

Ohio State University  
Horticulture and Crop Science

MANA Soybean Concepts - POST Program

Title No. 2:  
 Trial ID: 12CMTPOST Protocol ID: CMT-POST  
 Location: WESTERN BRANCH G-6 Study Director: Anthony F. Dobbels  
 Project ID: Investigator: Dr. Mark M. Loux  
 Sponsor Contact: Gerald Wiley, MANA

General Trial Information

Study Director: Anthony F. Dobbels Title: Research Specialist  
 Investigator: Dr. Mark M. Loux

Trial Location

City: South Charleston Latitude of LL Corner °: 39.85946 N  
 State/Prov.: Ohio Longitude of LL Corner °: 83.67481 W  
 Postal Code: 45368  
 Country: USA

Crop Description

Crop 1: GLXMA Glycine max Soybean  
 Variety: SC 9348 Description: RR  
 BBCH Scale: BSOY Planting Date: May-18-2012  
 Planting Method: SEEDED seeded Rate, Unit: 155000 S/A  
 Depth, Unit: 0.75 IN  
 Row Spacing, Unit: 15 IN  
 Seed Bed: MEDIUM medium  
 Soil Moisture: DRY dry Emergence Date: May-27-2012  
 Harvested Width, Unit: 6.25 FT Harvested Length, Unit: 40 FT

Pest Description

Pest 1 Type: W Code: SETFA Setaria faberi  
 Common Name: Giant foxtail  
 Pest 2 Type: W Code: AMBTR Ambrosia trifida  
 Common Name: Giant ragweed  
 Pest 3 Type: W Code: AMARE Amaranthus retroflexus  
 Common Name: Redroot pigweed  
 Pest 4 Type: W Code: CHEAL Chenopodium album  
 Common Name: Common lambsquarters  
 Pest 5 Type: W Code: ABUTH Abutilon theophrasti  
 Common Name: velvetleaf  
 Pest 6 Type: W Code: IPOHE Ipomoea hederacea  
 Common Name: Ivyleaf morningglory

Site and Design

Plot Width, Unit: 6.67 FT Site Type: FIELD field  
 Plot Length, Unit: 40 FT Experimental Unit: 1 PLOT plot  
 Plot Area, Unit: 266.8 FT<sup>2</sup> Tillage Type: CONTIL conventional-till  
 Replications: 4 Study Design: RACOB L Randomized Complete Block (RCB)  
 Untreated Arrangement: INCLUDED single control randomized in each block

Trial Initiation Comments:

Maintenance

No.	Date	Maintenance Treatment Name	Rate	Unit	Tank Mix
1.	Jul-23-2012	select max + coc	9	oz/a	no

Soil Description

Description Name: G-6  
 % OM: 2.2 Texture: SIL silt loam  
 pH: 6.3 Soil Name: Crosby  
 CEC: 13.6 Fert. Level: G good  
 Soil Drainage: G good

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Application Description

A  
 Application Date: Jun-20-2012  
 Time of Day: 9:00 A.M.  
 Application Method: SPRAY  
 Application Timing: POST  
 Application Placement: BROFOL  
 Applied By: REEB  
 Air Temperature, Unit: 76 F  
 % Relative Humidity: 79  
 Wind Velocity, Unit: 2 MPH  
 Wind Direction: N  
 Dew Presence (Y/N): Y yes  
 Soil Temperature, Unit: 72 F  
 Soil Moisture: SLIWET  
 % Cloud Cover: 0  
 Next Rain Occurred On: Jun-29-2012

Crop Stage At Each Application

A  
 Crop 1 Code, BBCH Scale: GLXMA BSOY  
 Stage Scale Used: BBCH  
 Stage Majority, Percent: 16 100  
 Height, Unit: 6 IN  
 Height Minimum, Maximum: 5 6

