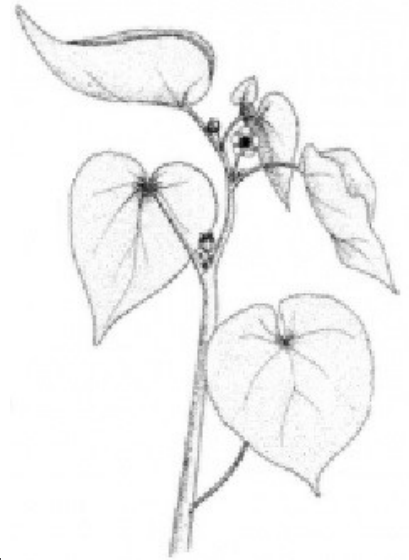


2022 WEED CONTROL FIELD TEST DATA

SDSU W.E.E.D. Project Weed Evaluation and Extension Demonstration Project



***South Dakota State University
College of Agriculture & Biological Sciences
Plant Science Department***



ACKNOWLEDGEMENT

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- Southeast Experiment Station-Beresford
- Northeast Experiment Station-South Shore
- Volga Experiment Station-Volga

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- South Dakota Soybean Research and Promotion Council
- South Dakota Wheat Commission
- Crop Protection Industries

2022
ROUNDUP READY SOYBEAN DEMONSTRATION
Northeast Research Farm

Treatment	Rate/A	6/23/22		7/13/22		9/28/22			10/11/22
		Yeft	Rrpw	Yeft	Rrpw	Yeft	Wocg	Corw	Yield bu/A
Check	---	0	0	0	0	0	0	0	6
PPI & Post									
Treflan + Dimetric 3L & RU Powermax 3 + Amsol + Flexstar	1.5 pt + 10.67 oz & 30 oz + 2 qt + 1 pt	75	98	99	99	98	99	95	48
Prowl H2O + Dimetric 3L & RU Powermax 3 + Amsol + Avalanche Ultra	3 pt + 10.67 oz & 30 oz + 2 qt + 1.5 pt	75	98	99	99	98	99	96	48
Pre & Post									
Sonic & Flexstar + Select Max + COC	5 oz & 1 pt + 12 oz + 0.25%	30	98	78	99	96	58	99	26
Authority MTZ & Avalanche Ultra + Section Three + NIS	14 oz & 1.5 pt + 5.33 oz + 0.25%	23	98	54	98	95	33	99	11
Authority Supreme & Cobra + Select Max + NIS	8 oz & 12.8 oz + 12 oz + 0.25%	68	98	77	98	94	54	98	33
Sonic & EverpreX + Durango DMA + Amsol	4.5 oz & 1 pt + 1 qt + 2.5%	29	98	99	99	99	99	99	46
Broadaxe XC + Dimetric 3L & Flexstar GT + Dual Magnum + AMS + MSO	28 oz + 10 oz & 56 oz + 1 pt + 3.4 lb + 1%	66	98	99	99	99	99	99	46
Authority MTZ & Anthem Maxx + COC + RU Powermax 3 + AMS	14 oz & 3 oz + 1 pt + 30 oz + 1.7 lb	24	98	99	99	99	99	98	43
Zidua Pro & RU Powermax 3 + Outlook + Amsol	6 oz & 30 oz + 10 oz + 2 qt	79	98	99	99	99	99	99	50
Fierce EZ & RU Powermax 3 + Perpetuo + Induce + AMS	6 oz & 30 oz + 6 oz + 0.25% + 3 lb	46	98	99	99	99	99	98	48
Fierce MTZ & RU Powermax 3 + Perpetuo + Induce + AMS	16 oz & 30 oz + 6 oz + 0.25% + 3 lb	45	98	99	99	99	99	99	47
Tendovo & Flexstar GT + AMS	2.35 qt & 3.5 pt + 3.4 lb	85	98	99	99	99	99	99	50
LSD (0.05)		6	--	2	1	2	4	1	5

RCB: 4 reps
Variety: AG09XF0
Planting Date: 5/26/22
PPI/Pre: 5/26/22
Post: 6/28/22 Soy 2-3 tri, 6-8 in; Yeft 3-7 in; Rrpw 1-2 in.

Soil: Clay Loam; 4.1% OM; 5.8 pH

Precipitation: (inches)
Pre: 1st week 2.56 2nd week 0.16

Yeft=Yellow foxtail
Rrpw=redroot pigweed

Comments: The objective of the study was to evaluate program treatments for weed control in soybeans. Moderate woolly cupgrass and heavy yellow foxtail and redroot pigweed pressure. Pre treatments were activated with a 2.56 inch rain 4 days after planting. Most treatments provided good late season weed control. Poor woolly cupgrass control in some treatments significantly reduced yield.

2022
ROUNDUP READY SOYBEAN DEMONSTRATION
Southeast Research Farm

Treatment	Rate/A	6/22/22			7/11/22			9/30/22			10/3/22
		Grft	Vele	Cowh	Grft	Vele	Cowh	Grft	Cowh	Vele	Yield bu/A
Check	---	0	0	0	0	0	0	0	0	0	3
PPI & Post											
Treflan + Dimetric 3L & RU Powermax 3 + Amsol + Flexstar	1.5 pt + 10.67 oz & 30 oz + 2 qt + 1 pt	86	87	92	99	97	94	99	89	97	21
Prowl H2O + Dimetric 3L & RU Pmax 3 + Amsol + Avalanche Ultra	3 pt + 10.67 oz & 30 oz + 2 qt + 1.5 pt	86	83	91	99	92	93	99	89	96	22
Pre & Post											
Sonic & Flexstar + Select Max + COC	5 oz & 1 pt + 12 oz + 0.25%	66	89	93	87	90	92	88	87	83	13
Authority MTZ & Avalanche Ultra + Section Three + NIS	14 oz & 1.5 pt + 5.33 oz + 0.25%	55	74	91	75	61	92	73	85	58	9
Authority Supreme & Cobra + Select Max + NIS	8 oz & 12.8 oz + 12 oz + 0.25%	64	85	89	79	73	90	82	83	77	15
Sonic & EverpreX + Durango DMA + Amsol	4.5 oz & 1 pt + 1 qt + 2.5%	58	88	88	99	99	93	99	88	99	21
Broadaxe XC + Dimetric 3L & Flexstar GT + Dual Magnum + AMS + MSO	28 oz + 10 oz & 56 oz + 1 pt + 3.4 lb + 1%	66	81	90	99	93	93	99	93	94	21
Authority MTZ & Anthem Maxx + COC + RU Powermax 3 + AMS	14 oz & 3 oz + 1 pt + 30 oz + 1.7 lb	58	81	88	99	99	93	99	88	99	20
Zidua Pro & RU Powermax 3 + Outlook + Amsol	6 oz & 30 oz + 10 oz + 2 qt	78	89	90	99	97	89	99	82	98	21
Fierce EZ & RU Powermax 3 + Perpetuo + Induce + AMS	6 oz & 30 oz + 6 oz + 0.25% + 3 lb	63	75	86	99	98	90	99	83	99	20
Fierce MTZ & RU Powermax 3 + Perpetuo + Induce + AMS	16 oz & 30 oz + 6 oz + 0.25% + 3 lb	58	53	86	99	98	90	99	83	99	20
Tendovo & Flexstar GT + AMS	2.35 qt & 3.5 pt + 3.4 lb	82	79	93	99	97	93	99	93	99	22
LSD (0.05)		11	12	4	3	7	2	4	5	11	3

