2026 Soybean Industry Value-Added Product Impact on Yield

Jenna Whitmore[1] and Andrew Lueck[2]

Next Gen Ag LLC, Renville, MN; [1]Field Research Manager and [2]Research Lead

Objectives were to demonstrate yield impact of value-added products in soybean, display value-added product portfolios from eight industry collaborators, and provide an unbiased evaluation of entries to allow growers to benchmark competitive performance of value-added products on the market. Growers should use the data set as a guide to visit with their crop consultants or local suppliers to determine a value-added product, if any, that may provide the greatest return on investment based on local supplier pricing and availability of products.

MATERIALS AND METHODS

Experiments were conducted on a fine-textured webster-clay loam soil with 5.4% organic matter and a 6.6 soil pH near Renville, Minnesota, in 2026. The study area has been a corn-soybean rotation with conventional tillage. Spring tillage was a field cultivator at 3" depth. Becks 1860E3 soybean was seeded 1.25 inches deep on 30-inch row spacing at 130,000 seeds per acre on May 6, emerging May 18. Studies were kept weed-free with a preemergent application of Sharpen (1 fl oz/A) and Authority Edge (13 fl oz/A) on May 7, followed by a postemergence application of Interline (32 fl oz/A), Warrant (48 fl oz/A), and AMS (3 lbs/A) on June 2. A subsequent postemergence application of Enlist One (32 fl oz/A), Roundup PowerMAX 3 (30 fl oz/A), and Section Three (10 fl oz/A) was applied on June 12. All plots were 10 feet (4 rows) wide and 30 feet in length. This grant includes three protocols based on timing of application. These protocols include an in-furrow, vegetative (V4), and reproductive (R1-R3) application timing. All three protocols were conducted at the same location next to each other and maintenance applications were identical to one another; therefore, comparisons can be made within and across application timing protocols.

Treatment application information for each of the three protocols can be found in Table 1. The in-furrow study treatments were applied at planting on May 6. These treatments were applied with a planter in a 7 GPA spray solution through a #34-flat disk orifice pressurized with CO_2 at 27 psi to all four rows directly overtop the seed, but prior to furrow closure. The vegetative foliar study treatments were applied on June 15 to V4 soybean. These treatments were applied with a bicycle sprayer in a 20 GPA spray solution through AIXR11002 air-induction flat fan nozzles pressurized with CO_2 at 42 psi to the center two rows of four row plots. The reproductive foliar study treatments were applied on June 30, July 2, and July 7 to R1, R2, and R3 soybean, respectively. These treatments were applied with a backpack sprayer in a 20 GPA spray solution through AIXR11002 air-induction flat fan nozzles pressurized with CO_2 at 42 psi to the center two rows of four row plots.

Table 1. Application Information for Soybean Value-Added Product Trials in 2026.

Study	In-Furrow	Vegetative	Reproductive		
Description (Growth Stage)	In-Furrow	V4	R1	R2	R3
Application Code	A	B	C	D	E
Date	May 6	June 15	June 30	July 2	July 7
Time of Day	4:00 PM	9:30 AM	9:00 AM	9:00 AM	12:00 PM
Air Temperature (F)	45	62	76	79	85
Relative Humidity (%)	42	65	72	71	69
Wind Velocity (mph)	12	4	7	2	2
Wind Direction	NW	W	SW	SE	S
Soil Temperature (F at 6")	44	60	70	72	74
Soil Moisture	Good	Good	Good	Good	Good
Cloud Cover (%)	100	50	10	60	90
Crop Growth Stage (avg)	-	V4	R1	R2	R3

Yield data were collected on October 2 utilizing a Hege 160 two-row small plot research combine equipped with a HarvestMaster HM800 weigh hopper. The middle two rows of the four-row plot were harvested and samples were taken. Samples were evaluated for moisture and test weight using a Perten 5200-A moisture tester. Experimental design was a randomized complete block with 6 replications. Soybean yield was evaluated across six replications with

each treatment randomized and appearing only once within each of the six replications to mitigate impact of field location and environment on the data set. For the individual protocols, data were analyzed with GLM procedure of SAS (Statistical Analysis Software, SAS Academic Studio October 20, 2026, SAS Institute, Inc.) at alpha=0.05 and differences were determined at 95% confidence; meaning, if the study were repeated 100 times, that 95 times out of 100 we would expect treatments that are statistically similar or different (within one LSD value of each other) to continue to be similar or different. For the combined analysis of all three protocols, data were analyzed with GLM procedure of SAS at alpha=0.01 and differences were determined at 99% confidence; meaning, if the study were repeated 100 times, that 99 times out of 100 we would expect treatments that are statistically similar or different (within one LSD value of each other) to continue to be similar or different.

