

Evaluation of Soil and POST Herbicides for Palmer Amaranth Control. 5-12-14 (14-COL-SOIL\_POST-MW60)  
 Trial ID: 14-COL-SOIL\_POST-MW60 Location:Collinsville, IL

Reps: 3  
 Spray vol: 15 gal/ac

Plots: 10 by 25 feet  
 Mix size: .19226 gallons (min .17226)

SPRAY 6.67 FEET - STAKE AND SPRAY CENTER OF PLOT

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 N

313 314 315 316 317 318  
 307 308 309 310 311 312  
 301 302 303 304 305 306  
 213 214 215 216 217 218  
 207 208 209 210 211 212  
 201 202 203 204 205 206  
 113 114 115 116 117 118  
 107 108 109 110 111 112  
 101 102 103 104 105 106

Trt No.	Treatment Name	Form Conc	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Amt to Measure	Product	Rep
1	NONTREATED									101 210 306
2	ANTHEM	2.15 SE	0.134 lb ai/a		8 fl oz/a		PRE	A 3.024 ml/mx		102 211 301
3	DUAL MAGNUM	7.62 EC	1.27 lb ai/a		1.33 pt/a		PRE	A 8.086 ml/mx		103 201 311
4	WARRANT	3 CS	1.130 lb ai/a		3 pt/a		PRE	A 18.27 ml/mx		104 213 304
5	PROWL H2O	3.8 CS	1.19 lb ai/a		2.5 pt/a		PRE	A 15.19 ml/mx		105 208 309
6	ZIDUA	85 WG	0.133 lb ai/a		2.5 oz/a		PRE	A 0.9097 g/mx		106 207 314
7	SHARPEN	2.85 SC	0.0223 lb ai/a		1 fl oz/a		PRE	A 0.3796 ml/mx		107 206 317
8	SPARTAN 4F	4 SC	0.25 lb ai/a		8 fl oz/a		PRE	A 3.032 ml/mx		108 205 310
9	SPARTAN 4F	4 SC	0.313 lb ai/a		10 fl oz/a		PRE	A 3.796 ml/mx		109 216 318
10	SPARTAN 4F	4 SC	0.375 lb ai/a		12 fl oz/a		PRE	A 4.548 ml/mx		110 202 312
11	VALOR SX	51 WG	0.063 lb ai/a		2 oz/a		PRE	A 0.7182 g/mx		111 204 302
12	VALOR SX	51 WG	0.078 lb ai/a		2.5 oz/a		PRE	A 0.912 g/mx		112 209 313
13	VALOR SX	51 WG	0.093 lb ai/a		3 oz/a		PRE	A 1.094 g/mx		113 217 315
14	COBRA	2 EC	0.188 lb ai/a		12 fl oz/a		3-4"W	B 4.56 ml/mx		114 215 305
	COC (PRIME OIL)	100 SL	1.0 % v/v		1 % v/v		3-4"W	B 7.277 ml/mx		
	N-PAK AMS	100 SL	5.0 % v/v		5 % v/v		3-4"W	B 36.39 ml/mx		
15	FLEXSTAR	1.88 EC	0.353 lb ai/a		24 fl oz/a		3-4"W	B 9.109 ml/mx		115 218 316
	COC (PRIME OIL)	100 SL	1.0 % v/v		1 % v/v		3-4"W	B 7.277 ml/mx		
	N-PAK AMS	100 SL	5.0 % v/v		5 % v/v		3-4"W	B 36.39 ml/mx		
16	CADET	0.91 EC	0.0064 lb ai/a		0.9 fl oz/a		3-4"W	B 0.3412 ml/mx		116 212 303
	COC (PRIME OIL)	100 SL	1.0 % v/v		1 % v/v		3-4"W	B 7.277 ml/mx		
	N-PAK AMS	100 SL	5.0 % v/v		5 % v/v		3-4"W	B 36.39 ml/mx		
17	RESOURCE	0.86 EC	0.054 lb ai/a		8 fl oz/a		3-4"W	B 3.046 ml/mx		117 203 308
	COC (PRIME OIL)	100 SL	1.0 % v/v		1 % v/v		3-4"W	B 7.277 ml/mx		
	N-PAK AMS	100 SL	5.0 % v/v		5 % v/v		3-4"W	B 36.39 ml/mx		
18	LIBERTY 280	2.34 EC	0.580 lb ai/a		31.7 fl oz/a		3-4"W	B 12.02 ml/mx		118 214 307
	N-PAK AMS	100 SL	5.0 % v/v		5 % v/v		3-4"W	B 36.39 ml/mx		