RCB: 4 reps
 Variety: AG20XF1
 Planting Date: 5/18/22
 PPI/Pre: 5/18/22
 Post: 6/28/22 Soy 4-5 tri, 9-12 in; Grft 5-10 in; Vele 3-9 in; Cowh 3-9 in.

Soil: Clay; 4.3% OM; 7.2 pH

Precipitation: (inches)
 Pre: 1st week 0.26 2nd week 0.75

Grft=Green foxtail
 Vele=Velvetleaf
 Cowh=Common waterhemp

Comments: The objective of the study was to evaluate program treatments for weed control in soybeans. Moderate green foxtail, velvetleaf and heavy common waterhemp pressure. There was enough moisture early in the season for soybean germination and herbicide activation. There were many differences for preemergence green foxtail and velvetleaf control, and many treatments had good waterhemp control. Treatments with poor late season weed control had reduced yields. Extreme drought severely reduced overall yield.

2022
ROUNDUP READY SOYBEAN DEMONSTRATION
Volga Research Farm

Treatment	Rate/A	6/23/22		7/20/22		9/22/22		9/29/22
		Gift	Cowh	Gift	Cowh	Gift	Cowh	Yield bu/A
Check	---	0	0	0	0	0	0	6
PPI & Post								
Treflan + Dimetric 3L & RU Powermax 3 + Amsol + Flexstar	1.5 pt + 10.67 oz & 30 oz + 2 qt + 1 pt	90	89	99	96	99	96	46
Prowl H2O + Dimetric 3L & RU Powermax 3 + Amsol + Avalanche Ultra	3 pt + 10.67 oz & 30 oz + 2 qt + 1.5 pt	91	90	99	96	99	96	46
Pre & Post								
Sonic & Flexstar + Select Max + COC	5 oz & 1 pt + 12 oz + 0.25%	81	93	98	97	99	97	47
Authority MTZ & Avalanche Ultra + Section Three + NIS	14 oz & 1.5 pt + 5.33 oz + 0.25%	81	91	94	95	89	93	46
Authority Supreme & Cobra + Select Max + NIS	8 oz & 12.8 oz + 12 oz + 0.25%	83	93	96	98	99	98	45
Sonic & EverpreX + Durango DMA + Amsol	4.5 oz & 1 pt + 1 qt + 2.5%	85	93	99	85	99	80	43
Broadaxe XC + Dimetric 3L & Flexstar GT + Dual Magnum + AMS + MSO	28 oz + 10 oz & 56 oz + 1 pt + 3.4 lb + 1%	91	95	99	99	99	99	47
Authority MTZ & Anthem Maxx + COC + RU Powermax 3 + AMS	14 oz & 3 oz + 1 pt + 30 oz + 1.7 lb	70	92	99	86	99	79	39
Zidua Pro & RU Powermax 3 + Outlook + Amsol	6 oz & 30 oz + 10 oz + 2 qt	94	96	99	90	99	87	46
Fierce EZ & RU Powermax 3 + Perpetuo + Induce + AMS	6 oz & 30 oz + 6 oz + 0.25% + 3 lb	80	90	99	88	99	83	42
Fierce MTZ & RU Powermax 3 + Perpetuo + Induce + AMS	16 oz & 30 oz + 6 oz + 0.25% + 3 lb	89	93	99	86	99	82	42
Tendovo & Flexstar GT + AMS	2.35 qt & 3.5 pt + 3.4 lb	94	96	99	99	99	99	47
LSD (0.05)		13	4	4	5	8	10	5

RCB: 4 reps
Variety: AG12XF1
Planting Date: 5/23/22
PPI: 5/23/22
Pre: 5/24/22
Post: 6/27/22 Soy 4 tri, 8-10 in; Gift 3-8 in; Cowh 2-8 in.

Precipitation: (inches)
Pre: 1st week 0.90 2nd week 0.08

Soil: Clay Loam; 4.2% OM; 5.8 pH
Gift=Giant foxtail
Cowh=Common waterhemp

Comments: The objective of the study was to evaluate program treatments for weed control in soybeans. Moderate giant foxtail and heavy common waterhemp pressure. Preemergence treatments were activated by 0.90 inches of rainfall the first week after planting with limited precipitation for the next two weeks. Most treatments provided good preemergence waterhemp control. Many programs had excellent season long weed control. There were no significant yield differences between treatments.