RESULTS AND DISCUSSION

GROWING SEASON ENVIRONMENTAL CONDITIONS

The climate in 2026 was excellent with timely, non-saturating rains and moderate temperatures from planting through early July. From mid-July through the end of July there were 20 days of intense heat and little rainfall, but the soybeans maintained sufficient early-season moisture during that period. Very little evidence of heat or moisture stress persisted. Early August through mid-September brought sufficient rainfall, more normal temperatures, and the absence of yield impacting pest or disease thresholds. Under these ideal conditions, it is likely the impact from plant health treatments were reduced considering the intent of these products is primarily to protect against abiotic (drought, flooding, temperatures, IDC, fertility) and biotic (fungus, bacteria, aphids, other insects) stresses. In general, across all three protocols and timings, it is likely more separation would have occurred from the untreated checks given a more stressed environment.

IN-FURROW VALUE-ADDED

Overall, the study was uniform and high yielding, with an average yield of 73.5 bu/A across the study. The average moisture across treatments was 14.3%. Data table has been displayed in descending order of yield (Table 2). There was a 5.8 bu/A range in the yield data set. Treatments 1 and 2 statistically out-yielded treatment 8 and four treatments trended better than the untreated check. Treatment 1 was the only treatment that included a fungicide and yielded at the top of the data set. However, all treatment yields were statistically similar to both untreated checks. There were no statistical differences in moisture.

Table 2. In-Furrow at Plant Application Impact on Soybean Yield and Moisture in 2026.

			App.	Harvest		
#	**Treatment**	**Rate**	**Code[a]**	**Yield**	**Moisture**	**Company**
		oz/A* or fl oz/A		Bu/A[b]	%	
1	Bifender FC+AZteroid FC 3.3	5+4.2	A	75.8 a	14.4	Vive
2	Bio-Forge Advanced	8	A	75.1 a	14.4	Corteva
3	Riser+Reax Complete+Reax Plus Iron	2.5 gal.+32+64	A	75.0 ab	14.5	Loveland
4	Averland	5.5	A	73.9 ab	14.1	Vive
5	Untreated Check	-	-	73.3 ab	14.5	-
6	Bifender FC	5	A	72.6 ab	14.2	Vive
7	Untreated Check	-	-	72.4 ab	14.1	-
8	Paralign	2 gal.	A	70.0 b	14.5	CHS
	LSD (0.05)			**5.0**	**NS**	

[a]Application codes refer to the information in Table 1.
[b]Bu/A=Soybean yield is corrected to a moisture of 13.5%. Same letters next to values are statistically similar values at alpha=0.05.

VEGETATIVE FOLIAR VALUE-ADDED

Overall, the study was uniform and high yielding, with an average yield of 74.7 bu/A across the study. The average moisture across treatments was 13.7%. The data table has been displayed in descending order of yield (Table 3). There was a 7.3 bu/A range in the yield data set.

Treatment 1 statistically outyielded all other treatments. The yield of the other seven treatments, including the untreated check, were statistically similar. Treatment 1 consisted of Miravis Neo at 13.7 fluid ounces per acre, a fungicide with three active ingredients – pydiflumetofen (Group 7), propiconazole (Group 3), and azoxystrobin (Group 11) – and Yield On at 24 fluid ounces per acre, a bio-stimulant that contains corn, sugarbeet, and seaweed extracts, molybdenum (0.5%), nitrogen (3%), soluble potash (3%), manganese EDTA (0.5%), and zinc EDTA (0.5%) marketed to aid in increasing plant physiological efficiency. Treatment 1 was the only treatment that included a fungicide that contained a Group 7 active ingredient. Other fungicides in the study included Zolera FX, containing fluoxastrobin (Group 11) and tetraconazole (Group 3); Vacciplant, containing seaweed extract laminarin (Group P04); Telaron, containing prothioconazole (Group 3); and AZterknot, containing azoxystrobin (Group 11) and *reynoutria sachalinensis* knotweed extract (Group P05). With azoxystrobin included in both treatments 1 and 8, azoxystrobin alone may not explain the yield increase, however the other two components of Miravis Neo were not included in any other treatments, so their contributions to the yield increase cannot be determined. Other bio stimulants in addition to Yield On included Moxon B *(nitrogen 3%, boron 7.5%, zinc 0.1%)*, Bio-Forge Advanced *(molybdenum 1%, nitrogen 3%, soluble potash 1%)* + X-Cyte *(cytokinin 0.04%)*, and Radiate *(IBA 0.85%, cytokinin 0.15%)* + Reax Complete *(nitrogen 4%, sulfur 2%, boron 0.25%, copper 0.5%, iron 0.5%, manganese 1.5%, molybdenum 0.01%, zinc 1.5%)*. Apart from soluble potash in Yield On, its remaining fertilizer components appear in higher quantities in other treatments, however not in combination with the plant extract components or exact other blends. These different bio stimulant blends have been researched for optimum performance from the parent company, so determining what kind of synergism or mobility in the plant is triggered within these blends is too difficult to discern. Looking at product performance as whole treatment impact is more meaningful versus independent ingredients.

