

Evaluation of Soil and POST Herbicides for Palmer Amaranth Control.

Trial ID: 15-COL-SOIL_POST-MW100 Location: Collinsville, IL Trial Year: 2015
Investigator: Ronald F. Krausz

Trial Status: F one-year/final
Initiation Date: 5-19-15
Completion Date: 10-12-15

Trial Location

City: Collinsville **Country:** USA
State/Prov.: Illinois IL
Postal Code: 62234

Objectives:

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

Contacts

Study Director: Ronald F. Krausz **Title:** Researcher/Farm Manager
Organization: Belleville Research Center - Southern Illinois Univ Carbondale
Address: 2036 Charles Lane **Phone No.:** 618-566-4761
City+State/Prov: Belleville, IL
Postal Code: 62221 **E-mail:** rkrausz@siu.edu
Country: USA

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: P37T09L **BBCH Scale:** BSOY
Description: LL
Planting Date: 5-19-15
Planting Rate, Unit: 140000 S/A **Planting Method:** SEEDED
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN

Pest Description

Pest 1 Type: W **Code:** AMAPA **Amaranthus palmeri** S.Wats.
Common Name: amaranth, Palmer
Description: glyphosate-resistant Palmer amaranth

Site and Design

Treated Plot Width: 6.67 FT **Total Plot Width:** 10 FT **Site Type:** FIELD
Treated Plot Length: 25 FT **Total Plot Length:** 25 FT **Experimental Unit:** 1 PLOT
Tillage Type: REDTIL reduced-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

| No. | Previous Crop | Year |
|-----|---------------|------|
| 1. | GLXMA | 2014 |

Maintenance

| No. | Maintenance Product Name |
|-----|-----------------------------------|
| 1. | N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A |

Soil Description

Description Name: Collinsville IL 2014
% Sand: 14 **% OM:** 2.8 **Texture:** SIL silt loam
% Silt: 70 **pH:** 7.07 **Soil Name:** Littleton/Haymond/Orion
% Clay: 16 **CEC:** 11.2

Additional Measured Elements

| Element | Quantity | Unit |
|---------|----------|------|
| P1 | 63 | lb/A |
| K | 346 | lb/A |

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR
Closest Weather Station: www.climate.com **Distance, Unit:** 1 MI

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| No. | Date | Amount | Unit | Type | Type Description | Interval | Unit | Min Temp | Max Temp | Temp Unit |
|-----|---------|--------|------|------|------------------|----------|------|----------|----------|-----------|
| 1. | 5-6-15 | | | | | 7 | DAY | 49 | 85 | F |
| 2. | 5-7-15 | 3.03 | IN | RAIN | rain | 5 | DAY | | | |
| 3. | 5-13-15 | | | | | 7 | DAY | 45 | 83 | F |
| 4. | 5-13-15 | 0.61 | IN | RAIN | rain | 5 | DAY | | | |
| 5. | 5-20-15 | | | | | 7 | DAY | 44 | 85 | F |
| 6. | 5-20-15 | 0.16 | IN | RAIN | rain | 1 | DAY | | | |
| 7. | 5-24-15 | 0.67 | IN | RAIN | rain | 1 | DAY | | | |
| 8. | 5-26-15 | 0.16 | IN | RAIN | rain | 2 | DAY | | | |
| 9. | 5-27-15 | | | | | 7 | DAY | 55 | 84 | F |
| 10. | 5-29-15 | 1.88 | IN | RAIN | rain | 2 | DAY | | | |
| 11. | 6-3-15 | | | | | 7 | DAY | 53 | 89 | F |
| 12. | 6-4-15 | 0.29 | IN | RAIN | rain | 2 | DAY | | | |
| 13. | 6-8-15 | 2 | IN | RAIN | rain | 1 | DAY | | | |
| 14. | 6-10-15 | | | | | 7 | DAY | 64 | 91 | F |
| 15. | 6-14-15 | 0.59 | IN | RAIN | rain | 1 | DAY | | | |
| 16. | 6-15-15 | 0.15 | IN | RAIN | rain | 1 | DAY | | | |
| 17. | 6-16-15 | 1.4 | IN | RAIN | rain | 1 | DAY | | | |
| 18. | 6-17-15 | | | | | 7 | DAY | 69 | 91 | F |
| 19. | 6-17-15 | 0.14 | IN | RAIN | rain | 1 | DAY | | | |
| 20. | 6-18-15 | 1.17 | IN | RAIN | rain | 1 | DAY | | | |
| 21. | 6-19-15 | 2 | IN | RAIN | rain | 1 | DAY | | | |
| 22. | 6-20-15 | 0.25 | IN | RAIN | rain | 2 | DAY | | | |
| 23. | 6-24-15 | | | | | 7 | DAY | 62 | 93 | F |
| 24. | 6-25-15 | 2.19 | IN | RAIN | rain | 2 | DAY | | | |
| 25. | 6-28-15 | 0.25 | IN | RAIN | rain | 1 | DAY | | | |
| 26. | 7-1-15 | | | | | 7 | DAY | 63 | 88 | F |
| 27. | 7-1-15 | 0.22 | IN | RAIN | rain | 1 | DAY | | | |
| 28. | 7-6-15 | 1.96 | IN | RAIN | rain | 3 | DAY | | | |
| 29. | 7-8-15 | | | | | 7 | DAY | 59 | 97 | F |
| 30. | 7-9-15 | 0.58 | IN | RAIN | rain | 1 | DAY | | | |
| 31. | 7-15-15 | | | | | 7 | DAY | 69 | 93 | F |
| 32. | 7-17-15 | 0.06 | IN | RAIN | rain | 1 | DAY | | | |
| 33. | 7-19-15 | 0.64 | IN | RAIN | rain | 2 | DAY | | | |
| 34. | 7-22-15 | | | | | 7 | DAY | 65 | 95 | F |
| 35. | 7-25-15 | 0.71 | IN | RAIN | rain | 2 | DAY | | | |
| 36. | 7-29-15 | | | | | 7 | DAY | 65 | 93 | F |
| 37. | 8-5-15 | 2.58 | IN | RAIN | rain | 1 | DAY | | | |