2022
DICAMBA SOYBEAN DEMONSTRATION
Northeast Research Farm

Treatment	Rate/A	6/23/22		7/13/22		9/28/22		10/7/22
		Yeft	Rrpw	Yeft	Rrpw	Yeft	Rrpw	Yield bu/A
Check	---	0	0	0	0	0	0	5
Pre & Post								
Broadaxe XC + Tricor DF & RU Powermax + Volt Edge + Class Act Ridion + OnTarget	28 oz + 5 oz & 56.5 oz + 27 oz + 26 oz + 0.5% + 0.5%	63	98	98	99	97	99	50
Tavium + Tricor DF + Volt Edge + OnTarget & Flexstar GT + Dual Magnum + MSO + AMS	56.5 oz + 5 oz + 26 oz + 0.5% & 3.5 pt + 1 pt + 0.5% + 1.7 lb	44	98	99	99	97	99	47
Boundary & RU Powermax + Tavium + Volt Edge + Class Act Ridion + OnTarget	2 pt & 27 oz + 56.5 oz + 26 oz + 0.5% + 0.5%	58	98	98	99	98	99	52
Tendovo & Tavium + RU Powermax + Volt Edge + Class Act Ridion + OnTarget	1.75 pt & 56.5 oz + 27 oz + 26 oz + 0.5% + 0.5%	39	98	98	99	96	98	49
Engenia + Pursuit + Zidua SC + Sentris & Liberty + RU Powermax 3 + Outlook + AMS	12.8 oz + 3 oz + 3.25 oz + 8 oz & 32 oz + 30 oz + 10 oz + 3 lb	71	98	98	99	98	99	52
Engenia + Sharpen + Zidua SC + Sentris & Engenia + RU Powermax 3 + Outlook + Sentris + Class Act Ridion + OnTarget	12.8 oz + 1 oz + 3.25 oz + 8 oz & 12.8 oz + 30 oz + 10 oz + 8 oz + 0.5% + 0.5%	53	98	98	99	97	99	50
Fierce EZ & RU Powermax 3 + Xtendimax + Perpetuo + Intact + Induce + Volt Edge	6 oz & 30 oz + 22 oz + 6 oz + 0.5% + 0.25% + 26 oz	38	98	98	99	98	99	47
Fierce MTZ & RU Powermax 3 + Xtendimax + Perpetuo + Intact + Induce + Volt Edge	1 pt & 30 oz + 22 oz + 6 oz + 0.5% + 0.25% + 26 oz	34	98	99	99	97	99	45
Warrant + Mauler & Liberty + Xtendimax + Volt Edge + Intact + Class Act Ridion	48 oz + 8 oz & 32 oz + 22 oz + 26 oz + 0.5% + 1%	18	98	88	99	63	99	40
Warrant + Mauler & RU Powermax 3 + Xtendimax + Volt Edge + Intact + Class Act Ridion	48 oz + 8 oz & 30 oz + 22 oz + 26 oz + 0.5% + 1%	13	98	99	99	93	99	48
LSD (0.05)		8	--	0.5	0.5	2	0.5	5

RCB: 4 reps
 Variety: AG09XF0
 Planting Date: 5/26/22
 Pre: 5/26/22
 Post: 6/28/22 Soy 2-3 tri, 6-8 in; Rrpw 1-2 in.

Precipitation: (inches)
 Pre: 1st week 2.56 2nd week 0.16

Soil: Clay Loam; 4.1% OM; 5.8 pH

Yeft=Yellow foxtail
 Rrpw=redroot pigweed

Comments: The objective of the study was to evaluate combination treatments with dicamba for weed control in XtendFlex soybeans. Heavy yellow foxtail and redroot pigweed pressure. Pre treatments were activated with a 2.56 inch rain 4 days after planting. Preemergence treatments did not adequately control yellow foxtail. One treatment with poor late season foxtail control had reduced yield.

2022
DICAMBA SOYBEAN DEMONSTRATION
Southeast Research Farm

Treatment	Rate/A	6/22/22			7/11/22			9/30/22			10/3/22
		Grft	Vele	Cowh	Grft	Vele	Cowh	Grft	Cowh	Vele	Yield bu/A
Check	---	0	0	0	0	0	0	0	0	0	3
Pre & Post											
Broadaxe XC + Tricor DF & RU Powermax + Volt Edge + Class Act Ridion + OnTarget	28 oz + 5 oz & 56.5 oz + 27 oz + 26 oz + 0.5% + 0.5%	76	76	86	98	99	93	98	94	99	23
Tavium + Tricor DF + Volt Edge + OnTarget & Flexstar GT + Dual Magnum + MSO + AMS	56.5 oz + 5 oz + 26 oz + 0.5% & 3.5 pt + 1 pt + 0.5% + 1.7 lb	86	94	93	99	99	95	99	95	98	21
Boundary & RU Powermax + Tavium + Volt Edge + Class Act Ridion + OnTarget	2 pt & 27 oz + 56.5 oz + 26 oz + 0.5% + 0.5%	55	41	86	99	99	91	97	94	99	21
Tendovo & Tavium + RU Powermax + Volt Edge + Class Act Ridion + OnTarget	1.75 pt & 56.5 oz + 27 oz + 26 oz + 0.5% + 0.5%	60	87	88	98	97	92	97	93	99	22
Engenia + Pursuit + Zidua SC + Sentris & Liberty + RU Pmax 3 + Outlook + AMS	12.8 oz + 3 oz + 3.25 oz + 8 oz & 32 oz + 30 oz + 10 oz + 3 lb	91	96	95	99	99	97	99	97	99	25
Engenia + Sharpen + Zidua SC + Sentris & Engenia + RU Powermax 3 + Outlook + Sentris + Class Act Ridion + OnTarget	12.8 oz + 1 oz + 3.25 oz + 8 oz & 12.8 oz + 30 oz + 10 oz + 8 oz + 0.5% + 0.5%	87	93	95	99	99	97	99	98	99	23
Fierce EZ & RU Pmax 3 + Xtendimax + Perpetuo + Intact + Induce + Volt Edge	6 oz & 30 oz + 22 oz + 6 oz + 0.5% + 0.25% + 26 oz	35	50	87	99	99	95	97	93	98	17
Fierce MTZ & RU Pmax 3 + Xtendimax + Perpetuo + Intact + Induce + Volt Edge	1 pt & 30 oz + 22 oz + 6 oz + 0.5% + 0.25% + 26 oz	38	59	85	99	98	92	98	92	98	17
Warrant + Mauler & Liberty + Xtendimax + Volt Edge + Intact + Class Act Ridion	48 oz + 8 oz & 32 oz + 22 oz + 26 oz + 0.5% + 1%	55	58	90	97	97	96	75	95	96	20
Warrant + Mauler & RU Powermax 3 + Xtendimax + Volt Edge + Intact + Class Act Ridion	48 oz + 8 oz & 30 oz + 22 oz + 26 oz + 0.5% + 1%	58	58	86	99	98	94	98	94	99	25
LSD (0.05)		13	9	4	1	1	3	3	2	2	5

2022
DICAMBA SOYBEAN DEMONSTRATION
Southeast Research Farm

RCB: 4 reps
Variety: AG20XF1
Planting Date: 5/18/22
Pre: 5/18/22
Post: 6/28/22 Soy 4-5 tri, 9-12 in; Grft 5-10 in; Vele 3-9 in; Cowh 3-9 in.

Precipitation: (inches)
Pre: 1st week 0.26 2nd week 0.75

Soil: Clay; 4.3% OM; 7.2 pH

Grft=Green foxtail
Vele=Velvetleaf
Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with dicamba for weed control in XtendFlex soybeans. Moderate green foxtail, velvetleaf and heavy common waterhemp pressure. There was enough moisture early in the season for soybean germination and herbicide activation. There were some differences for early evaluations of preemergence weed control. Most treatments had good weed control after the follow up postemergence application. Extreme drought severely reduced yield.

