

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Trial Status: F one-year/final Initiation Date: 6-14-13 Completion Date: 10-26-13		Trial Location
City: Belleville Country: USA State/Prov.: Illinois IL Postal Code: 62221		

Objectives:
Evaluate crop tolerance and weed control from new MANA herbicides postemergence in soybean.

Study Director: Bryan Young Title: Professor Organization: Southern Illinois University Address: 1205 Lincoln Drive - AG 176 - MC 4415 Phone No.: 618-453-7679 City+State/Prov: Carbondale IL Mobile No.: 618-713-6471 Postal Code: 62901 E-mail: bgyoung@siu.edu Country: USA		Contacts
---	--	-----------------

Crop 1: GLXMA Glycine max Soybean Variety: AG3832 BBCH Scale: BSOY Description: RR2Y Planting Rate, Unit: 75 LB/A Planting Date: 6-14-13 Depth, Unit: 1 IN Planting Method: SEEDED Row Spacing, Unit: 30 IN		Crop Description
--	--	-------------------------

Pest 1 Type: W Code: SETFA Setaria faberi Herm. Common Name: foxtail, giant Pest 2 Type: W Code: AMBTR Ambrosia trifida L. Common Name: ragweed, giant Pest 3 Type: W Code: AMATA Amaranthus rudis Sauer Common Name: waterhemp, common		Pest Description
---	--	-------------------------

Treated Plot Width: 7.5 FT Total Plot Width: 10 FT Site Type: FIELD Treated Plot Length: 28 FT Total Plot Length: 28 FT Experimental Unit: 1 PLOT Tillage Type: REDTIL reduced-till Replications: 4 Study Design: RACOB L Randomized Complete Block (RCB) Untreated Arrangement: INCLUDED single control randomized in each block		Site and Design						
<table border="1"> <thead> <tr> <th>No.</th> <th>Previous Crop</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>ZEAMD</td> <td>2012</td> </tr> </tbody> </table>		No.	Previous Crop	Year	1.	ZEAMD	2012	
No.	Previous Crop	Year						
1.	ZEAMD	2012						

Maintenance					
<table border="1"> <thead> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>N 0 LB/A, P2O5 50 LB/A, K2O 150 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 0 LB/A, P2O5 50 LB/A, K2O 150 LB/A	
No.	Maintenance Product Name				
1.	N 0 LB/A, P2O5 50 LB/A, K2O 150 LB/A				

% OM: 2.5 Texture: SIL silt loam pH: 6.7 Soil Name: Pierron CEC: 6		Soil Description									
<table border="1"> <thead> <tr> <th>Element</th> <th>Quantity</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>65</td> <td>lb/A</td> </tr> <tr> <td>K</td> <td>262</td> <td>lb/A</td> </tr> </tbody> </table>		Element	Quantity	Unit	P1	65	lb/A	K	262	lb/A	Additional Measured Elements
Element	Quantity	Unit									
P1	65	lb/A									
K	262	lb/A									

Overall Moisture Conditions: ABONOR Closest Weather Station: ICN - Belleville IL Distance, Unit: 0.5 MI		Moisture and Weather Conditions
---	--	--