Evaluation of Soil and POST Herbicides for Palmer Amaranth Control.

Trial ID: 15-COL-SOIL_POST-MW100 Location: Collinsville, IL Trial Year: 2015
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Application Description

| | A | B |
|------------------------------|---------|---------|
| Application Date: | 5-19-15 | 6-12-15 |
| Appl. Start Time: | 15:00 | 8:30 |
| Appl. Stop Time: | 16:10 | 9:00 |
| Application Method: | Spray | Spray |
| Application Timing: | PRE | 3-4"W |
| Application Placement: | BROSOI | BROFOL |
| Applied By: | MEJ | MEJ |
| Air Temperature, Unit: | 70 F | 81 F |
| % Relative Humidity: | 54 | 70 |
| Wind Velocity, Unit: | 6 MPH | 7 MPH |
| Wind Direction: | S | W |
| Dew Presence (Y/N): | N | N |
| Soil Temperature, Unit: | 80 F | 75 F |
| Soil Moisture: | NORMAL | NORMAL |
| % Cloud Cover: | 10 | 50 |
| Next Moisture Occurred On: | 5-20-15 | 6-14-15 |
| Time to Next Moisture, Unit: | 19 HR | 2 DAY |

Crop Stage At Each Application

| | A | B |
|--------------------------|-------|--------|
| Crop 1 Code, BBCH Scale: | GLXMA | GLXMA |
| Stage Scale Used: | DESC | DESC |
| Stage Majority, Percent: | NA | V4 |
| Stage Minimum, Percent: | | V3 |
| Stage Maximum, Percent: | | V4 |
| Height, Unit: | | 8.5 IN |
| Height Minimum, Maximum: | | 5 8.5 |

Pest Stage At Each Application

| | A | B |
|---------------------------|---------|---------|
| Pest 1 Code, Type, Scale: | AMAPA W | AMAPA W |
| Stage Majority, Percent: | NA | 6 |
| Stage Minimum, Percent: | | 3 |
| Stage Maximum, Percent: | | 14 |
| Height, Unit: | | 4 IN |
| Height Minimum, Maximum: | | 3 8 |
| Density, Unit: | | 3 FT2 |

Application Equipment

| | A | B |
|---------------------------|-------------|-------------|
| 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 |