Treatment 1 was also the only treatment in the study with the combination of a fungicide and bio stimulant together. There were other fungicides and bio stimulants applied within this protocol timing, but not as a tank mix. This may suggest that the combination of a fungicide-based product and a bio stimulant-based product may have a synergistic benefit, however this data set is not targeted enough to support this conjecture. Alternatively, the Yield On could be the catalyst for the yield increase, regardless of the tank mix with the fungicide. Although not statistically significant, the top 4 of the 7 evaluated treatments all had a fertilizer component, suggesting that if a grower was going to apply a value-added product at V4, that fertilizer-containing product(s) may provide an improved yield benefit compared to other non-fertilizer containing value-added products. Other micronutrient, bio stimulant, and fungicide products may have had a greater impact on yield, compared to the untreated check, in a growing season with more environmental stressors.

Treatment 3 had a significantly higher moisture compared only to treatment 4, the untreated check. This is likely due to random variation within the field design. The untreated check had the lowest moisture, which may suggest improved plant health because of increased nutrient uptake across all other treatments. However, the highest yielding treatment was only 0.1% more the untreated check, so the likelihood that moisture is linked to plant health in this study is low. There were no other statistical differences in moisture.

Table 3. Vegetative Growth Stage Application Impact on Soybean Yield and Moisture in 2026.

			App.	Harvest		
#	**Treatment**	**Rate**	**Code[a]**	**Yield**	**Moisture**	**Company**
		oz/A* or fl oz/A		Bu/A[b]	%	
1	Miravis Neo+Yield On	13.7+24	B	79.9 a	13.6 ab	Syngenta
2	Verium+Moxon B	0.25%v/v+16	B	75.3 b	13.8 ab	CHS
3	Bio-Forge Advanced+X-Cyte	8+8	B	75.3 b	13.9 a	Corteva
4	Untreated Check	-	-	74.8 b	13.5 b	-
5	Radiate+Liberate+Reax Complete	2+0.25%v/v+32	B	73.8 b	13.7 ab	Loveland
6	Zolera FX+Vacciplant	5+7	B	72.9 b	13.7 ab	UPL
7	Telaron+Vacciplant	7+7	B	72.8 b	13.7 ab	UPL
8	AZterknot	14	B	72.6 b	13.7 ab	Vive
	LSD (0.05)			**3.8**	**0.4**	

[a]Application codes refer to the information in Table 1.
[b]Bu/A=Soybean yield is corrected to a moisture of 13.5%. Same letters next to values are statistically similar values at alpha=0.05.

REPRODUCTIVE FOLIAR VALUE-ADDED

Overall, the study was uniform and high yielding, with an average yield of 80.3 bu/A across the study. The average moisture across treatments was 13.7%. Data table has been displayed in descending order of yield (Table 4). There was a 15.0 bu/A range in the yield data set. Treatments applied at the R3 timing landed together in the 6-9 slots, whereas treatments at the R1 and R2 timings were spread across the data set. Overall, application timing did not appear to have as much of an impact compared to actual product applied.