Pest Stage At Each Application

A  
 Pest 1 Code, Type, Scale: SETFA W  
 Stage Majority, Percent: 23 100  
 Height, Unit: 7 IN  
 Height Minimum, Maximum: 6 8  
 Density, Unit: 22 M2  
 Pest 2 Code, Type, Scale: AMBTR W  
 Stage Majority, Percent: 19 100  
 Height, Unit: 8 IN  
 Height Minimum, Maximum: 6 9  
 Density, Unit: 10 M2  
 Pest 3 Code, Type, Scale: AMARE W  
 Stage Majority, Percent: 6 80  
 Stage Minimum, Percent: 3 10  
 Stage Maximum, Percent: 7 10  
 Height, Unit: 2 IN  
 Height Minimum, Maximum: 1 3  
 Density, Unit: 47 M2  
 Pest 4 Code, Type, Scale: CHEAL W  
 Stage Majority, Percent: 16 100  
 Height, Unit: 1 IN  
 Height Minimum, Maximum: 1 1  
 Density, Unit: 5 M2  
 Pest 5 Code, Type, Scale: ABUTH W  
 Stage Majority, Percent: 16 100  
 Height, Unit: 2 IN  
 Height Minimum, Maximum: 2 3  
 Density, Unit: 2.6 M2  
 Pest 6 Code, Type, Scale: IPOHE W  
 Stage Majority, Percent: 13 90  
 Stage Minimum, Percent: 13 90  
 Stage Maximum, Percent: 14 10  
 Height, Unit: 2 IN  
 Height Minimum, Maximum: 2 2  
 Density, Unit: 9 M2

Application Equipment

A  
 Appl. Equipment: 6 foot boom  
 Equipment Type: SPRBAC  
 Operation Pressure, Unit: 46 PSI  
 Nozzle Type: TEEJET DG  
 Nozzle Size: 8002  
 Nozzle Spacing, Unit: 18 IN  
 Boom Length, Unit: 6 FT  
 Boom Height, Unit: 20 IN  
 Ground Speed, Unit: 3 MPH  
 Carrier: WATER  
 Spray Volume, Unit: 20 GPA  
 Mix Size, Unit: 2 Liters  
 Propellant: CO2

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Location: WESTERN BRANCH G-6

Study Director: Anthony F. Dobbels

Project ID:

Investigator: Dr. Mark M. Loux

Sponsor Contact: Gerald Wiley, MANA

Pest Type			
Pest Code			
Pest Scientific Name			
Pest Name			
Crop Code	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean
Rating Date	Oct-17-201	Oct-17-2012	Oct-17-201
	2		2
Rating Type	YIELD	MOICON	YIELD
Rating Unit	LBS	%	BU
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT
Collection Basis, Unit	250 FT2	250 FT2	250 FT2
Number of Subsamples	1	1	1
Days After First/Last Applic.	119 119	119 119	119 119
Trt-Eval Interval	119 DA-A	119 DA-A	119 DA-A
Plant-Eval Interval	152 DP-1	152 DP-1	152 DP-1
Days After Emergence	143 DE-1	143 DE-1	143 DE-1
ARM Action Codes			TY1
Number of Decimals	1	1	1

