clark Merkle



Ohio City Branch Manager Amos Stauffer



Glenmore Sales Agronomist Randy Roe



Coldwater Grain North / Chatt Branch Manager Dusty Rutledge



Coldwater Grain North / Chatt Sales Agronomist Steve Heckler



Coldwater Branch Manager Roger Homan



Coldwater Sales Agronomist Alex Fullenkamp



Coldwater Sales Agronomist **Todd Siegrist**



New Weston Branch Manager Randy Winner



New Weston Sales Agronomist **Shane Peters**

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syngenta



















