



TECH Tips

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Research and Technology Field Results- Soybean Spray on Profits Programs

Objectives:

- 1) Demonstrate the value of fungicides, insecticides and micronutrients to reproductive stage soybean
- 2) Demonstrate the differential gains possible with various nutritional and PGR additives beyond a base fungicide plus insecticide program

Treatments Tested – Soybean Spray on Profits Programs:

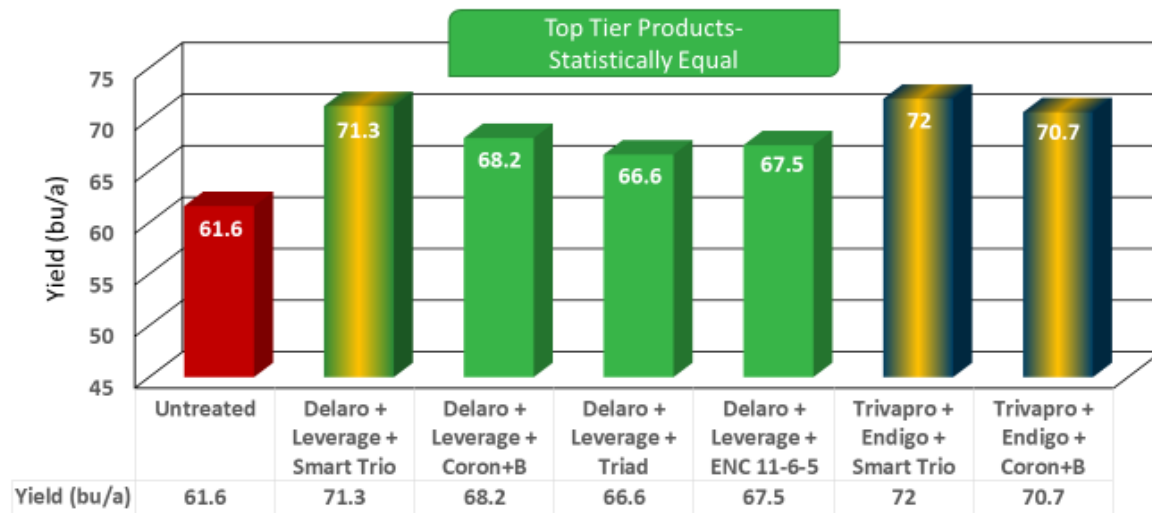
- Untreated (no additional fertilizer)
- Delaro Fungicide + Leverage 360 Insecticide (Bayer) plus Smart Trio (ZMB containing micro) (Brandt)
- Delaro + Leverage 360 + CoRoN+B (Helena)
- Delaro + Leverage360 + Triad PGR (Rosen's)
- Delaro + Leverage 360 + ESN 11-6-5 (Helena)
- TrivaPro Fungicide + Endigo Insecticide (Syngenta) + Smart Trio
- TrivaPro + Endigo + CoRoN+B

Treatments and Rates Tested:

