

Ohio State University Horticulture and Crop Science

Preemergence Weed Control in Corn I

Title No. 2:
 Trial ID: 12PREC1 Protocol ID: 12PREC1
 Location: Western Branch F-9 E Study Director: Anthony F. Dobbels
 Project ID: USA-12-011 Investigator: Dr. Mark M. Loux
 Sponsor Contact: Marsha Martin, DuPont

General Trial Information

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

Trial Location

City: South Charleston Latitude of LL Corner °: 39.85674 N
 State/Prov.: Ohio Longitude of LL Corner °: 83.67017 W
 Postal Code: 45368
 Country: USA

Crop Description

Crop 1: ZEAMX Zea mays Corn
 Variety: Pioneer 93Y14 Description: RR/LL
 BBCH Scale: BCOR Planting Date: Apr-24-2012
 Planting Method: SEEDED seeded Rate, Unit: 32097 S/A
 Depth, Unit: 2 IN
 Row Spacing, Unit: 30 IN
 Seed Bed: MEDIUM medium Soil Temperature, Unit: 60 F
 Soil Moisture: GOOD good Emergence Date: May-4-2012

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: CHEAL Chenopodium album
 Common Name: Common lambsquarters
 Pest 4 Type: W Code: AMARE Amaranthus retroflexus
 Common Name: Redroot pigweed
 Pest 5 Type: W Code: ABUTH Abutilon theophrasti
 Common Name: velvetleaf
 Pest 6 Type: W Code: POLPY Persicaria pensylvanica
 Common Name: Pennsylvania smartweed

Site and Design

Plot Width, Unit: 6.67 FT Site Type: FIELD field
 Plot Length, Unit: 30 FT Experimental Unit: 1 PLOT plot
 Plot Area, Unit: 200.1 FT² Tillage Type: CONTIL conventional-till
 Replications: 3 Study Design: RACOB Randomized Complete Block (RCB)
 Untreated Arrangement: INCLUDED single control randomized in each block

Trial Initiation Comments:

Soil Description

Description Name: Big E South
 % OM: 2.2 Texture: SICL silty clay loam
 pH: 6.1 Soil Name: Kokomo
 CEC: 14

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Application Description

| | A | B |
|-------------------------|-------------|-------------|
| Application Date: | Apr-25-2012 | May-23-2012 |
| Time of Day: | 9:30 A.M. | 9:00 A.M. |
| Application Method: | SPRAY | SPRAY |
| Application Timing: | PRE | POST |
| Application Placement: | BROSOI | BROFO |
| Applied By: | Bethel | |
| Air Temperature, Unit: | 55 F | 69 F |
| % Relative Humidity: | 62 | 67 |
| Wind Velocity, Unit: | 5 MPH | 2 MPH |
| Wind Direction: | S | NNE |
| Dew Presence (Y/N): | N no | N no |
| Soil Temperature, Unit: | 45 F | 67 F |
| Soil Moisture: | GOOD | DRY |
| % Cloud Cover: | 3 | 85 |
| Next Rain Occurred On: | Apr-26-2012 | May-31-2012 |

Crop Stage At Each Application

| | A | B |
|--------------------------|------------|------------|
| Crop 1 Code, BBCH Scale: | ZEAMX BCOR | ZEAMX BCOR |
| Stage Scale Used: | BBCH | |
| Stage Majority, Percent: | 14 | 100 |
| Height, Unit: | 12 | IN |
| Height Minimum, Maximum: | 10 | 12 |