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	5-3-13	3.07	IN	RAIN	rain	4	DAY			
2.	5-5-13					7	DAY	46	80	F
3.	5-9-13	0.35	IN	RAIN	rain	2	DAY			
4.	5-12-13					7	DAY	39	92	F
5.	5-16-13	0.55	IN	RAIN	rain	2	DAY			
6.	5-19-13					7	DAY	45	88	F
7.	5-20-13	0.67	IN	RAIN	rain	2	DAY			
8.	5-26-13					7	DAY	56	86	F
9.	5-27-13	1.23	IN	RAIN	rain	2	DAY			
10.	5-30-13	0.51	IN	RAIN	rain	3	DAY			
11.	5-31-13	3.46	IN	RAIN	rain	2	DAY			
12.	6-2-13					7	DAY	50	80	F
13.	6-9-13					7	DAY	59	94	F
14.	6-10-13	0.48	IN	RAIN	rain	2	DAY			
15.	6-16-13					7	DAY	61	90	F
16.	6-17-13	2.16	IN	RAIN	rain	3	DAY			
17.	6-23-13					7	DAY	64	92	F
18.	6-23-13	5.33	IN	RAIN	rain	2	DAY			
19.	6-26-13	0.46	IN	RAIN	rain	1	DAY			
20.	6-29-13	0.19	IN	RAIN	rain	2	DAY			
21.	6-30-13					7	DAY	61	86	F
22.	7-2-13	2.08	IN	RAIN	rain	2	DAY			
23.	7-7-13					7	DAY	62	94	F
24.	7-10-13	0.2	IN	RAIN	rain	1	DAY			
25.	7-14-13					7	DAY	64	94	F
26.	7-15-13	0.03	IN	RAIN	rain	1	DAY			
27.	7-20-13	0.59	IN	RAIN	rain	1	DAY			
28.	7-21-13					7	DAY	56	91	F
29.	7-26-13	0.03	IN	RAIN	rain	1	DAY			
30.	7-28-13					7	DAY	52	87	F
31.	7-30-13	0.46	IN	RAIN	rain	1	DAY			
32.	8-2-13	0.24	IN	RAIN	rain	1	DAY			
33.	8-4-13					7	DAY	62	87	F
34.	8-8-13	0.03	IN	RAIN	rain	3	DAY			
35.	8-11-13					7	DAY	54	85	F
36.	8-12-13	0.57	IN	RAIN	rain	1	DAY			
37.	8-18-13	0.1	IN	RAIN	rain	1	DAY			
38.	8-18-13					7	DAY	61	91	F
39.	8-25-13					7	DAY	62	100	F
40.	8-31-13	0.74	IN	RAIN	rain	1	DAY			
41.	9-1-13					7	DAY	57	92	F
42.	9-8-13	0.26	IN	RAIN	rain	1	DAY			

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Application Description

	A
Application Date:	7-17-13
Appl. Start Time:	13:30
Appl. Stop Time:	14:00
Application Method:	Spray
Application Timing:	POST
Application Placement:	BROFOL
Applied By:	RJW
Air Temperature, Unit:	92 F
% Relative Humidity:	54
Wind Velocity, Unit:	1 MPH
Wind Direction:	E
Dew Presence (Y/N):	N
Soil Temperature, Unit:	80 F
Soil Moisture:	NORMAL
% Cloud Cover:	70
Next Moisture Occurred On:	7-20-13
Time to Next Moisture, Unit:	3 DAY

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA
Stage Scale Used:	DESC
Stage Majority, Percent:	V5
Stage Minimum, Percent:	V4
Stage Maximum, Percent:	V5
Height, Unit:	14 IN
Height Minimum, Maximum:	12 14

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	SETFA W
Stage Majority, Percent:	6
Stage Minimum, Percent:	2
Stage Maximum, Percent:	10
Height, Unit:	5 IN
Height Minimum, Maximum:	3 12
Density, Unit:	0.5 FT2
Pest 2 Code, Type, Scale:	AMBTR W
Stage Majority, Percent:	8
Stage Minimum, Percent:	6
Stage Maximum, Percent:	10
Height, Unit:	4 IN
Height Minimum, Maximum:	2 5
Density, Unit:	0.01 FT2
Pest 3 Code, Type, Scale:	AMATA W
Stage Majority, Percent:	8
Stage Minimum, Percent:	4
Stage Maximum, Percent:	30
Height, Unit:	4 IN
Height Minimum, Maximum:	1 10
Density, Unit:	0.1 FT2

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Application Equipment

	A
Appl. Equipment:	CO2 sprayer
Equipment Type:	BACSPR
Operation Pressure, Unit:	30 PSI
Nozzle Type:	XR
Nozzle Size:	8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Southern Illinois University