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	17	18	19
1	MANA 14201	0.238 lb ai/a		1 pt/a		A	10.2 a	11.4 ab	30.1 a
1	Preference NIS	0.25 % v/v		6.4 oz/a		A			
2	MANA 14201	0.38 lb ai/a		1.6 pt/a		A	9.0 a	11.3 abc	26.5 a
2	Preference NIS	0.25 % v/v		6.4 oz/a		A			
3	Flexstar	0.235 lb ai/a		1 pt/a		A	9.0 a	11.6 a	26.5 a
3	Preference NIS	0.25 % v/v		6.4 oz/a		A			
4	Flexstar	0.376 lb ai/a		1.6 pt/a		A	10.9 a	11.3 ab	32.3 a
4	Preference NIS	0.25 % v/v		6.4 oz/a		A			
5	MANA 14204	1.35 lb ai/a		2 pt/a		A	9.9 a	11.4 ab	29.2 a
5	Preference NIS	0.25 % v/v		6.4 oz/a		A			
6	MANA 14204	1.57 lb ai/a		2.33 pt/a		A	9.8 a	11.2 a-d	29.2 a
6	Preference NIS	0.25 % v/v		6.4 oz/a		A			
7	PREFIX	1.54 lb ai/a		2.33 pt/a		A	8.5 a	11.2 abc	25.1 a
7	Preference NIS	0.25 % v/v		6.4 oz/a		A			
8	MANA 25311	0.98 lb ai/a		1.5 pt/a		A	10.8 a	11.1 bcd	32.0 a
8	Preference NIS	0.25 % v/v		6.4 oz/a		A			
9	MANA 25311	1.31 lb ai/a		2 pt/a		A	8.5 a	11.0 bcd	25.3 a
9	Preference NIS	0.25 % v/v		6.4 oz/a		A			
10	Pursuit	0.047 lb ai/a		3 oz/a		A	9.6 a	11.1 bcd	28.5 a
10	Parallel PCS	0.94 lb ai/a		0.938 pt/a		A			
10	Preference NIS	0.25 % v/v		6.4 oz/a		A			
11	MANA 25350	0.234 lb ai/a		0.75 pt/a		A	7.9 a	10.8 d	23.5 a
11	Preference NIS	0.25 % v/v		6.4 oz/a		A			
12	MANA 25350	0.313 lb ai/a		1 pt/a		A	9.3 a	11.0 bcd	27.5 a
12	Preference NIS	0.25 % v/v		6.4 oz/a		A			
13	Flexstar	0.185 lb ai/a		12.6 oz/a		A	8.7 a	11.0 bcd	26.0 a
13	Pursuit	0.047 lb ai/a		3 oz/a		A			
13	Preference NIS	0.25 % v/v		6.4 oz/a		A			

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.

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Crop Scientific Name		Glycine max		Glycine max		Glycine max		
Crop Name		Soybean		Soybean		Soybean		
Rating Date		Oct-17-201		Oct-17-2012		Oct-17-201		
		2				2		
Rating Type		YIELD		MOICON		YIELD		
Rating Unit		LBS		%		BU		
Sample Size, Unit		1 PLOT		1 PLOT		1 PLOT		
Collection Basis, Unit		250 FT2		250 FT2		250 FT2		
Number of Subsamples		1		1		1		
Days After First/Last Applic.		119 119		119 119		119 119		
Trt-Eval Interval		119 DA-A		119 DA-A		119 DA-A		
Plant-Eval Interval		152 DP-1		152 DP-1		152 DP-1		
Days After Emergence		143 DE-1		143 DE-1		143 DE-1		
ARM Action Codes						TY1		
Number of Decimals		1		1		1		

Trt	Treatment	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	17	18	19
14	Warrant	0.84 lb ai/a		2.25 pt/a		A	8.3 a	11.0 bcd	24.5 a
14	Preference NIS	0.25 % v/v		6.4 oz/a		A			
15	Pursuit	0.0625 lb ai/a		4 oz/a		A	10.8 a	10.9 bcd	32.1 a
15	Preference NIS	0.25 % v/v		6.4 oz/a		A			
16	Roundup PowerMax	0.77 lb ae/a		22 oz/a		A	12.6 a	10.9 bcd	37.4 a
16	N-PAK AMS	2.5 % v/v		4 pt/a		A			
17	Flexstar GT	3.5 pt/a				A	11.9 a	11.1 bcd	35.3 a
17	Preference NIS	0.25 % v/v		6.4 oz/a		A			
18	Untreated						9.5 a	10.9 cd	28.2 a
	LSD (P=.05)						2.74	0.43	8.09
	Standard Deviation						1.93	0.31	5.72
	CV						19.89	2.76	19.82

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

YIELD = yield

MOICON = moisture content

Rating Unit

% = percent

BU = bushel

PLOT = total plot

FT2 = square foot

Plant-Eval Interval

152 DP-1 = 1 GLXMA May-18-2012

ARM Action CodesTY1 =  $2.904 * [17] * (100 - [18]) / 87$