Pest Stage At Each Application

| | A | B |
|---------------------------|---------|---------|
| Pest 1 Code, Type, Scale: | SETFA W | SETFA W |
| Stage Majority, Percent: | 13 | 90 |
| Stage Minimum, Percent: | 12 | 10 |
| Stage Maximum, Percent: | 13 | 90 |
| Height, Unit: | 2 | IN |
| Height Minimum, Maximum: | 2 | 3 |
| Density, Unit: | 517 M2 | |
| Pest 2 Code, Type, Scale: | AMBTR W | AMBTR W |
| Stage Majority, Percent: | 12 | 100 |
| Height, Unit: | 2 | IN |
| Height Minimum, Maximum: | 1 | 2 |
| Density, Unit: | 10.4 M2 | |
| Pest 3 Code, Type, Scale: | CHEAL W | CHEAL W |
| Stage Majority, Percent: | 14 | 100 |
| Height, Unit: | 2 | IN |
| Height Minimum, Maximum: | 1 | 2 |
| Density, Unit: | 121 M2 | |
| Pest 4 Code, Type, Scale: | AMARE W | AMARE W |
| Stage Majority, Percent: | 14 | 100 |
| Height, Unit: | 2 | IN |
| Height Minimum, Maximum: | 1 | 2 |
| Density, Unit: | 32 M2 | |
| Pest 5 Code, Type, Scale: | ABUTH W | ABUTH W |
| Stage Majority, Percent: | 14 | 100 |
| Height, Unit: | 1 | IN |
| Height Minimum, Maximum: | 1 | 2 |
| Density, Unit: | 4 M2 | |
| Pest 6 Code, Type, Scale: | POLPY W | POLPY W |
| Stage Majority, Percent: | 13 | 100 |
| Height, Unit: | 2 | IN |
| Height Minimum, Maximum: | 1 | 2 |
| Density, Unit: | 13.3 M2 | |

Application Equipment

| | A | B |
|---------------------------|--------------|--------------|
| Appl. Equipment: | 6 foot boom | 6 foot boom |
| Equipment Type: | SPRBAC | SPRBAC |
| Operation Pressure, Unit: | 46 PSI | 46 PSI |
| Nozzle Type: | A1 XR | A1 XR |
| Nozzle Size: | 110015 | 110015 |
| Nozzle Spacing, Unit: | 18 IN | 18 IN |
| Boom Length, Unit: | 6 FT | 6 FT |
| Boom Height, Unit: | 20 IN | 20 IN |
| Ground Speed, Unit: | 3 MPH | 3 MPH |
| Carrier: | WATER | |
| Spray Volume, Unit: | 15 GPA | 15 GPA |
| Mix Size, Unit: | 0.33 Gallons | 0.33 Gallons |
| Propellant: | CO2 | CO2 |