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| Pest Code | | | | | | | GLXMA | GLXMA | GLXMA | GLXMA | | |
|-------------------|-----------------|-----------|-----------|----------------|------------|-----------------|--------------|-----------|---------|----------|------|-------|
| Crop Code | | | | | | | 10-12-15 | 10-12-15 | 6-19-15 | 6-19-15 | | |
| Rating Date | | | | | | | Moisture | Yield | Stunt | Bronzing | | |
| Rating Type | | | | | | | Percent | bu/A | Percent | Percent | | |
| Rating Unit | | | | | | | | | | | | |
| Rating Timing | | | | | | | | | | | | |
| Trt-Eval Interval | | | | | | | | | 7 DA-B | 7 DA-B | | |
| Trt No. | Treatment Name | Form Conc | Form Type | Rate | Other Rate | Other Rate Unit | Growth Stage | Appl Code | | | | |
| 1 | NONTREATED | | | | | | | | 11.6 a | 30 d | 0 | 0 |
| 2 | ANTHEM | 2.15 | SE | 0.134 lb ai/a | | 8 fl oz/a | PRE | A | | | | |
| 3 | DUAL MAGNUM | 7.62 | EC | 1.27 lb ai/a | 1.33 | pt/a | PRE | A | | | | |
| 4 | WARRANT | 3 | CS | 1.13 lb ai/a | | 3 pt/a | PRE | A | | | | |
| 5 | PROWL H2O | 3.8 | CS | 1.19 lb ai/a | | 2.5 pt/a | PRE | A | | | | |
| 6 | ZIDUA | 85 | WG | 0.133 lb ai/a | | 2.5 oz/a | PRE | A | | | | |
| 7 | SHARPEN | 2.85 | SC | 0.0223 lb ai/a | | 1 fl oz/a | PRE | A | | | | |
| 8 | SPARTAN 4F | 4 | SC | 0.25 lb ai/a | | 8 fl oz/a | PRE | A | | | | |
| 9 | SPARTAN 4F | 4 | SC | 0.313 lb ai/a | | 10 fl oz/a | PRE | A | | | | |
| 10 | SPARTAN 4F | 4 | SC | 0.375 lb ai/a | | 12 fl oz/a | PRE | A | | | | |
| 11 | VALOR SX | 51 | WG | 0.063 lb ai/a | | 2 oz/a | PRE | A | | | | |
| 12 | VALOR SX | 51 | WG | 0.08 lb ai/a | | 2.5 oz/a | PRE | A | | | | |
| 13 | VALOR SX | 51 | WG | 0.096 lb ai/a | | 3 oz/a | PRE | A | | | | |
| 14 | COBRA | 2 | EC | 0.188 lb ai/a | | 12 fl oz/a | 3-4"W | B | 11.8 a | 44 bc | 15 a | 25 b |
| | COC (PRIME OIL) | 100 | SL | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | |
| | N-PAK AMS | 100 | SL | 5 % v/v | | 5 % v/v | 3-4"W | B | | | | |
| 15 | FLEXSTAR | 1.88 | EC | 0.353 lb ai/a | | 24 fl oz/a | 3-4"W | B | 11.7 a | 57 ab | 10 b | 12 d |
| | COC (PRIME OIL) | 100 | SL | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | |
| | N-PAK AMS | 100 | SL | 5 % v/v | | 5 % v/v | 3-4"W | B | | | | |
| 16 | CADET | 0.91 | EC | 0.0064 lb ai/a | | 0.9 fl oz/a | 3-4"W | B | | | 3 c | 20 bc |
| | COC (PRIME OIL) | 100 | SL | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | |
| | N-PAK AMS | 100 | SL | 5 % v/v | | 5 % v/v | 3-4"W | B | | | | |
| 17 | RESOURCE | 0.86 | EC | 0.054 lb ai/a | | 8 fl oz/a | 3-4"W | B | | | 10 b | 20 bc |
| | COC (PRIME OIL) | 100 | SL | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | |
| | N-PAK AMS | 100 | SL | 5 % v/v | | 5 % v/v | 3-4"W | B | | | | |
| 18 | LIBERTY 280 | 2.34 | EC | 0.58 lb ai/a | | 31.7 fl oz/a | 3-4"W | B | 11.7 a | 62 a | 0 c | 0 e |
| | N-PAK AMS | 100 | SL | 5 % v/v | | 5 % v/v | 3-4"W | B | | | | |
| 19 | COBRA | 2 | EC | 0.188 lb ai/a | | 12 fl oz/a | 3-4"W | B | 11.5 a | 43 c | 18 a | 35 a |
| | COC (PRIME OIL) | 100 | SL | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | |
| | 28% UAN | 100 | SL | 4 % v/v | | 4 % v/v | 3-4"W | B | | | | |
| 20 | FLEXSTAR | 1.88 | EC | 0.353 lb ai/a | | 24 fl oz/a | 3-4"W | B | 11.6 a | 51 abc | 8 b | 12 d |
| | COC (PRIME OIL) | 100 | SL | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | |
| | 28% UAN | 100 | SL | 4 % v/v | | 4 % v/v | 3-4"W | 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.