Treatment 1 was significantly better than treatments 7-14. Treatment 2 and treatment 3 were statistically better than treatments 10-14. All treatments, except treatment 14, which fell below, were statistically similar to the untreated check (treatment 5). Although yields were not significantly greater than the untreated check, AZterknot and the combination of Zolera FX and Vacciplant consistently trended better than the other treatments in this data set. AZterknot contains azoxystrobin (Group 11) and *reynoutria sachalinensis* knotweed extract (Group P05); Zolera FX contains fluoxastrobin (Group 11) and tetraconazole (Group 3); Vacciplant contains seaweed extract laminarin (Group P04); Phobos contains prothioconazole (Group 3); and Topsin contains thiophanate-methyl (Group 1). Curiously, the top 4 treatments each included a plant extract with host plant defense induction activity with the knotweed extract in AZterknot (Group P05) and seaweed extract in Vacciplant (Group P04). Additionally, treatment 7 is similar in tank mix to the top yielding treatment at the vegetative timing, which also includes three different plant extracts. Although these top treatments were not statistically different from the untreated check in this protocol, it is curious that 5 of the top 6 evaluated treatments all included a plant-based extract plus a fungicide.

With the lack of disease pressure, many of the fungicides did not have the opportunity to serve the primary intent, to prevent yield loss from disease. In a growing season with greater disease pressure and more severe disease development, there may have been greater separation between fungicide treatments and the untreated check. However, treatments with a fungicide plus a plant-based extract intended to trigger host plant defense induction were the only treatments to trend above the untreated check, although not statistically significant.

Table 4. Reproductive Growth Stage Application Impact on Soybean Yield in 2026.

			App.	Harvest		
#	**Treatment**	**Rate**	**Code[a]**	**Yield**	**Moisture**	**Company**
		oz/A* or fl oz/A		Bu/A[b]	%	
1	AZterknot	14	D	88.8 a	13.8 ab	Vive
2	Zolera FX+Vacciplant	5+7	C	86.3 ab	13.8 ab	UPL
3	AZterknot+Phobos	8+4	D	85.8 ab	13.9 a	Vive
4	Zolera FX+Vacciplant+Topsin	5+7+20	C	85.2 a-c	14.0 a	UPL
5	Untreated Check	-	-	83.5 a-d	13.6 ab	-
6	Revytek+NIS	8+0.13%v/v	E	80.8 a-e	14.0 a	BASF
7	Miravis Neo+Yield On+Endigo ZCX	13.7+24+3.5	E	79.3 b-e	13.6 ab	Syngenta
8	Verium+Cygin Pro	0.25%v/v+4	C	78.5 b-e	13.7 ab	CHS
9	Veltyma+NIS	7+0.13%v/v	E	78.1 b-e	13.8 ab	BASF
10	Delaro+NIS	8+0.13%v/v	C	77 c-e	13.6 ab	Bayer
11	Terramar+ReaxK+Reax Complete+ Magistrate+Franchise Copilot	32+32+32+6+0.25%v/v	D	76.3 de	13.7 ab	Loveland
12	Terramar+ReaxK+Franchise Copilot+Magistrate	32+32+0.25%v/v+6	D	75.3 de	13.4 b	Loveland
13	Sugar Mover Premier+X-Cyte	32+8	D	75.2 de	13.5 ab	Corteva
14	Delaro Complete+NIS	8+0.13%v/v	C	73.8 e	13.7 ab	Bayer
	LSD (0.05)			**8.6**	**0.5**	

[a]Application codes refer to the information in Table 1.
[b]Bu/A=Soybean yield is corrected to a moisture of 13.5%. Same letters next to values are statistically similar values at alpha=0.05.

COMBINED ANALYSIS ACROSS APPLICATION TIMINGS OF VALUE-ADDED PRODCUTS

All three timing protocols were conducted at the same location next to each other and maintenance applications were identical to one another, therefore data were combined and analyzed across all protocols. Combined, the protocols averaged 77 bu/A and 13.9% moisture. For the sake of simplicity, the untreated checks from each of the studies, four total, have been averaged together to create one combined untreated check treatment (treatment 12) with essentially twenty-four replicated data points versus six replicated data points like the other treatments. This gives a solid baseline to make inferences. The range of the data table has been displayed in descending order of yield (Table 5 – *Note, treatment numbers have been updated from tables above to reflect new ranking order in combined table*). There was an 18.8 bu/A range between the top yielding treatment and the lowest yielding treatment.

In general, the reproductive study treatments trended towards the top, with ten of the eleven treatments above the untreated check having a reproductive application timing (Table 5). The in-furrow treatments trended towards the bottom, with all in-furrow applications falling below the untreated check. The vegetative study treatments were mixed throughout. Under the ideal environmental conditions of this growing season, the in-furrow treatments did not provide the intended early-season boost, whereas the later timing applications may have helped the soybeans more when moisture was less available and some environmental stress may have occurred.