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| Pest Type | W Weed | W Weed | W Weed | W Weed | W Weed | | | | | | |
|-------------------------------|-----------------|------------------|----------------------|-------------------------|----------------------|--------|--------|--------|--------|-----------|---------|
| Pest Code | SETFA | AMBTR | CHEAL | AMARE | ABUTH | | | | | | |
| Pest Scientific Name | Setaria faberi | Ambrosia trifida | Chenopodium albidum | Amaranthus retrofractus | Abutilon theophrasti | | | | | | |
| Pest Name | Giant foxtail | Giant ragweed | Common lambsquarters | Redroot pigweed | velvetleaf | | | | | | |
| Crop Code | ZEAMX | | | | | | | | | | |
| BBCH Scale | BCOR | | | | | | | | | | |
| Crop Scientific Name | Zea mays | | | | | | | | | | |
| Crop Name | Corn | | | | | | | | | | |
| Rating Date | May-10-2012 | May-10-2012 | May-10-2012 | May-10-2012 | May-10-2012 | | | | | | |
| Rating Type | PHYTO | CONTRO | CONTRO | CONTRO | CONTRO | | | | | | |
| Rating Unit | % | % | % | % | % | | | | | | |
| Number of Subsamples | 1 | 1 | 1 | 1 | 1 | | | | | | |
| Days After First/Last Applic. | 15 15 | 15 15 | 15 15 | 15 15 | 15 15 | | | | | | |
| Trt-Eval Interval | 15 DA-A | 15 DA-A | 15 DA-A | 15 DA-A | 15 DA-A | | | | | | |
| Plant-Eval Interval | 16 DP-1 | 16 DP-1 | 16 DP-1 | 16 DP-1 | 16 DP-1 | | | | | | |
| Days After Emergence | 6 DE-1 | 6 DE-1 | 6 DE-1 | 6 DE-1 | 6 DE-1 | | | | | | |
| Number of Decimals | 0 | 0 | 0 | 0 | 0 | | | | | | |
| Trt No. | Treatment Name | Rate | Other Rate | Other Rate | Appl Unit Code | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | A | 0 a | 100 a | 86 a | 100 a | 100 a | 100 a |
| 1 | Isoxaflutole | 0.6 oz ai/a | 0.8 oz/a | | | | | | | | |
| 1 | Breakfree ATZ | 2.1 lb ai/a | 1.5 qt/a | | | | | | | | |
| 2 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 0 a | 98 ab | 90 a | 100 a | 100 a | 100 a |
| 2 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 2 | Breakfree ATZ | 2.8 lb ai/a | 2 qt/a | | | | | | | | |
| 3 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 0 a | 99 a | 88 a | 100 a | 100 a | 100 a |
| 3 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 3 | Cinch ATZ | 2.75 lb ai/a | 2 qt/a | | | | | | | | |
| 4 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 0 a | 80 c | 83 a | 100 a | 100 a | 97 a |
| 4 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 4 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | | |
| 4 | Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | B | | | | | | |
| 4 | Isoxadifen-Ethy | 0.15 oz ai/a | 0.3 oz/a | | | | | | | | |
| 4 | Mesotrione | 1.25 oz ai/a | 2.5 oz/a | | | | | | | | |
| 4 | Abundit | 32 fl oz/a | 1 qt/a | | | | | | | | |
| 4 | N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | | | |
| 5 | Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 0 a | 88 bc | 88 a | 100 a | 99 a | 100 a |
| 6 | Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 0 a | 86 c | 92 a | 100 a | 100 a | 100 a |
| 6 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | | |
| 7 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 0 a | 78 c | 85 a | 100 a | 100 a | 100 a |
| 7 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 7 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | | |
| 7 | Abundit | 32 fl oz/a | 1 qt/a | | B | | | | | | |
| 7 | N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | | | |
| 8 | | | | | | 0 a | 0 d | 0 b | 0 b | 0 b | 0 b |
| LSD (P=.05) | | | | | | 0.0 | 10.9 | 10.8 | 0.0 | 0.7 | 3.6 |
| Standard Deviation | | | | | | 0.0 | 6.3 | 6.1 | 0.0 | 0.4 | 2.0 |
| CV | | | | | | 0.0 | 7.93 | 8.03 | 0.0 | 0.47 | 2.34 |
| Bartlett's X2 | | | | | | 0.0 | 9.537 | 4.237 | 0.0 | 0.0 | 0.0 |
| P(Bartlett's X2) | | | | | | . | 0.089 | 0.645 | . | . | . |
| Replicate F | | | | | | 0.000 | 0.276 | 4.419 | 0.000 | 1.000 | 1.000 |
| Replicate Prob(F) | | | | | | 1.0000 | 0.7627 | 0.0325 | 1.0000 | 0.3927 | 0.3927 |
| Treatment F | | | | | | 0.000 | 83.422 | 76.465 | 0.000 | 22458.145 | 892.429 |
| Treatment Prob(F) | | | | | | 1.0000 | 0.0001 | 0.0001 | 1.0000 | 0.0001 | 0.0001 |