Could not calculate LSD (% mean diff) for columns 14 because error mean square = 0.

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| Pest Code | | | | | | | | | | GLXMA | GLXMA | GLXMA | GLXMA |
|--------------------|-----------------|-----------|-----------|--------|-----------|------------|-----------------|--------------|-----------|----------|----------|---------|----------|
| Crop Code | | | | | | | | | | 10-12-15 | 10-12-15 | 6-19-15 | 6-19-15 |
| Rating Date | | | | | | | | | | Moisture | Yield | Stunt | Bronzing |
| Rating Type | | | | | | | | | | Percent | bu/A | Percent | Percent |
| Rating Unit | | | | | | | | | | | | | |
| Rating Timing | | | | | | | | | | | | | |
| Trt-Eval Interval | | | | | | | | | | | | 7 DA-B | 7 DA-B |
| Trt No. | Treatment Name | Form Conc | Form Type | Rate | Rate Unit | Other Rate | Other Rate Unit | Growth Stage | Appl Code | | | | |
| 21 | CADET | 0.91 | EC | 0.0064 | lb ai/a | 0.9 | fl oz/a | 3-4"W | B | | | 0 c | 15 cd |
| | COC (PRIME OIL) | 100 | SL | | 1 % v/v | 1 | % v/v | 3-4"W | B | | | | |
| | 28% UAN | 100 | SL | | 4 % v/v | 4 | % v/v | 3-4"W | B | | | | |
| 22 | RESOURCE | 0.86 | EC | 0.054 | lb ai/a | 8 | fl oz/a | 3-4"W | B | | | 0 c | 17 cd |
| | COC (PRIME OIL) | 100 | SL | | 1 % v/v | 1 | % v/v | 3-4"W | B | | | | |
| | 28% UAN | 100 | SL | | 4 % v/v | 4 | % v/v | 3-4"W | B | | | | |
| LSD P=.05 | | | | | | | | | | 0.20 | 13.2 | 4.2 | 5.2 |
| Standard Deviation | | | | | | | | | | 0.11 | 7.3 | 2.4 | 3.0 |
| CV | | | | | | | | | | 0.95 | 15.23 | 33.64 | 17.45 |
| Replicate F | | | | | | | | | | 2.838 | 0.551 | 0.471 | 0.308 |
| Replicate Prob(F) | | | | | | | | | | 0.1056 | 0.5927 | 0.6330 | 0.7394 |
| Treatment F | | | | | | | | | | 1.730 | 7.668 | 23.647 | 31.385 |
| Treatment Prob(F) | | | | | | | | | | 0.2154 | 0.0033 | 0.0001 | 0.0001 |

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Investigator: Ronald F. Krausz