2022
DICAMBA SOYBEAN DEMONSTRATION
Volga Research Farm

Treatment	Rate/A	6/23/22		7/12/22		9/22/22		9/28/22
		Cowh	Gift	Cowh	Gift	Cowh	Yield bu/A	
Check	---	0	0	0	0	0	24	
Pre & Post								
Broadaxe XC + Tricor DF & RU Powermax + Volt Edge + Class Act Ridion + OnTarget	28 oz + 5 oz & 56.5 oz + 27 oz + 26 oz + 0.5% + 0.5%	98	99	99	99	98	43	
Tavium + Tricor DF + Volt Edge + OnTarget & Flexstar GT + Dual Magnum + MSO + AMS Boundary &	56.5 oz + 5 oz + 26 oz + 0.5% & 3.5 pt + 1 pt + 0.5% + 1.7 lb 2 pt &	97	99	99	99	98	42	
RU Powermax + Tavium + Volt Edge + Class Act Ridion + OnTarget	27 oz + 56.5 oz + 26 oz + 0.5% + 0.5%	97	99	98	99	99	44	
Tendovo & Tavium + RU Powermax + Volt Edge + Class Act Ridion + OnTarget	1.75 pt & 56.5 oz + 27 oz + 26 oz + 0.5% + 0.5%	96	98	97	99	97	43	
Engenia + Pursuit + Zidua SC + Sentris & Liberty + RU Powermax 3 + Outlook + AMS	12.8 oz + 3 oz + 3.25 oz + 8 oz & 32 oz + 30 oz + 10 oz + 3 lb	97	99	99	99	98	44	
Engenia + Sharpen + Zidua SC + Sentris & Engenia + RU Powermax 3 + Outlook + Sentris + Class Act Ridion + OnTarget	12.8 oz + 1 oz + 3.25 oz + 8 oz & 12.8 oz + 30 oz + 10 oz + 8 oz + 0.5% + 0.5%	98	99	98	99	99	43	
Fierce EZ & RU Powermax 3 + Xtendimax + Perpetuo + Intact + Induce + Volt Edge	6 oz & 30 oz + 22 oz + 6 oz + 0.5% + 0.25% + 26 oz	96	99	98	99	99	44	
Fierce MTZ & RU Powermax 3 + Xtendimax + Perpetuo + Intact + Induce + Volt Edge	1 pt & 30 oz + 22 oz + 6 oz + 0.5% + 0.25% + 26 oz	96	99	98	99	99	45	
Warrant + Mauler & Liberty + Xtendimax + Volt Edge + Intact + Class Act Ridion	48 oz + 8 oz & 32 oz + 22 oz + 26 oz + 0.5% + 1%	97	99	98	99	98	45	
Warrant + Mauler & RU Powermax 3 + Xtendimax + Volt Edge + Intact + Class Act Ridion	48 oz + 8 oz & 30 oz + 22 oz + 26 oz + 0.5% + 1%	97	99	98	99	98	46	
LSD (0.05)		2	1	1	0.5	1	3	

RCB: 4 reps

Variety: AG12XF1

Planting Date: 5/23/22

Pre: 5/24/22

Post: 6/27/22 Soy 4 tri, 6-8 in; Gift 3-8 in; Cowh 2-7 in.

Precipitation: (inches)

Pre: 1st week 0.90

2nd week 0.08

Soil: Clay Loam; 4.5% OM; 5.9 pH

Gift=Giant foxtail

Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with dicamba for weed control in XtendFlex soybeans. Moderate giant foxtail and heavy common waterhemp pressure. Preemergence treatments were activated by 0.90 inches of rainfall the first week after planting with limited precipitation for the next two weeks. All treatments provided good preemergence waterhemp control. All programs had excellent season long weed control. Yields were consistent with no significant differences between herbicide treatments.

2022
ENLIST SOYBEAN DEMONSTRATION
Northeast Research Farm

Treatment	Rate/A	6/23/22		7/13/22		9/28/22		10/11/22
		Yeft	Rrpw	Yeft	Pesw	Yeft	Cowh	Yield bu/A
Check	---	0	0	0	0	0	0	4
Pre & Post								
Sonic & Enlist One + Durango DMA + Amsol	5 oz & 32 oz + 32 oz + 2.5%	28	98	99	99	98	99	47
Sonic & Enlist One + Liberty + Amsol	5 oz & 2 pt + 2 pt + 2.5%	28	98	95	99	85	98	44
Verdict + Outlook & Liberty + Enlist One + Zidua SC + AMS	5 oz + 8 oz & 32 oz + 32 oz + 2.5 oz + 3 lb	63	98	96	99	91	98	48
Fierce EZ & Enlist One + RU Powermax 3 + Perpetuo + AMS + Induce	6 oz & 1 pt + 30 oz + 6 oz + 1.5 lb + 0.25%	54	98	99	99	99	99	48
Fierce EZ + Firstrate & Enlist One + RU Powermax 3 + Perpetuo + AMS + Induce	6 oz + 0.6 oz & 1 pt + 30 oz + 6 oz + 1.5 lb + 0.25%	55	98	99	99	99	99	48
LSD (0.05)		3	4	1	2	5	6	4

RCB: 4 reps
 Variety: Impact 10E125N
 Planting Date: 5/26/22
 Pre: 5/26/22
 Post: 6/28/22 Soy 2 tri, 6-8 in; Yeft 5-8 in; Rrpw 1-4 in.

Precipitation: (inches)
 Pre: 1st week 2.56 2nd week 0.16

Soil: Clay Loam; 4.1% OM; 5.8 pH

Yeft=Yellow foxtail
 Rrpw=Redroot pigweed
 Pesw=Pennsylvania smartweed
 Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with Enlist for weed control in Enlist E3 soybeans. Heavy yellow foxtail, redroot pigweed, and moderate common waterhemp pressure. Pre treatments were activated with a 2.56 inch rain 4 days after planting. Preemergence treatments did not adequately control yellow foxtail. Post emergence applications provided good weed control.