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval										GLXMA 10-26-13 Moisture Percent	GLXMA 10-26-13 Yield bu/A	GLXMA 7-24-13 Injury Percent 7 DA-A	GLXMA 7-31-13 Injury Percent 14 DA-A	GLXMA 8-16-13 Injury Percent 30 DA-A	GLXMA 9-15-13 Injury Percent 60 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code						
1	RUMBLE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.235 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.7 a	58 a	9 de	7 cd	3 cde	2 b
2	RUMBLE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.376 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1.6 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.7 a	53 a	12 bc	9 bc	4 bcd	1 b
3	FLEXSTAR ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.235 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.6 a	56 a	10 cd	7 cd	1 de	1 b
4	FLEXSTAR ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.376 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1.6 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.8 a	55 a	12 bc	9 bc	5 bc	2 b
5	WISE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	5.4 4.5 100 100	EC SL SL SL	1.35 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	2 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.8 a	52 a	14 b	11 b	6 b	5 a
6	PREFIX ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	5.29 4.5 100 100	EC SL SL SL	1.32 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	2 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.6 a	55 a	8 e	7 cd	4 bcd	2 b
7	SEE COMMENT #6 PUMMEL ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	100 4.5 100 100	SL SL SL SL	1.57 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1.5 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A							
8	PUMMEL ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	100 4.5 100 100	SL SL SL SL	2.09 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	2 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.8 a	56 a	2 g	1 f	0 e	0 b
9	TORMENT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2.5 4.5 100 100	SL SL SL SL	0.234 0.77 0.25 5	lb ae/a lb ae/a % v/v % v/v	0.75 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.7 a	54 a	6 f	5 de	1 e	1 b
10	TORMENT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2.5 4.5 100 100	SL SL SL SL	0.312 0.77 0.25 5	lb ae/a lb ae/a % v/v % v/v	1 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.7 a	54 a	5 f	4 e	1 de	0 b
11	PURSUIT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2 4.5 100 100	SL SL SL SL	0.0625 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	4 22 0.25 5	fl oz/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A		11.6 a	56 a	1 gh	0 f	0 e	0 b
12	EXTREME NIS (ACTIVATOR 90) N-PAK AMS	2.17 100 100	SL SL SL	0.71 0.25 5	lb ai/a % v/v % v/v	42 0.25 5	fl oz/a % v/v % v/v	POST POST POST	A A A		11.7 a	57 a	2 gh	0 f	0 e	0 b

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							GLXMA 10-26-13 Moisture Percent	GLXMA 10-26-13 Yield bu/A	GLXMA 7-24-13 Injury Percent 7 DA-A	GLXMA 7-31-13 Injury Percent 14 DA-A	GLXMA 8-16-13 Injury Percent 30 DA-A	GLXMA 9-15-13 Injury Percent 60 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Stage Stage	Appl Code		
13	WARRANT	3	CS	0.84	lb ai/a	2.25	pt/a	POST	A		11.7 a	55 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	1 gh	1 f	0 e
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A			
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A			0 b
14	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	POST	A		11.7 a	54 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	19 a	16 a	9 a
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A			
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A			5 a
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		11.8 a	56 a
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	0 h	0 f	0 e
16	NONTREATED										0 h	0 f
											0 e	0 b
LSD (P= .05)							0.23	8.0	2.0	2.3	2.7	2.2
Standard Deviation							0.16	5.6	1.4	1.6	1.9	1.5
CV							1.39	10.26	21.0	31.1	89.55	135.11
Replicate F							0.937	2.687	0.806	1.168	2.683	3.171
Replicate Prob(F)							0.4315	0.0586	0.4976	0.3333	0.0589	0.0340
Treatment F							0.682	1.769	72.474	36.956	7.724	4.611
Treatment Prob(F)							0.7780	0.0772	0.0001	0.0001	0.0001	0.0001

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							SETFA 7-31-13 Control Percent 14 DA-A	SETFA 8-16-13 Control Percent 30 DA-A	SETFA 9-15-13 Control Percent 60 DA-A	SETFA 10-9-13 Control Percent At Harvest
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	RUMBLE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 EC 4.5 SL 100 SL 100 SL		0.235 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	1 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	99 a
2	RUMBLE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 EC 4.5 SL 100 SL 100 SL		0.376 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	1.6 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	98 a
3	FLEXSTAR ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 EC 4.5 SL 100 SL 100 SL		0.235 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	1 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	98 a
4	FLEXSTAR ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 EC 4.5 SL 100 SL 100 SL		0.376 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	1.6 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	97 a
5	WISE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	5.4 EC 4.5 SL 100 SL 100 SL		1.35 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	2 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	99 a
6	PREFIX ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	5.29 EC 4.5 SL 100 SL 100 SL		1.32 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	2 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	99 a
7	SEE COMMENT #6 PUMMEL ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	100 SL 4.5 SL 100 SL 100 SL		1.57 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	1.5 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A		
8	PUMMEL ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	100 SL 4.5 SL 100 SL 100 SL		2.09 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	2 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	99 a
9	TORMENT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2.5 SL 4.5 SL 100 SL 100 SL		0.234 lb ae/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	0.75 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	99 a
10	TORMENT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2.5 SL 4.5 SL 100 SL 100 SL		0.312 lb ae/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	1 pt/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	99 a
11	PURSUIT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2 SL 4.5 SL 100 SL 100 SL		0.0625 lb ai/a 0.77 lb ae/a 0.25 % v/v 5 % v/v	4 fl oz/a 22 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST POST	A A A A	99 a	99 a
12	EXTREME NIS (ACTIVATOR 90) N-PAK AMS	2.17 SL 100 SL 100 SL		0.71 lb ai/a 0.25 % v/v 5 % v/v	42 fl oz/a 0.25 % v/v 5 % v/v		POST POST POST	A A A	99 a	99 a