The top three treatments had statistically greater yields than the untreated checks, averaged (Table 5). The products used in these treatments were AZterknot, a fungicide that contains azoxystrobin (Group 11) and *reynoutria sachalinensis* knotweed extract (Group P05); Zolera FX, a fungicide that contains fluoxastrobin (Group 11) and tetraconazole (Group 3); Vacciplant, a bio fungicide that contains laminarin seaweed extract (Group P04); and Phobos, a fungicide that contains prothioconazole (Group 3). Curiously, these treatments each included a plant extract with host plant defense induction activity with the knotweed extract in AZterknot (Group P05) and seaweed extract in Vacciplant (Group P04) in combination with one or two group 11 and/or group 3 fungicides. Plant extracts also appear in treatments 6 and 7 as components of Yield On which includes corn, sugarbeet, and seaweed extract; and, in treatment 8 as components in Cygin Pro which are marketed as naturally derived plant PGRs. However, none of these other products' plant extracts are classified as a fungicide like the extracts in AZterknot and Vacciplant.

Seven of the top eight treatments were applied at a reproductive application timing (except for treatment 6 applied at V4), included a plant-based extract or plant derived hormone, and performed above the untreated check average. Only the top 4 treatments included at least one fungicide and a plant-based extract with host plant defense induction activity (Table 5). Treatment 6 was the only non-reproductive timing treatment to trend above the untreated average and was unique at that application timing for including fungicide, fertilizer, and plant extract components as compared to the other V4 timing treatments. V4 timing treatments that included a fungicide with no fertilizer components performed significantly below the single treatment that included both fungicide and fertilizer components; however, this script flips at the reproductive timing. At the reproductive timing we see treatment combinations with fungicide plus plant-based extracts with host plant defense induction activity trending better than treatments that were solely fertilizer based or fertilizer based in combination with traditionally classified fungicides. Although these treatments outperformed the untreated check, many other treatments contained fungicides and similar active ingredients.

Treatments including Miravis Neo and Yield On, treatments 6 and 7, landed next to one another in the ranking, suggesting timing of the application may be flexible for the same effect, although treatment 7 also had Endigo ZCX in the tank mix (Table 5). Treatments with AZterknot performed better when applied at the reproductive timing later in the season, compared to the in-furrow or vegetative timings. Treatments with Zolera FX and Vacciplant also followed this trend, suggesting that when applied later in the season, at a reproductive timing, these products may be more beneficial than applying at an early season vegetative timing. The top twelve treatments did not include insecticides showing that insects were not a yield-impacting factor in this environment.

There did not appear to be any patterns or trends when looking at moisture based on application timings or yield.

Table 5. Value-Added Product Impact on Soybean Yield and Moisture in 2026.						
			App.	Harvest		
#	Treatment	Rate	Code[a]	Yield	Moisture	Company
		oz/A* or fl oz/A		Bu/A[b]	%	
1	AZterknot	14	D	88.8 a	13.8 c-f	Vive
2	Zolera FX+Vacciplant	5+7	C	86.3 ab	13.8 c-f	UPL
3	AZterknot+Phobos	8+4	D	85.8 a-c	13.9 a-f	Vive
4	Zolera FX+Vacciplant+Topsin	5+7+20	C	85.2 a-d	14.0 a-f	UPL
5	Revytek+NIS	8+0.13%v/v	E	80.8 a-f	14.0 a-f	BASF
6	Miravis Neo+Yield On	13.7+24	B	79.9 a-f	13.6 d-f	Syngenta
7	Miravis Neo+Yield On+Endigo ZCX	13.7+24+3.5	E	79.3 a-g	13.6 d-f	Syngenta
8	Verium+Cygin Pro	0.25%v/v+4	C	78.5 b-g	13.7 c-f	CHS
9	Veltyma+NIS	7+0.13%v/v	E	78.1 b-g	13.8 b-f	BASF
10	Delaro+NIS	8+0.13%v/v	C	77 b-g	13.6 d-f	Bayer
11	Terramar+ReaxK+Reax Complete+ Magistrate+Franchise Copilot	32+32+32+6+0.25%v/v	D	76.3 c-g	13.7 d-f	Loveland
12	Untreated Check	-	-	76.0 d-g	13.9 a-f	-
13	Bifender FC+AZteroid FC 3.3	5+4.2	A	75.8 d-g	14.4 a-c	Vive
14	Verium+Moxon B	0.25%v/v+16	B	75.3 e-g	13.8 b-f	CHS
15	Bio-Forge Advanced+X-Cyte	8+8	B	75.3 e-g	13.9 a-f	Corteva
16	Terramar+ReaxK+Franchise Copilot+Magistrate	32+32+0.25%v/v+6	D	75.3 e-g	13.4 f	Loveland
17	Sugar Mover Premier+X-Cyte	32+8	D	75.2 e-g	13.5 d-f	Corteva
18	Bio-Forge Advanced	8	A	75.1 e-g	14.4 ab	Corteva
19	Riser+Reax Complete+Reax Plus Iron	2.5 gal.+32+64	A	75.0 e-g	14.5 a	Loveland
20	Averland	5.5	A	73.9 e-g	14.1 a-e	Vive
21	Radiate+Liberate+Reax Complete	2+0.25%v/v+32	B	73.8 fg	13.7 c-f	Loveland
22	Delaro Complete+NIS	8+0.13%v/v	C	73.8 fg	13.7 c-f	Bayer
23	Zolera FX+Vacciplant	5+7	B	72.9 fg	13.7 d-f	UPL
24	Telaron+Vacciplant	7+7	B	72.8 fg	13.7 d-f	UPL
25	Bifender FC	5	A	72.6 fg	14.2 a-d	Vive
26	AZterknot	14	B	72.6 fg	13.7 c-f	Vive
27	Paralign	2 gal.	A	70.0 g	14.5 a	CHS
	LSD (0.01)			**9.6**	**0.7**	