2022
ENLIST SOYBEAN DEMONSTRATION
Southeast Research Farm

Treatment	Rate/A	6/22/22			7/11/22			9/30/22			10/3/22
		Grft	Vele	Cowh	Grft	Vele	Cowh	Grft	Cowh	Vele	Yield bu/A
Check	---	0	0	0	0	0	0	0	0	0	2
Pre & Post											
Sonic & Enlist One + Durango DMA + Amsol	5 oz & 32 oz + 32 oz + 2.5%	69	91	91	99	99	98	99	99	99	23
Sonic & Enlist One + Liberty + Amsol	5 oz & 2 pt + 2 pt + 2.5%	73	92	90	99	99	98	96	98	98	24
Verdict + Outlook & Liberty + Enlist One + Zidua SC + AMS	5 oz + 8 oz & 32 oz + 32 oz + 2.5 oz + 3 lb	50	75	89	98	97	98	94	98	98	23
Fierce EZ & Enlist One + RU Powermax 3 + Perpetuo + AMS + Induce	6 oz & 1 pt + 30 oz + 6 oz + 1.5 lb + 0.25%	30	53	83	99	98	95	98	92	99	19
Fierce EZ + Firstrate & Enlist One + RU Powermax 3 + Perpetuo + AMS + Induce	6 oz + 0.6 oz & 1 pt + 30 oz + 6 oz + 1.5 lb + 0.25%	38	86	82	99	98	97	99	98	99	24
LSD (0.05)		6	7	6	1	3	2	2	3	3	3

RCB: 4 reps

Variety: Impact NK S20-E3

Planting Date: 5/18/22

Pre: 5/18/22

Post: 6/26/22 Soy 5-6 tri, 7-11 in; Grft 4-7 in; Vele 3-7 in; Cowh 3-10 in.

Soil: Clay; 4.3% OM; 7.0 pH

Precipitation: (inches)

Pre: 1st week 0.26

2nd week 0.75

Grft=Green foxtail

Vele=Velvetleaf

Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with Enlist for weed control in Enlist E3 soybeans. Moderate green foxtail, velvetleaf and heavy common waterhemp pressure. There was enough moisture early in the season for soybean germination and herbicide activation. Several treatments provided good early season velvetleaf and waterhemp control. All treatments had good weed control after the follow up postemergence application. Extreme drought severely reduced yield.

2022
ENLIST SOYBEAN DEMONSTRATION
Volga Research Farm

Treatment	Rate/A	6/22/22		7/18/22		9/22/22		9/29/22
		Gift	Cowh	Gift	Cowh	Gift	Cowh	Yield bu/A
Check	---	0	0	0	0	0	0	5
Pre & Post								
Sonic & Enlist One + Durango DMA + Amsol	5 oz & 32 oz + 32 oz + 2.5%	79	92	97	98	97	99	44
Sonic & Enlist One + Liberty + Amsol	5 oz & 2 pt + 2 pt + 2.5%	83	94	97	98	97	98	45
Verdict + Outlook & Liberty + Enlist One + Zidua SC + AMS	5 oz + 8 oz & 32 oz + 32 oz + 2.5 oz + 3 lb	97	98	98	99	98	99	44
Fierce EZ & Enlist One + RU Powermax 3 + Perpetuo + AMS + Induce	6 oz & 1 pt + 30 oz + 6 oz + 1.5 lb + 0.25%	86	90	98	98	98	98	44
Fierce EZ + Firstrate & Enlist One + RU Powermax 3 + Perpetuo + AMS + Induce	6 oz + 0.6 oz & 1 pt + 30 oz + 6 oz + 1.5 lb + 0.25%	92	94	98	98	98	98	44
LSD (0.05)		9	4	1	3	2	4	3

RCB: 4 reps
 Variety: Impact 10E125N
 Planting Date: 5/23/22
 Pre: 5/24/22
 Post: 6/22/22 Soy 3 tri, 5-6 in; Gift 3-7 in; Cowh 2-7 in.

Precipitation: (inches)
 Pre: 1st week 0.90 2nd week 0.08

Soil: Clay Loam; 4.2% OM; 5.8 pH

Gift=Giant foxtail
 Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with Enlist for weed control in Enlist E3 soybeans. Moderate giant foxtail and heavy common waterhemp pressure. Preemergence treatments were activated by 0.90 inches of rainfall the first week after planting with limited precipitation for the next two weeks. All programs had excellent season long weed control. Yields were consistent with no significant differences between herbicide treatments.

2022
LIBERTY SOYBEAN DEMONSTRATION
Northeast Research Farm

Treatment	Rate/A	6/23/22		7/13/22		9/28/22		10/11/22
		Yeft	Rrpw	Yeft	Rrpw	Yeft	Pesw	Yield bu/A
Check	---	0	0	0	0	0	0	6
Pre & Post								
Authority MTZ & Cheetah + AMS	14 oz & 32 oz + 3 lb	25	98	94	98	81	99	44
Dimetric Charged & Total SL + AMS	15 oz & 32 oz + 1.5 lb	43	98	95	99	90	99	47
Moccasin MTZ & Interline + AMS	3.56 pt & 32 oz + 3 lb	89	98	96	99	97	99	51
Fierce EZ & Liberty + Perpetuo + Select Max + Induce + AMS	6 oz & 32 oz + 6 oz + 9 oz + 0.25% + 3 lb	59	98	98	99	97	99	44
Fierce EZ + Firstrate & Liberty + Perpetuo + Select Max + Induce + AMS	6 oz + 0.6 oz & 32 oz + 6 oz + 9 oz + 0.25% + 3 lb	60	98	97	99	98	99	47
Zidua Pro & Liberty + RU Powermax 3 + Outlook + AMS	4.5 oz & 32 oz + 30 oz + 10 oz + 3 lb	71	98	99	99	99	99	47
LSD (0.05)		4	--	2	1	3	--	3

RCB: 4 reps

Variety: AG09XF0

Planting Date: 5/26/22

Pre: 5/26/22

Post: 6/28/22 Soy 2-3 tri, 6-8 in; Yeft 1-5 in; Rrpw 1-3 in.

Soil: Clay Loam; 4.1% OM; 5.8 pH

Precipitation: (inches)

Pre: 1st week 2.56

2nd week 0.16

Yeft=Yellow foxtail

Rrpw=Redroot pigweed

Pesw=Pennsylvania smartweed

Comments: The objective of the study was to evaluate combination treatments with Liberty for weed control in XtendFlex soybeans. Heavy yellow foxtail and redroot pigweed pressure. Most preemergence treatments did not adequately control yellow foxtail. Yields were reduced for treatments with lower yellow foxtail control.