| Pest Code | | | | | | | GLXMA | GLXMA | GLXMA | AMAPA-HR | AMAPA-HR | AMAPA-HR |
|-------------------|--|--------------------|----------------|--------------------------------------|-----------------------------------|-----------------|-------------------------|-------------|---------|----------|----------|----------|
| Crop Code | | | | | | | Injury | Injury | Injury | Control | Control | Control |
| Rating Date | | | | | | | Percent | Percent | Percent | Percent | Percent | Percent |
| Rating Type | | | | | | | 14 DAT | 28 DAT | 56 DAT | 14 DAT | 28 DAT | 56 DAT |
| Rating Unit | | | | | | | | | | | | |
| Rating Timing | | | | | | | | | | | | |
| Trt-Eval Interval | | | | | | | | | | | | |
| Trt No. | Treatment Name | Form Conc | Form Type | Rate | Other Rate | Other Rate Unit | Growth Stage | Appl Code | | | | |
| 1 | NONTREATED | | | | | | | | 0 | 0 | 0 | 0 |
| 2 | ANTHEM | 2.15 | SE | 0.134 lb ai/a | 8 fl oz/a | | PRE | A | 0 g | 0 c | 0 a | 99 a |
| 3 | DUAL MAGNUM | 7.62 | EC | 1.27 lb ai/a | 1.33 pt/a | | PRE | A | 0 g | 0 c | 0 a | 99 a |
| 4 | WARRANT | 3 | CS | 1.13 lb ai/a | 3 pt/a | | PRE | A | 0 g | 0 c | 0 a | 99 a |
| 5 | PROWL H2O | 3.8 | CS | 1.19 lb ai/a | 2.5 pt/a | | PRE | A | 0 g | 0 c | 0 a | 93 ab |
| 6 | ZIDUA | 85 | WG | 0.133 lb ai/a | 2.5 oz/a | | PRE | A | 0 g | 0 c | 0 a | 99 a |
| 7 | SHARPEN | 2.85 | SC | 0.0223 lb ai/a | 1 fl oz/a | | PRE | A | 10 de | 0 c | 0 a | 99 a |
| 8 | SPARTAN 4F | 4 | SC | 0.25 lb ai/a | 8 fl oz/a | | PRE | A | 12 cd | 0 c | 0 a | 99 a |
| 9 | SPARTAN 4F | 4 | SC | 0.313 lb ai/a | 10 fl oz/a | | PRE | A | 17 b | 10 b | 0 a | 99 a |
| 10 | SPARTAN 4F | 4 | SC | 0.375 lb ai/a | 12 fl oz/a | | PRE | A | 23 a | 13 a | 0 a | 99 a |
| 11 | VALOR SX | 51 | WG | 0.063 lb ai/a | 2 oz/a | | PRE | A | 7 ef | 0 c | 0 a | 99 a |
| 12 | VALOR SX | 51 | WG | 0.08 lb ai/a | 2.5 oz/a | | PRE | A | 10 de | 0 c | 0 a | 99 a |
| 13 | VALOR SX | 51 | WG | 0.096 lb ai/a | 3 oz/a | | PRE | A | 10 de | 0 c | 0 a | 99 a |
| 14 | COBRA COC (PRIME OIL) N-PAK AMS | 2 100 100 | EC SL SL | 0.188 lb ai/a 1 % v/v 5 % v/v | 12 fl oz/a 1 % v/v 5 % v/v | | 3-4"W 3-4"W 3-4"W | B B B | 12 cd | 0 c | 0 a | 83 b |
| 15 | FLEXSTAR COC (PRIME OIL) N-PAK AMS | 1.88 100 100 | EC SL SL | 0.353 lb ai/a 1 % v/v 5 % v/v | 24 fl oz/a 1 % v/v 5 % v/v | | 3-4"W 3-4"W 3-4"W | B B B | 7 ef | 0 c | 0 a | 94 ab |
| 16 | CADET COC (PRIME OIL) N-PAK AMS | 0.91 100 100 | EC SL SL | 0.0064 lb ai/a 1 % v/v 5 % v/v | 0.9 fl oz/a 1 % v/v 5 % v/v | | 3-4"W 3-4"W 3-4"W | B B B | 0 g | 0 c | 0 a | 47 c |
| 17 | RESOURCE COC (PRIME OIL) N-PAK AMS | 0.86 100 100 | EC SL SL | 0.054 lb ai/a 1 % v/v 5 % v/v | 8 fl oz/a 1 % v/v 5 % v/v | | 3-4"W 3-4"W 3-4"W | B B B | 10 de | 0 c | 0 a | 55 c |
| 18 | LIBERTY 280 N-PAK AMS | 2.34 100 | EC SL | 0.58 lb ai/a 5 % v/v | 31.7 fl oz/a 5 % v/v | | 3-4"W 3-4"W | B B | 0 g | 0 c | 0 a | 99 a |
| 19 | COBRA COC (PRIME OIL) 28% UAN | 2 100 100 | EC SL SL | 0.188 lb ai/a 1 % v/v 4 % v/v | 12 fl oz/a 1 % v/v 4 % v/v | | 3-4"W 3-4"W 3-4"W | B B B | 15 bc | 0 c | 0 a | 83 b |
| 20 | FLEXSTAR COC (PRIME OIL) 28% UAN | 1.88 100 100 | EC SL SL | 0.353 lb ai/a 1 % v/v 4 % v/v | 24 fl oz/a 1 % v/v 4 % v/v | | 3-4"W 3-4"W 3-4"W | B B B | 5 f | 0 c | 0 a | 90 ab |