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| Pest Type | W Weed | W Weed | W Weed | W Weed | | | | | | |
|-------------------------------|--------------------|----------------|------------------|------------------|----------------|---------|--------|--------|--------|---------|
| Pest Code | POLPY | SETFA | AMBTR | CHEAL | | | | | | |
| Pest Scientific Name | Persicaria pen-> | Setaria faberi | Ambrosia trifi-> | Chenopodium al-> | | | | | | |
| Pest Name | Pennsylvania s> | Giant foxtail | Giant ragweed | Common lambsqu-> | | | | | | |
| Crop Code | | ZEAMX | | | | | | | | |
| BBCH Scale | | BCOR | | | | | | | | |
| Crop Scientific Name | | Zea mays | | | | | | | | |
| Crop Name | | Corn | | | | | | | | |
| Rating Date | May-10-2012 | May-22-2012 | May-22-2012 | May-22-2012 | | | | | | |
| Rating Type | CONTRO | PHYTO | CONTRO | CONTRO | | | | | | |
| Rating Unit | % | % | % | % | | | | | | |
| Number of Subsamples | 1 | 1 | 1 | 1 | | | | | | |
| Days After First/Last Applic. | 15 15 | 27 27 | 27 27 | 27 27 | | | | | | |
| Trt-Eval Interval | 15 DA-A | 27 DA-A | 27 DA-A | 27 DA-A | | | | | | |
| Plant-Eval Interval | 16 DP-1 | 28 DP-1 | 28 DP-1 | 28 DP-1 | | | | | | |
| Days After Emergence | 6 DE-1 | 18 DE-1 | 18 DE-1 | 18 DE-1 | | | | | | |
| Number of Decimals | 0 | 0 | 0 | 0 | | | | | | |
| Trt No. | Treatment Name | Rate | Other Rate | Other Rate | Appl Unit Code | 7 | 8 | 9 | 10 | 11 |
| 1 | Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | A | 98 a | 0 a | 89 ab | 80 ab | 100 a |
| 1 | Isoxaflutole | 0.6 oz ai/a | 0.8 oz/a | | | | | | | |
| 1 | Breakfree ATZ | 2.1 lb ai/a | 1.5 qt/a | | | | | | | |
| 2 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 100 a | 0 a | 99 a | 82 ab | 97 a |
| 2 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | |
| 2 | Breakfree ATZ | 2.8 lb ai/a | 2 qt/a | | | | | | | |
| 3 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 100 a | 0 a | 96 ab | 80 ab | 100 a |
| 3 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | |
| 3 | Cinch ATZ | 2.75 lb ai/a | 2 qt/a | | | | | | | |
| 4 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 97 a | 0 a | 67 cd | 67 b | 100 a |
| 4 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | |
| 4 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | |
| 4 | Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | B | | | | | |
| 4 | Isoxadifen-Ethy | 0.15 oz ai/a | 0.3 oz/a | | | | | | | |
| 4 | Mesotrione | 1.25 oz ai/a | 2.5 oz/a | | | | | | | |
| 4 | Abundit | 32 fl oz/a | 1 qt/a | | | | | | | |
| 4 | N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | | |
| 5 | Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 100 a | 0 a | 79 bc | 85 ab | 100 a |
| 6 | Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 99 a | 0 a | 82 abc | 96 a | 100 a |
| 6 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | |
| 7 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 95 a | 0 a | 57 d | 70 b | 100 a |
| 7 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | |
| 7 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | |
| 7 | Abundit | 32 fl oz/a | 1 qt/a | | B | | | | | |
| 7 | N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | | |
| 8 | | | | | | 0 b | 0 a | 0 e | 0 c | 0 b |
| LSD (P=.05) | | | | | | 6.6 | 0.0 | 19.3 | 18.6 | 3.6 |
| Standard Deviation | | | | | | 3.8 | 0.0 | 11.0 | 10.6 | 2.0 |
| CV | | | | | | 4.35 | 0.0 | 15.46 | 15.19 | 2.34 |
| Bartlett's X2 | | | | | | 6.132 | 0.0 | 7.565 | 5.857 | 0.0 |
| P(Bartlett's X2) | | | | | | 0.105 | . | 0.182 | 0.439 | . |
| Replicate F | | | | | | 1.389 | 0.000 | 0.007 | 2.048 | 1.000 |
| Replicate Prob(F) | | | | | | 0.2816 | 1.0000 | 0.9928 | 0.1659 | 0.3927 |
| Treatment F | | | | | | 259.250 | 0.000 | 25.564 | 23.393 | 892.429 |
| Treatment Prob(F) | | | | | | 0.0001 | 1.0000 | 0.0001 | 0.0001 | 0.0001 |