2022
LIBERTY SOYBEAN DEMONSTRATION
Southeast Research Farm

Treatment	Rate/A	6/22/22			7/11/22			9/30/22				10/3/22
		Grft	Vele	Cowh	Grft	Vele	Cowh	Grft	Vele	Cowh	Colq	Yield bu/A
Check	---	0	0	0	0	0	0	0	0	0	0	1
Pre & Post												
Authority MTZ & Cheetah + AMS	14 oz & 32 oz + 3 lb	53	58	91	98	80	93	91	61	92	92	17
Dimetric Charged & Total SL + AMS	15 oz & 32 oz + 1.5 lb	58	68	88	97	81	89	94	58	82	83	18
Moccasin MTZ & Interline + AMS	3.56 pt & 32 oz + 3 lb	69	69	93	98	83	92	96	70	87	86	18
Fierce EZ & Liberty + Perpetuo + Select Max + Induce + AMS	6 oz & 32 oz + 6 oz + 9 oz + 0.25% + 3 lb	45	48	74	98	88	91	94	63	81	78	21
Fierce EZ + Firstrate & Liberty + Perpetuo + Select Max + Induce + AMS	6 oz + 0.6 oz & 32 oz + 6 oz + 9 oz + 0.25% + 3 lb	70	93	87	98	98	95	97	98	91	90	22
Zidua Pro & Liberty + RU Powermax 3 + Outlook + AMS	4.5 oz & 32 oz + 30 oz + 10 oz + 3 lb	81	94	89	99	97	93	99	98	87	97	24
LSD (0.05)		7	10	5	1	4	3	2	12	7	6	5

RCB: 4 reps

Variety: NK S20-E3

Planting Date: 5/18/22

Pre: 5/18/22

Post: 6/26/22 Soy 5-6 tri, 7-11 in; Grft 4-7 in; Vele 3-7 in; Cowh 3-10 in.

Soil: Clay; 4.3% OM; 7.0 pH

Precipitation: (inches)

Pre: 1st week 0.26

2nd week 0.75

Grft=Green foxtail

Vele=Velvetleaf

Cowh=Common waterhemp

Colq=Common lambsquarters

Comments: The objective of the study was to evaluate combination treatments with Liberty for weed control in Enlist E3 soybeans. Moderate green foxtail, velvetleaf and heavy common waterhemp pressure. There was enough moisture early in the season for soybean germination and herbicide activation. There were differences for early season preemergence weed control. Only a few treatments had good late season weed control. Extreme drought severely reduced yield.

2022
LIBERTY SOYBEAN DEMONSTRATION
Volga Research Farm

Treatment	Rate/A	6/22/22		7/18/22		9/22/22		9/29/22
		Gift	Cowh	Gift	Cowh	Gift	Cowh	Yield bu/A
Check	---	0	0	0	0	0	0	6
Pre & Post								
Authority MTZ & Cheetah + AMS	14 oz & 32 oz + 3 lb	78	93	97	98	94	98	45
Dimetric Charged & Total SL + AMS	15 oz & 32 oz + 1.5 lb	84	94	97	98	94	98	45
Moccasin MTZ & Interline + AMS	3.56 pt & 32 oz + 3 lb	97	97	99	99	99	99	45
Fierce EZ & Liberty + Perpetuo + Select Max + Induce + AMS	6 oz & 32 oz + 6 oz + 9 oz + 0.25% + 3 lb	86	92	98	99	97	99	44
Fierce EZ + Firstrate & Liberty + Perpetuo + Select Max + Induce + AMS	6 oz + 0.6 oz & 32 oz + 6 oz + 9 oz + 0.25% + 3 lb	85	95	98	99	97	99	44
Zidua Pro & Liberty + RU Powermax 3 + Outlook + AMS	4.5 oz & 32 oz + 30 oz + 10 oz + 3 lb	95	96	98	99	99	99	43
LSD (0.05)		6	1	2	1	4	1	2

RCB: 4 reps

Variety: Impact 10E125N

Planting Date: 5/23/22

Pre: 5/24/22

Post: 6/22/22 Soy 3 tri, 5-6 in; Gift 3-7 in; Cowh 2-7 in.

Soil: Clay Loam; 4.2% OM; 5.8 pH

Precipitation: (inches)

Pre: 1st week 0.90

2nd week 0.08

Gift=Giant foxtail

Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with glufosinate for weed control in Enlist E3 soybeans. Moderate giant foxtail and heavy common waterhemp pressure. Preemergence treatments were activated by 0.90 inches of rainfall the first week after planting with limited precipitation for the next two weeks. All programs had excellent season long weed control. Yields were consistent with no significant differences between herbicide treatments.

2022
LLGT27 SOYBEAN DEMONSTRATION
Northeast Research Farm

Treatment	Rate/A	6/23/22		7/13/22		9/28/22		10/11/22
		Yeft	Rrpw	Yeft	Cowh	Yeft	Cowh	Yield bu/A
Check	---	0	0	0	0	0	0	4
Epost								
RU Powermax + AMS	30 oz + 1.7 lb	--	--	97	78	88	43	35
Liberty + AMS	32 oz + 1.7 lb	--	--	84	80	83	66	39
Liberty + RU Powermax 3 + AMS	32 oz + 30 oz + 1.7 lb	--	--	95	88	84	73	42
Pre & Post								
Alite 27 + Dimetric 3L & RU Powermax 3 + AMS	3 oz + 10.67 oz & 30 oz + 1.7 lb	65	97	99	96	99	97	54
Alite 27 + Dimetric 3L & Liberty + AMS	3 oz + 10.67 oz & 32 oz + 1.7 lb	65	96	94	97	97	98	56
Alite 27 + Outlook & Liberty + AMS	3 oz + 10 oz & 32 oz + 1.7 lb	69	92	94	96	98	97	56
Alite 27 + Zidua SC & Liberty + RU Powermax 3 + Outlook + AMS	2 oz + 2.5 oz & 32 oz + 30 oz + 10 oz + 3 lb	70	93	99	98	98	97	54
LSD (0.05)		3	3	3	10	5	6	6

RCB: 4 reps

Variety: NK S16-LLGT27

Planting Date: 5/26/22

Pre: 5/26/22

Epost: 6/22/22 Soy 2 tri, 6-7 in; Yeft 2.5 in; Rrpw 3-5 in.

Post: 6/28/22 Soy 2-3 tri, 6-8 in; Yeft 2-5 in; Rrpw 2-4 in.

Soil: Clay Loam; 4.1% OM; 5.8 pH

Precipitation: (inches)

Pre: 1st week 2.56

2nd week 0.16

Yeft=Yellow foxtail

Rrpw=Redroot pigweed

Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with Alite 27 for weed control in LLGT27 soybeans. Heavy yellow foxtail and moderate redroot pigweed and waterhemp pressure. Pre treatments were activated with a 2.56 inch rain 4 days after planting. Weed control was good with Alite 27 combinations. Early post treatments with glyphosate and glufosinate had poor late season control and reduced yields.