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| Pest Code | | | | | | | | GLXMA | GLXMA | GLXMA | AMAPA-HR | AMAPA-HR | AMAPA-HR | | |
|--------------------|-----------------|-----------|-----------|--------|---------|------------|------------|--------------|-----------|---------|----------|----------|----------|--------|------|
| Crop Code | | | | | | | | | | | | | | | |
| Rating Date | | | | | | | | | | | | | | | |
| Rating Type | | | | | | | | Injury | Injury | Injury | Control | Control | Control | | |
| Rating Unit | | | | | | | | Percent | Percent | Percent | Percent | Percent | Percent | | |
| Rating Timing | | | | | | | | | | | | | | | |
| Trt-Eval Interval | | | | | | | | 14 DAT | 28 DAT | 56 DAT | 14 DAT | 28 DAT | 56 DAT | | |
| Trt No. | Treatment Name | Form Conc | Form Type | Rate | Unit | Other Rate | Other Unit | Growth Stage | Appl Code | | | | | | |
| 21 | CADET | 0.91 | EC | 0.0064 | lb ai/a | 0.9 | fl oz/a | 3-4"W | B | 0 g | 0 c | 0 a | 53 c | 17 cde | 17 c |
| | COC (PRIME OIL) | 100 | SL | | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | | | |
| | 28% UAN | 100 | SL | | 4 % v/v | | 4 % v/v | 3-4"W | B | | | | | | |
| 22 | RESOURCE | 0.86 | EC | 0.054 | lb ai/a | 8 | fl oz/a | 3-4"W | B | 0 g | 0 c | 0 a | 50 c | 0 e | 0 c |
| | COC (PRIME OIL) | 100 | SL | | 1 % v/v | | 1 % v/v | 3-4"W | B | | | | | | |
| | 28% UAN | 100 | SL | | 4 % v/v | | 4 % v/v | 3-4"W | B | | | | | | |
| LSD P=.05 | | | | | | | | 3.7 | 1.0 | . | 12.1 | 26.3 | 19.9 | | |
| Standard Deviation | | | | | | | | 2.2 | 0.6 | 0.0 | 7.3 | 16.0 | 12.1 | | |
| CV | | | | | | | | 34.29 | 56.69 | 0.0 | 8.37 | 23.37 | 20.22 | | |
| Replicate F | | | | | | | | 0.080 | 1.000 | 0.000 | 1.943 | 1.339 | 0.880 | | |
| Replicate Prob(F) | | | | | | | | 0.9236 | 0.3769 | 1.0000 | 0.1566 | 0.2735 | 0.4225 | | |
| Treatment F | | | | | | | | 28.430 | 95.200 | 0.000 | 19.587 | 13.018 | 31.440 | | |
| Treatment Prob(F) | | | | | | | | 0.0001 | 0.0001 | 1.0000 | 0.0001 | 0.0001 | 0.0001 | | |

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Trial Comments

1. Protocol: SIU.
2. Ratings:
CI 14, 28, and 56 DA-A; and 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.
5. Rainfall following the PRE application was 0.99 inch over 4 days beginning 19 hours later.
Rainfall following the 3-4"W application was 2.14 inch over 3 days beginning 2 days later.
6. AMAPA-HR = Herbicide-resistant Palmer amaranth (glyphosate).
7. DAT = Days after either the PRE or 3-4"W application.
Ratings at 14 days after the PRE and 3-4"W application were on 6-2-15 and 6-26-15, respectively.
Ratings at 28 days after the PRE and 3-4"W application were on 6-16-15 and 7-10-15, respectively.
Ratings at 56 days after the PRE and 3-4"W application were on 7-14-15 and 8-7-15, respectively.
8. Crop injury at 14 days after the PRE application was stunting.
9. Harvested selected plots 10-12-15, (2) 30 inch rows by 10 ft.