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| Pest Type | W Weed | W Weed | W Weed | W Weed | W Weed | W Weed | | | | | |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|---------|---------|--------|--------|--------|
| Pest Code | AMARE | ABUTH | POLPY | | SETFA | AMBTR | | | | | |
| Pest Scientific Name | Amaranthus ret> | Abutilon theop> | Persicaria pen> | | Setaria faberi | Ambrosia trifi> | | | | | |
| Pest Name | Redroot pigweed | velvetleaf | Pennsylvania s> | | Giant foxtail | Giant ragweed | | | | | |
| Crop Code | | | | ZEAMX | | | | | | | |
| BBCH Scale | | | | BCOR | | | | | | | |
| Crop Scientific Name | | | | Zea mays | | | | | | | |
| Crop Name | | | | Corn | | | | | | | |
| Rating Date | May-22-2012 | May-22-2012 | May-22-2012 | Jun-19-2012 | Jun-19-2012 | Jun-19-2012 | | | | | |
| Rating Type | CONTRO | CONTRO | CONTRO | PHYTO | CONTRO | CONTRO | | | | | |
| Rating Unit | % | % | % | % | % | % | | | | | |
| Number of Subsamples | 1 | 1 | 1 | 1 | 1 | 1 | | | | | |
| Days After First/Last Applic. | 27 27 | 27 27 | 27 27 | 55 27 | 55 27 | 55 27 | | | | | |
| Trt-Eval Interval | 27 DA-A | 27 DA-A | 27 DA-A | 55 DA-A | 55 DA-A | 55 DA-A | | | | | |
| Plant-Eval Interval | 28 DP-1 | 28 DP-1 | 28 DP-1 | 56 DP-1 | 56 DP-1 | 56 DP-1 | | | | | |
| Days After Emergence | 18 DE-1 | 18 DE-1 | 18 DE-1 | 46 DE-1 | 46 DE-1 | 46 DE-1 | | | | | |
| Number of Decimals | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Trt No. | Treatment Name | Rate Rate Unit | Other Rate | Other Rate Unit | Appl Code | 12 | 13 | 14 | 15 | 16 | 17 |
| 1 | Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | A | 100 a | 100 a | 100 a | 0 a | 70 bcd | 75 bc |
| 1 | Isoxaflutole | 0.6 oz ai/a | 0.8 oz/a | | | | | | | | |
| 1 | Breakfree ATZ | 2.1 lb ai/a | 1.5 qt/a | | | | | | | | |
| 2 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 100 a | 100 a | 100 a | 0 a | 67 bcd | 68 c |
| 2 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 2 | Breakfree ATZ | 2.8 lb ai/a | 2 qt/a | | | | | | | | |
| 3 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 100 a | 100 a | 100 a | 0 a | 78 abc | 63 c |
| 3 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 3 | Cinch ATZ | 2.75 lb ai/a | 2 qt/a | | | | | | | | |
| 4 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 100 a | 97 a | 87 b | 0 a | 86 a | 87 ab |
| 4 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 4 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | | |
| 4 | Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | B | | | | | | |
| 4 | Isoxadifen-Ethy | 0.15 oz ai/a | 0.3 oz/a | | | | | | | | |
| 4 | Mesotrione | 1.25 oz ai/a | 2.5 oz/a | | | | | | | | |
| 4 | Abundit | 32 fl oz/a | 1 qt/a | | | | | | | | |
| 4 | N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | | | |
| 5 | Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 100 a | 100 a | 100 a | 0 a | 60 d | 68 c |
| 6 | Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 100 a | 100 a | 100 a | 0 a | 65 cd | 72 c |
| 6 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | | |
| 7 | Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 100 a | 100 a | 93 ab | 0 a | 81 ab | 94 a |
| 7 | Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | | | |
| 7 | Atrazine | 1 lb ai/a | 1 qt/a | | | | | | | | |
| 7 | Abundit | 32 fl oz/a | 1 qt/a | | B | | | | | | |
| 7 | N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | | | |
| 8 | | | | | | 0 b | 0 b | 0 c | 0 a | 0 e | 0 d |
| LSD (P=.05) | | | | | | 0.0 | 3.5 | 9.6 | 0.0 | 14.6 | 13.7 |
| Standard Deviation | | | | | | 0.0 | 2.0 | 5.5 | 0.0 | 8.3 | 7.8 |
| CV | | | | | | 0.0 | 2.32 | 6.48 | 0.0 | 13.15 | 11.84 |
| Bartlett's X2 | | | | | | 0.0 | 6.281 | 17.104 | 0.0 | 4.359 | 7.478 |
| P(Bartlett's X2) | | | | | | . | 0.012* | 0.001* | . | 0.628 | 0.279 |
| Replicate F | | | | | | 0.000 | 1.233 | 1.820 | 0.000 | 0.658 | 6.239 |
| Replicate Prob(F) | | | | | | 1.0000 | 0.3212 | 0.1983 | 1.0000 | 0.5334 | 0.0116 |
| Treatment F | | | | | | 0.000 | 908.424 | 118.808 | 0.000 | 31.589 | 40.147 |
| Treatment Prob(F) | | | | | | 1.0000 | 0.0001 | 0.0001 | 1.0000 | 0.0001 | 0.0001 |