2022
LLGT27 SOYBEAN DEMONSTRATION
Southeast Research Farm

Treatment	Rate/A	6/22/22			7/11/22			9/30/22		10/3/22
		Grft	Vele	Cowh	Grft	Vele	Cowh	Grft	Cowh	Yield bu/A
Check	---	0	0	0	0	0	0	0	0	2
Epost										
RU Powermax + AMS	30 oz + 1.7 lb	99	99	93	99	99	77	92	48	15
Liberty + AMS	32 oz + 1.7 lb	98	99	99	96	97	90	88	84	15
Liberty + RU Powermax 3 + AMS	32 oz + 30 oz + 1.7 lb	99	99	97	99	99	91	90	79	19
Pre & Post										
Alite 27 + Dimetric 3L & RU Powermax 3 + AMS	3 oz + 10.67 oz & 30 oz + 1.7 lb	94	96	95	99	99	94	99	92	19
Alite 27 + Dimetric 3L & Liberty + AMS	3 oz + 10.67 oz & 32 oz + 1.7 lb	93	96	97	98	95	96	99	95	22
Alite 27 + Outlook & Liberty + AMS	3 oz + 10 oz & 32 oz + 1.7 lb	94	95	98	99	97	97	99	96	21
Alite 27 + Zidua SC & Liberty + RU Powermax 3 + Outlook + AMS	2 oz + 2.5 oz & 32 oz + 30 oz + 10 oz + 3 lb	92	98	94	99	99	95	99	92	19
LSD (0.05)		2	2	2	1	2	3	5	4	4

RCB: 4 reps

Variety: NK S20-LLGT27

Planting Date: 5/18/22

Pre: 5/18/22

Epost: 6/15/22 Soy 1-2 tri, 3-5 in; Grft 2-7 in; Vele 0.5-2 in; Cowh 0.5-2 in.

Post: 6/26/22 Soy 5-6 tri, 7-11 in; Grft 4-7 in; Vele 3-7 in; Cowh 3-10 in.

Soil: Clay; 4.3% OM; 7.0 pH

Precipitation: (inches)

Pre: 1st week 0.26

2nd week 0.75

Grft=Green foxtail

Vele=Velvetleaf

Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with Alite 27 for weed control in LLGT27 soybeans. Moderate green foxtail, velvetleaf and heavy common waterhemp pressure. There was enough moisture early in the season for soybean germination and herbicide activation. Alite 27 combinations provided good preemergence weed control. Poor weed control with Liberty or Roundup alone significantly reduced yield. Extreme drought severely reduced overall yield.

2022
LLGT27 SOYBEAN DEMONSTRATION
Volga Research Farm

Treatment	Rate/A	6/23/22			7/18/22			9/22/22		9/29/22
		Gift	Colq	Cowh	Gift	Cowh	Colq	Gift	Cowh	Yield bu/A
Check	---	0	0	0	0	0	0	0	0	6
Epost										
RU Powermax + AMS	30 oz + 1.7 lb	--	--	--	99	15	99	99	13	21
Liberty + AMS	32 oz + 1.7 lb	--	--	--	99	79	98	99	80	38
Liberty + RU Powermax 3 + AMS	32 oz + 30 oz + 1.7 lb	--	--	--	99	83	99	99	82	40
Pre & Post										
Alite 27 + Dimetric 3L & RU Powermax 3 + AMS	3 oz + 10.67 oz & 30 oz + 1.7 lb	98	99	99	99	99	99	99	98	39
Alite 27 + Dimetric 3L & Liberty + AMS	3 oz + 10.67 oz & 32 oz + 1.7 lb	98	99	99	99	99	99	99	99	39
Alite 27 + Outlook & Liberty + AMS	3 oz + 10 oz & 32 oz + 1.7 lb	99	99	99	99	99	99	99	99	39
Alite 27 + Zidua SC & Liberty + RU Powermax 3 + Outlook + AMS	2 oz + 2.5 oz & 32 oz + 30 oz + 10 oz + 3 lb	99	99	99	99	99	99	99	99	41
LSD (0.05)		1	--	0.5	0.5	4	1	--	4	3

RCB: 4 reps
 Variety: NK S20-LLGT27
 Planting Date: 5/23/22
 Pre: 5/23/22
 Epost: 6/22/22 Soy 3 tri, 5-6 in.
 Post: 6/27/22 Soy 4 tri, 8-10 in; Gift 5-8 in.

Soil: Clay Loam; 4.2% OM; 5.8 pH

Precipitation: (inches)
 Pre: 1st week 0.90 2nd week 0.08

Gift=Giant foxtail
 Colq=Common lambsquarters
 Cowh=Common waterhemp

Comments: The objective of the study was to evaluate combination treatments with Alite 27 for weed control in LLGT27 soybeans. Moderate giant foxtail and heavy common waterhemp pressure. Preemergence treatments were activated by 0.90 inches of rainfall the first week after planting with limited precipitation for the next two weeks. Alite 27 combinations provided good preemergence weed control. Poor waterhemp control with Roundup alone significantly reduced yield.

2022
DICAMBA SIMULATED DRIFT IN SOYBEANS
Volga Research Farm

Treatment	Cobra timing	7/22/22	7/28/22	8/12/22	8/26/22	9/2/22	9/29/22
		VCRR	VCRR	VCRR	VCRR	VCRR	Yield bu/A
Check		0	0	0	0	0	42
Post: Xtendimax Rate	Cobra 12.8 oz + COC 1 qt						
---	Epost	8	3	0	0	0	41
---	Post	11	4	6	1	0	39
---	Lpost	15	8	8	4	0	37
0.0022 oz	---	1	1	0	0	0	43
0.0022 oz	Epost	13	9	4	0	0	41
0.0022 oz	Post	15	14	8	0	0	39
0.0022 oz	Lpost	14	14	9	4	0	39
0.22 oz	---	23	29	33	35	34	36
0.22 oz	Epost	39	39	33	31	30	36
0.22 oz	Post	50	58	53	53	50	23
0.22 oz	Lpost	31	43	50	50	54	24
0.44 oz	---	31	38	38	41	41	28
0.44 oz	Epost	41	50	45	48	45	28
0.44 oz	Post	48	56	64	64	63	15
0.44 oz	Lpost	33	43	54	56	58	19
2.2 oz	---	60	69	59	59	56	14
2.2 oz	Epost	74	79	73	68	64	12
2.2 oz	Post	68	78	80	78	75	5
2.2 oz	Lpost	60	69	69	74	71	8
LSD (0.05)		5	5	6	4	3	3

RCB: 4 reps
 Variety: NK14-W6E3
 Planting Date: 5/23/22
 Epost: 6/27/22 Soy 3-4 tri, 7-9 in.
 Post: 7/6/22 Soy ebloom, 14-16 in.
 Lpost: 7/13/22 Soy bloom, 18-20 in.