NONTREATED

ANTHEM	2.15 SE	PRE	A
DUAL MAGNUM	7.62 EC	PRE	A
PROWL H2O	3.8 CS	PRE	A
SHARPEN	2.85 SC	PRE	A
SPARTAN 4F	4 SC	PRE	A
VALOR SX	51 WG	PRE	A
WARRANT	3 CS	PRE	A
ZIDUA	85 WG	PRE	A
CADET	0.91 EC	3-4"W	B
COBRA	2 EC	3-4"W	B
COC (PRIME OIL)	100 SL	3-4"W	B
FLEXSTAR	1.88 EC	3-4"W	B
LIBERTY 280	2.34 EC	3-4"W	B
N-PAK AMS	100 SL	3-4"W	B
RESOURCE	0.86 EC	3-4"W	B

Products and amounts needed		
ANTHEM	2.15 SE	3.024 ml
CADET	0.91 EC	0.341 ml
COBRA	2 EC	4.56 ml
COC (PRIME OIL)	100 SL	29.108 ml
DUAL MAGNUM	7.62 EC	8.086 ml
FLEXSTAR	1.88 EC	9.109 ml
LIBERTY 280	2.34 EC	12.025 ml
N-PAK AMS	100 SL	181.93 ml
PROWL H2O	3.8 CS	15.192 ml
RESOURCE	0.86 EC	3.046 ml
SHARPEN	2.85 SC	0.38 ml
SPARTAN 4F	4 SC	11.376 ml
VALOR SX	51 WG	2.725 g
WARRANT	3 CS	18.273 ml
ZIDUA	85 WG	0.91 g

Evaluation of Soil and POST Herbicides for Palmer Amaranth Control. 5-12-14 (14-COL-SOIL\_POST-MW60)

Trial ID: 14-COL-SOIL\_POST-MW60 Location: Collinsville, IL

City State Zip Country: Collinsville, IL 62234 USA

Trial Status: Setup Initiation Date: \_\_\_\_\_

Objectives: Evaluate the efficacy of a single herbicide for Palmer amaranth control.

Crop 1: GLXMA Soybean Variety: \_\_\_\_\_ Description: LL  
 Planting Method: SEEDED Planting Date: \_\_\_\_\_  
 Rate, Unit: \_\_\_\_\_ Depth, Unit: 1 IN  
 Row Spacing, Unit: 30 IN Seed Bed: \_\_\_\_\_  
 Soil Moisture: \_\_\_\_\_ Soil Temp, Unit: \_\_\_\_\_

Treated Plot Width, Unit: 6.67 FT Total Plot Width, Unit: 10 FT Site Type: FIELD  
 Treated Plot Length, Unit: 25 FT Total Plot Length, Unit: 25 FT Tillage Type: REDTIL  
 Replications: 3 Study Design: RACOB

Previous Crop, Year: GLXMA, 2013

Field Prep./Maintenance: N \_\_\_ LB/A, P205 \_\_\_ LB/A, K20 \_\_\_ LB/A

% Sand: \_\_\_\_\_ % OM: \_\_\_\_\_ Texture: \_\_\_\_\_  
 % Silt: \_\_\_\_\_ pH: \_\_\_\_\_ Soil Name: \_\_\_\_\_  
 % Clay: \_\_\_\_\_ CEC: \_\_\_\_\_ Fert. Level: P1 \_\_\_\_, K \_\_\_\_

Application Description

	A	B
Application Date:	_____	_____
Appl. Start Time:	_____	_____
Appl. Stop Time:	_____	_____
Application Method:	Spray	Spray
Application Timing:	PRE	3-4"W
Application Placement:	BROSOI	BROFOL
Applied By:	_____	_____
Air Temperature, Unit:	___ F	___ F
% Relative Humidity:	_____	_____
Wind Velocity, Unit:	___ MPH	___ MPH
Wind Direction:	_____	_____
Dew Presence (Y/N):	___	___
Soil Temperature, Unit:	___ F	___ F
Soil Moisture:	_____	_____
% Cloud Cover:	_____	_____
Next Moisture Occurred On:	_____	_____

Crop stage Min, Max: \_\_\_\_\_ - \_\_\_\_\_  
 Height Min, Max (inch): \_\_\_\_\_ - \_\_\_\_\_

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Equipment Type:	BACSPR	BACSPR
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	XR	XR
Nozzle Size:	8002	8002
Boom Length, Unit:	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____
Weed 2: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____
Weed 3: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____
Weed 4: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____
Weed 5: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____
Weed 6: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____
Weed 7: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____
Weed 8: _____						
LVS (#) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Ht (in) min-max, maj	— / —	— / —	— / —	— / —	— / —	— / —
Est Density (#/sqft)	_____	_____	_____	_____	_____	_____

Trial Comments

1. Protocol: SIU.
2. Ratings: CI 14, 28, and 56 DA-A, CI 14, 28, and 56 DA-B;  
 WC 14, 28, and 56 DA-A, WC 14, 28, and 56 DA-B
3. No yield.
4. Photos at 28 and 56 DA-A.