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code							SETFA	SETFA	SETFA	SETFA
Crop Code							7-31-13	8-16-13	9-15-13	10-9-13
Rating Date							Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent
Rating Unit							14 DA-A	30 DA-A	60 DA-A	At Harvest
Rating Timing										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Stage	Appl Code	
13	WARRANT	3	CS	0.84	lb ai/a	2.25	pt/a	POST	A	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	98 a
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A	98 abc
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	98 bc
14	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	POST	A	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	96 a
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A	97 d
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	97 d
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	99 a
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	97 a
										97 cd
										97 d
16	NONTREATED									59 b
										59 b
										0 e
										0 e
LSD (P= .05)										6.1
Standard Deviation										4.3
CV										4.45
										6.4
										4.5
										0.7
										0.73
										0.8
Replicate F										0.916
Replicate Prob(F)										0.363
Treatment F										4.125
										5.091
										0.4415
										0.7801
										0.0119
										0.0043
										23.487
										21.029
										4830.750
										5678.455
Treatment Prob(F)										0.0001
										0.0001
										0.0001
										0.0001

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								AMBTR	AMBTR	AMBTR	AMBTR
								7-31-13 Control Percent	8-16-13 Control Percent	9-15-13 Control Percent	10-9-13 Control Percent
								14 DA-A	30 DA-A	60 DA-A	At Harvest
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	RUMBLE	1.88	EC	0.235	lb ai/a	1	pt/a	POST	A	99 ab	98 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		98 ab
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
2	RUMBLE	1.88	EC	0.376	lb ai/a	1.6	pt/a	POST	A	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		99 ab
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
3	FLEXSTAR	1.88	EC	0.235	lb ai/a	1	pt/a	POST	A	99 ab	98 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		98 ab
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
4	FLEXSTAR	1.88	EC	0.376	lb ai/a	1.6	pt/a	POST	A	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		98 ab
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
5	WISE	5.4	EC	1.35	lb ai/a	2	pt/a	POST	A	99 ab	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		98 ab
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	POST	A	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		99 ab
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
7	SEE COMMENT #6										
	PUMMEL	100	SL	1.57	lb ai/a	1.5	pt/a	POST	A		
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
8	PUMMEL	100	SL	2.09	lb ai/a	2	pt/a	POST	A	98 ab	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		99 a
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
9	TORMENT	2.5	SL	0.234	lb ae/a	0.75	pt/a	POST	A	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		99 ab
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
10	TORMENT	2.5	SL	0.312	lb ae/a	1	pt/a	POST	A	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		99 a
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
11	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	POST	A	95 b	97 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A		98 bc
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		98 abc
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		
12	EXTREME	2.17	SL	0.71	lb ai/a	42	fl oz/a	POST	A	97 ab	98 a
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A		98 ab
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A		98 abc

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code							AMBTR	AMBTR	AMBTR	AMBTR
Crop Code							7-31-13	8-16-13	9-15-13	10-9-13
Rating Date							Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent
Rating Unit							14 DA-A	30 DA-A	60 DA-A	At Harvest
Rating Timing										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code
13	WARRANT	3	CS	0.84	lb ai/a	2.25	pt/a	POST	A	
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A	
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	
14	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	POST	A	
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A	
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	
16	NONTREATED									
LSD (P= .05)							4.2	4.2	1.3	1.3
Standard Deviation							2.9	2.9	0.9	0.9
CV							3.05	3.05	0.96	1.01
Replicate F							1.336	0.728	7.260	5.368
Replicate Prob(F)							0.2754	0.5409	0.0005	0.0032
Treatment F							34.759	34.412	3339.670	3026.776
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001