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| Pest Type | W Weed | W Weed | W Weed | W Weed | | | | |
|-------------------------------|-----------------|--------------------|-----------------|--------------------|--------|--------|--------|--------|
| Pest Code | CHEAL | AMARE | ABUTH | POLPY | | | | |
| Pest Scientific Name | Chenopodium al- | Amaranthus ret- | Abutilon theop- | Persicaria pen- | | | | |
| Pest Name | Common lambsqu- | Redroot pigweed | velvetleaf | Pennsylvania s> | | | | |
| Crop Code | | | | | | | | |
| BBCH Scale | | | | | | | | |
| Crop Scientific Name | | | | | | | | |
| Crop Name | | | | | | | | |
| Rating Date | Jun-19-2012 | Jun-19-2012 | Jun-19-2012 | Jun-19-2012 | | | | |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO | | | | |
| Rating Unit | % | % | % | % | | | | |
| Number of Subsamples | 1 | 1 | 1 | 1 | | | | |
| Days After First/Last Applic. | 55 27 | 55 27 | 55 27 | 55 27 | | | | |
| Trt-Eval Interval | 55 DA-A | 55 DA-A | 55 DA-A | 55 DA-A | | | | |
| Plant-Eval Interval | 56 DP-1 | 56 DP-1 | 56 DP-1 | 56 DP-1 | | | | |
| Days After Emergence | 46 DE-1 | 46 DE-1 | 46 DE-1 | 46 DE-1 | | | | |
| Number of Decimals | 0 | 0 | 0 | 0 | | | | |
| Trt Treatment | Rate | Other | Other | Appl | 18 | 19 | 20 | 21 |
| No. Name | Rate Unit | Rate | Rate Unit | Code | | | | |
| 1 Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | A | 100 a | 85 ab | 93 a | 93 a |
| 1 Isoxaflutole | 0.6 oz ai/a | 0.8 oz/a | | | | | | |
| 1 Breakfree ATZ | 2.1 lb ai/a | 1.5 qt/a | | | | | | |
| 2 Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 90 a | 83 ab | 90 a | 90 a |
| 2 Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | |
| 2 Breakfree ATZ | 2.8 lb ai/a | 2 qt/a | | | | | | |
| 3 Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 88 a | 73 b | 87 a | 90 a |
| 3 Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | |
| 3 Cinch ATZ | 2.75 lb ai/a | 2 qt/a | | | | | | |
| 4 Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 100 a | 100 a | 100 a | 100 a |
| 4 Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | |
| 4 Atrazine | 1 lb ai/a | 1 qt/a | | | | | | |
| 4 Rimsulfuron | 0.3 oz ai/a | 1.2 oz/a | | B | | | | |
| 4 Isoxadifen-Ethy | 0.15 oz ai/a | 0.3 oz/a | | | | | | |
| 4 Mesotrione | 1.25 oz ai/a | 2.5 oz/a | | | | | | |
| 4 Abundit | 32 fl oz/a | 1 qt/a | | | | | | |
| 4 N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | |
| 5 Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 97 a | 97 a | 100 a | 100 a |
| 6 Corvus | 5.6 fl oz/a | 5.6 oz/a | | A | 100 a | 100 a | 98 a | 100 a |
| 6 Atrazine | 1 lb ai/a | 1 qt/a | | | | | | |
| 7 Rimsulfuron | 0.25 oz ai/a | 1 oz/a | | A | 96 a | 97 a | 100 a | 100 a |
| 7 Isoxaflutole | 0.5 oz ai/a | 0.67 oz/a | | | | | | |
| 7 Atrazine | 1 lb ai/a | 1 qt/a | | | | | | |
| 7 Abundit | 32 fl oz/a | 1 qt/a | | B | | | | |
| 7 N-PAK AMS | 5 % v/v | 3 qt/a | | | | | | |
| 8 | | | | | 0 b | 0 c | 0 b | 0 b |
| LSD (P=.05) | | | | | 12.3 | 18.1 | 19.6 | 16.9 |
| Standard Deviation | | | | | 7.0 | 10.3 | 11.2 | 9.7 |
| CV | | | | | 8.38 | 13.03 | 13.37 | 11.49 |
| Bartlett's X2 | | | | | 7.142 | 6.496 | 5.544 | 0.372 |
| P(Bartlett's X2) | | | | | 0.068 | 0.165 | 0.136 | 0.83 |
| Replicate F | | | | | 2.008 | 0.789 | 0.809 | 0.847 |
| Replicate Prob(F) | | | | | 0.1711 | 0.4737 | 0.4649 | 0.4495 |
| Treatment F | | | | | 71.046 | 31.376 | 28.004 | 37.783 |
| Treatment Prob(F) | | | | | 0.0001 | 0.0001 | 0.0001 | 0.0001 |