[a]Application codes refer to the information in Table 1.
[b]Bu/A=Soybean yield is corrected to a moisture of 13.5%. Same letters next to values are statistically similar values at alpha=0.01.

CONCLUSION

In 2026 the growing season maintained generally adequate moisture, moderate temperatures, and low abiotic (non-living) and biotic (living) stresses. Some plant health treatments were capable of increased yields and enhanced the soybean yield "ceiling". However, in a future growing season with one or more yield impacting thresholds of an environmental stressor, and/or pest and disease pressure, treatments may be more impactful in protecting yields, likely creating more separation from the untreated check.

Overall, all three protocols were uniform and high yielding, allowing for data to be analyzed with high confidence. The in-furrow protocol did not show statistical differences in yield between treatments and the untreated check. In the vegetative application protocol, one treatment, Miravis Neo and Yield On, a unique combination of fungicide, fertilizer, and plant-based extracts compared to all other vegetative timing treatments, stood out and was able to statistically outperform all others indicating perhaps a synergistic outcome from a fungicide and bio stimulant tank mix. The reproductive application protocol showed treatments that include a traditional fungicide group in addition to a plant extract with host plant defense induction activity trended above the untreated check, although not statistically

significant within the application timing. There did not seem to be any differences between the reproductive application timings. There did not appear to be any moisture trends across any of the protocols.

Combining the three data sets into one allowed for more trends and differences to be observed. Reproductive application treatments trended to yield higher than in-furrow applications, with vegetative applications falling across the board. A few products were applied at different timings, allowing for inferences on best time to apply these products for the greatest chance of yield increase. The yield results did not support an in-furrow application timing under optimal conditions and reduced soil borne disease pressure environments or presence; however, in-furrow applications should be considered in fields with high soil borne disease pressure and/or anticipated cold, wet spring environments. The yield results support vegetative application of products; however, the grower should put emphasis on products including fertilizer components or combinations of fertilizer and fungicide components. Under growing conditions with little to no disease pressure, applying a fungicide alone at a vegetative timing is less likely to provide an economic return compared to a fertilizer-based product by itself. The yield results support reproductive applications when a traditionally classified fungicide is combined with a plant-based extract with host plant defense induction activity compared to a traditionally classified fungicide or fertilizer-based product alone; however, in a year with increased disease pressure and disease conducive environments applying any fungicide would be expected to have a positive impact on yield. One take away from the 2026 data is the potential impact and efficacy or our naturally sourced product components showing promise in a political and social shift in demand to decrease synthetically derived inputs with emphasis in naturally occurring components.

Growers should use this as a guide to visit with their crop consultants or local suppliers to determine a value-added product, if any, that may provide the greatest return on investment based on local supplier price and availability of products. Future research evaluating these programs should be considered, as growing conditions with greater environmental stressors may reveal more differences between treatments and help determine whether combinations of fungicides and fertilizer and plant-based extract products have synergistic benefits.

This publication and more MSRPC funded research conducted by Next Gen Ag LLC can be found online at www.nxtgenag.com under the “Latest News” tab and “Public Grant Research Studies” page.