Trt No.	Type	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Growth Unit	Stage	Appl Code	Comment 1	Rep 1	Notes
1	FUNG	Delaro	2.76	LBA/GAL	SC	8 oz/a	MIPOCR	A		20 ft plot	101	
	INSE	Leverage 360	3	LBA/GAL	SC	2.8 oz/a	MIPOCR	A				
	FERT	Smart Trio	100 %		SL	32 oz/a	MIPOCR	A				
	ADJ	Masterlock	100 %		SL	6.4 oz/a	MIPOCR	A				
2	FUNG	Delaro	2.76	LBA/GAL	SC	8 oz/a	MIPOCR	A		20 ft plot	102	
	INSE	Leverage 360	3	LBA/GAL	SC	2.8 oz/a	MIPOCR	A				
	FERT	CoroN + B	27 %	N	SL	2 gal/a	MIPOCR	A				
	ADJ	Masterlock	100 %		SL	6.4 oz/a	MIPOCR	A				
3	FUNG	Delaro	2.76	LBA/GAL	SC	8 oz/a	MIPOCR	A		20 ft plot	103	
	INSE	Leverage 360	3	LBA/GAL	SC	2.8 oz/a	MIPOCR	A				
	PGR	Triad	100 %		SL	4 oz/a	MIPOCR	A				
	ADJ	Masterlock	100 %		SL	6.4 oz/a	MIPOCR	A				
4	FUNG	Delaro	2.76	LBA/GAL	SC	8 oz/a	MIPOCR	A		20 ft plot	104	
	INSE	Leverage 360	3	LBA/GAL	SC	2.8 oz/a	MIPOCR	A				
	FERT	ENC 11-6-5	100 %		SL	32 oz/a	MIPOCR	A				
	ADJ	Masterlock	100 %		SL	6.4 oz/a	MIPOCR	A				
5	FUNG	Trivapro	2.21	LBA/GAL	SC	13.7 oz/a	MIPOCR	A		20 ft plot	105	
	INSE	Endigo ZC	2.06	LBA/GAL	SC	2.5 oz/a	MIPOCR	A				
	FERT	Smart Trio	100 %		SL	32 oz/a	MIPOCR	A				
	ADJ	Masterlock	100 %		SL	6.4 oz/a	MIPOCR	A				
6	FUNG	Trivapro	2.21	LBA/GAL	SC	13.7 oz/a	MIPOCR	A		20 ft plot	106	
	INSE	Endigo ZC	2.06	LBA/GAL	SC	2.5 oz/a	MIPOCR	A				
	FERT	CoroN + B	27 %	N	SL	2 gal/a	MIPOCR	A				
	ADJ	Masterlock	100 %		SL	6.4 oz/a	MIPOCR	A				
7	FUNG	UNTREATED	100 %		SL	0 oz/a	MIPOCR	A		10 ft plot	107	

Results – Soybean Spray on Profits Programs:

Research and Technology Plots: 2018 Soybean Spray on Profits



Soil Test Nutrients	Fall 2017		
Nitrogen	200	Zinc	1.39
Phosphorus	23	Calcium	2564
Potassium	318	pH	6.0
Sulfur	120 +360	CEC	17.7

- Fertilizer Applied: 150# MAP + 50# potash/acre
- Soybean Variety: AG14X8; Population: 140000 seeds/acre- 5-19-18
- All plots treated with 3 GPA Jumper Starter Fertilizer
- All treatments applied at R2 growth stage- 7-9-18



Yield Results – Soybean Spray on Profits Programs:

Crop Name	Part Rated	Rating Type	Rating Unit	Soybean PLOT C YIELD BU	Soybean PLANT C MOICON %	Soybean PLANT C WEITES LB
Trt No.	Treatment Name	Rate	Rate Unit			
1	Delaro Leverage 360 Smart Trio Masterlock	8 oz/a 2.8 oz/a 32 oz/a 6.4 oz/a		71.3	13.00	58.40
2	Delaro Leverage 360 CoroN + B Masterlock	8 oz/a 2.8 oz/a 2 gal/a 6.4 oz/a		68.2	13.00	57.70
3	Delaro Leverage 360 Triad Masterlock	8 oz/a 2.8 oz/a 4 oz/a 6.4 oz/a		66.6	13.00	57.40
4	Delaro Leverage 360 ENC 11-6-5 Masterlock	8 oz/a 2.8 oz/a 32 oz/a 6.4 oz/a		67.5	12.90	57.90
5	Trivapro Endigo ZC Smart Trio Masterlock	13.7 oz/a 2.5 oz/a 32 oz/a 6.4 oz/a		72.0	13.10	57.90
6	Trivapro Endigo ZC CoroN + B Masterlock	13.7 oz/a 2.5 oz/a 2 gal/a 6.4 oz/a		70.7	13.10	57.60
7	UNTREATED	0 oz/a		61.6	13.10	57.20
LSD P=.05						

Key Observations – Soybean Spray on Profits Programs:

- **Results look very good for any of the programs compared to Untreated Check.**
- **The addition of micronutrients** (ZMB formulations or simply Boron) **vs macronutrients or PGR's** to the programs appeared to give positive results.
- Only **two fungicides participated** in the program, and **both performed well**, even in the absence of significant foliar or stem diseases
- Trivapro appeared to slightly outperform Delaro, but that could be expected with the three active ingredients in Trivapro vs two in Delaro. Cost difference may equal these programs.

2018 Plot Setup Information:

- Plot located at the Agtegra Bath location in the Research and Technology demonstration plots
- Variety: Asgrow 14X8 planted at 140000 plants per acre in 30" rows
- Plots planted May 19, 2018
- R2 foliar applications sprayed 7-9-18