VCRR=Visual Crop Response Rating
 (0=no injury; 100=complete kill)

Comments: The objective of the study was to evaluate simulated dicamba drift on non-dicamba tolerant soybeans for crop injury and yield. The study was in a low weed pressure area and plots were kept weed free. Cobra treatments were applied one week before, the same day or one week after dicamba application. The post and late post Cobra applications with dicamba drift had increased injury and lower yield than the dicamba drift treatments alone. The lowest rate of Xtendimax (0.0022oz/A) had no crop injury and no yield loss. All the other dicamba rates resulted in season long injury and significantly reduced yields.

2022
ROUNDUP & LIBERTY TANKMIXES IN SOYBEANS
Northeast Research Farm

Treatment	Rate/A	7/14/22		7/29/22		10/11/22
		Yeft	Cowh	Yeft	Cowh	Yield bu/A
Check	---	0	0	0	0	5
Post						
RU Powermax + AMS	22 oz + 2.5 lb	92	89	99	88	31
Liberty + AMS	29 oz + 2.5 lb	85	96	89	90	27
RU Powermax + Liberty + AMS	12 oz + 22 oz + 2.5 lb	88	97	99	89	29
RU Powermax + Liberty + AMS	12 oz + 29 oz + 2.5 lb	88	95	99	89	28
RU Powermax + Liberty + AMS	12 oz + 36 oz + 2.5 lb	89	98	99	93	33
RU Powermax + Liberty + AMS	22 oz + 22 oz + 2.5 lb	90	97	99	91	31
RU Powermax + Liberty + AMS	22 oz + 29 oz + 2.5 lb	90	97	99	92	30
RU Powermax + Liberty + AMS	22 oz + 36 oz + 2.5 lb	91	98	99	90	33
RU Powermax + Liberty + AMS	32 oz + 22 oz + 2.5 lb	92	97	99	91	32
RU Powermax + Liberty + AMS	32 oz + 29 oz + 2.5 lb	91	99	99	95	34
RU Powermax + Liberty + AMS	32 oz + 36 oz + 2.5 lb	89	98	99	96	33
RU Powermax + Liberty + AMS	44 oz + 22 oz + 2.5 lb	90	98	99	91	32
RU Powermax + Liberty + AMS	44 oz + 29 oz + 2.5 lb	91	98	99	94	35
RU Powermax + Liberty + AMS	44 oz + 36 oz + 2.5 lb	92	98	99	92	31
Epost & Lpost						
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 12 oz + 2.5 lb	95	93	99	94	39
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 22 oz + 2.5 lb	94	92	99	94	45
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 32 oz + 2.5 lb	92	93	99	93	42
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 44 oz + 2.5 lb	92	89	99	98	46
LSD (0.05)		3	2	1	6	6

RCB: 4 reps

Variety: AG09XF0

Planting Date: 5/26/22

Epost: 6/28/22 Soy 1-2 tri, 5-9 in; Yeft 3-7 in.

Post: 7/8/22 Soy 4 tri, 9-12 in; Yeft 8-16 in.

Lpost: 7/21/22 Soy 18-20 in bloom; Yeft 5-12 in.

Soil: Clay Loam; 4.1% OM; 5.8 pH

Yeft=Yellow foxtail

Cowh=Common waterhemp

Comments: The objective of the study was to evaluate Roundup and Liberty tankmixes for weed control in soybeans. Heavy yellow foxtail and moderate common waterhemp pressure. Weed control was generally better with increasing Liberty rates. No significant yield differences were noted for the tankmix treatments. Early post Liberty followed by Roundup had the best yields.

2022
ROUNDUP & LIBERTY TANKMIXES IN SOYBEANS
Volga Research Farm

Treatment	Rate/A	7/22/22	8/3/22	10/10/22
		Cowh	Cowh	Yield bu/A
Check	---	0	0	13
Post				
RU Powermax + AMS	22 oz + 2.5 lb	25	20	24
Liberty + AMS	29 oz + 2.5 lb	38	30	30
RU Powermax + Liberty + AMS	12 oz + 22 oz + 2.5 lb	35	28	29
RU Powermax + Liberty + AMS	12 oz + 29 oz + 2.5 lb	47	38	31
RU Powermax + Liberty + AMS	12 oz + 36 oz + 2.5 lb	55	49	32
RU Powermax + Liberty + AMS	22 oz + 22 oz + 2.5 lb	45	34	30
RU Powermax + Liberty + AMS	22 oz + 29 oz + 2.5 lb	54	41	31
RU Powermax + Liberty + AMS	22 oz + 36 oz + 2.5 lb	55	43	32
RU Powermax + Liberty + AMS	32 oz + 22 oz + 2.5 lb	44	40	28
RU Powermax + Liberty + AMS	32 oz + 29 oz + 2.5 lb	51	43	31
RU Powermax + Liberty + AMS	32 oz + 36 oz + 2.5 lb	59	44	30
RU Powermax + Liberty + AMS	44 oz + 22 oz + 2.5 lb	45	33	29
RU Powermax + Liberty + AMS	44 oz + 29 oz + 2.5 lb	60	46	33
RU Powermax + Liberty + AMS	44 oz + 36 oz + 2.5 lb	64	56	35
Epost & Lpost				
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 12 oz + 2.5 lb	79	77	40
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 22 oz + 2.5 lb	88	87	41
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 32 oz + 2.5 lb	85	86	40
Liberty + AMS & RU Powermax + AMS	29 oz + 2.5 lb & 44 oz + 2.5 lb	89	90	42
LSD (0.05)		7	7	3

RCB: 4 reps

Variety: AG12XF1

Planting Date: 5/23/22

Epost: 6/22/22 Soy 2-3 tri, 5-6 in; Cowh 1-5 in.

Post: 7/1/22 Soy 4 tri, 8-10 in; Cowh 3-14 in.

Lpost: 7/6/22 Soy 14-16 in ebloom; Cowh 2-8 in.

Soil: Clay Loam; 5.1% OM; 5.6 pH

Cowh=Common waterhemp

Comments: The objective of the study was to evaluate Roundup and Liberty tankmixes for weed control in soybeans. Heavy common waterhemp pressure. A large percentage of the waterhemp was glyphosate resistant. For the post timing, waterhemp was larger than recommended to help detect tankmix differences. Weed control and yield were generally better with increasing Liberty and Roundup PowerMax rates. Early post Liberty followed by Roundup had the best weed control and yield.