Southern Illinois University

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval									AMATA	AMATA	AMATA	AMATA	
									7-31-13 Control Percent	8-16-13 Control Percent	9-15-13 Control Percent	10-9-13 Control Percent	
									14 DA-A	30 DA-A	60 DA-A	At Harvest	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	RUMBLE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.235 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	99 a	99 a	99 a
2	RUMBLE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.376 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1.6 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	99 a	99 a	99 a
3	FLEXSTAR ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.235 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	98 a	99 a	99 a
4	FLEXSTAR ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	1.88 4.5 100 100	EC SL SL SL	0.376 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1.6 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	99 a	98 a	98 a
5	WISE ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	5.4 4.5 100 100	EC SL SL SL	1.35 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	2 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	99 a	99 a	98 a
6	PREFIX ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	5.29 4.5 100 100	EC SL SL SL	1.32 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	2 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	99 a	99 a	99 a
7	SEE COMMENT #6 PUMMEL ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	100 4.5 100 100	SL SL SL SL	1.57 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	1.5 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A				
8	PUMMEL ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	100 4.5 100 100	SL SL SL SL	2.09 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	2 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	98 a	97 a	98 a	98 a
9	TORMENT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2.5 4.5 100 100	SL SL SL SL	0.234 0.77 0.25 5	lb ae/a lb ae/a % v/v % v/v	0.75 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	99 a	98 a	98 a
10	TORMENT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2.5 4.5 100 100	SL SL SL SL	0.312 0.77 0.25 5	lb ae/a lb ae/a % v/v % v/v	1 22 0.25 5	pt/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	99 a	99 a	99 a	98 a
11	PURSUIT ROUNDUP POWERMAX NIS (ACTIVATOR 90) N-PAK AMS	2 4.5 100 100	SL SL SL SL	0.0625 0.77 0.25 5	lb ai/a lb ae/a % v/v % v/v	4 22 0.25 5	fl oz/a fl oz/a % v/v % v/v	POST POST POST POST	A A A A	97 a	97 a	98 a	97 a
12	EXTREME NIS (ACTIVATOR 90) N-PAK AMS	2.17 100 100	SL SL SL	0.71 0.25 5	lb ai/a % v/v % v/v	42 0.25 5	fl oz/a % v/v % v/v	POST POST POST	A A A	97 a	97 a	97 ab	98 a

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Pest Code							AMATA	AMATA	AMATA	AMATA
Crop Code							7-31-13	8-16-13	9-15-13	10-9-13
Rating Date							Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent
Rating Unit							14 DA-A	30 DA-A	60 DA-A	At Harvest
Rating Timing										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code
13	WARRANT	3	CS	0.84	lb ai/a	2.25	pt/a	POST	A	
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A	
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	
14	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	POST	A	
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	A	
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	A	
	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	A	
16	NONTREATED									
LSD (P= .05)							4.7	4.7	2.2	1.7
Standard Deviation							3.3	3.3	1.5	1.2
CV							3.43	3.47	1.66	1.3
Replicate F							0.558	1.517	0.799	0.799
Replicate Prob(F)							0.6460	0.2241	0.5015	0.5016
Treatment F							36.662	35.476	1110.080	1801.658
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001

MANA Postemergence Concepts in Soybean.

Trial ID: 13-2A-M110 Location: Belleville Res. Center Trial Year: 2013
Investigator: Bryan Young

Trial Comments

1. Protocol: MANA.
2. Ratings: CI at 7, 14, and 30 DA-A; WC at 14, 30, and 60 DA-A, and at harvest.
3. Photos requested of CI, weed pressure, overall plot and closeup.
Photos at 30 DA-A and at harvest.
POST application timing A is targeted for 4 inch weeds.
4. Blanket PRE application of Valor XLT (3 oz/A) was applied to all plots including the nontreated 7.5 ft wide on 6-15-13.
Following the PRE application the first rainfall event, beginning 12 hours later, was 2.16 inch over 3 days.
In the nontreated plots, non-zero weed control is due to the blanket PRE application.
5. Yield.
6. Missing data for treatment 7 was due to a mixing error.
7. Harvested 10-26-13, (2) 30 inch rows by 25 ft.