# The Ohio State University

**SCEPTER TANK MIXTURES FOR PRE APPLICATIONS IN SOYBEANS**

Trial ID: 17 PRES1 Location: South Charleston, OH Trial Year: 2017
Protocol ID: 17 PRES 1 Investigator: Dr. Mark M. Loux
Project ID: 17C05H043 Study Director: Mark Loux
Sponsor Contact: Joe Argentine, AMVAC

## General Trial Information

**Study Director:** Mark Loux
**Investigator:** Dr. Mark M. Loux

**Planned Completion Date:** Aug-31-2017

## Trial Location

**City:** South Charleston **Country:** USA United States
**State/Prov.:** Ohio
**Postal Code:** 45368 **Climate Zone:** USWARM US Warm Continental

**Latitude of LL Corner °:** 39.86021 N
**Longitude of LL Corner °:** 83.67077 W
**Altitude of LL Corner, Unit:** 1092.00 FT

**Conducted Under GLP:** No
**Conducted Under GEP:** No

**Objectives:**
EVALUATE FIT AND PERFORMANCE OF SCEPTER IN AT-PLANT PRE PROGRAMS.

## Contacts

**Study Director:** Mark Loux

**Investigator:** Dr. Mark M. Loux

## Crop Description

**Crop 1:** GLXMA Glycine max Soybean
**Variety:** Pioneer 36T36X **BBCH Scale:** BSOY
**Description:** Dicamba Tolerant

**Planting Date:** May-17-2017
**Planting Rate, Unit:** 175000 P/A **Planting Method:** PLANTD planted
**Depth, Unit:** 1 IN **Planting Equipment:** FE Field Equipment
**Row Spacing, Unit:** 15 IN **Emergence Date:** May-29-2017
**Soil Moisture:** GOOD good

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### Pest Description

**Pest 1 Type:** W **Code:** IPOHE Ipomoea hederacea
**Common Name:** ivy-leaf morning glory

**Pest 2 Type:** W **Code:** IPOLA Ipomoea lacunosa
**Common Name:** pitted morning glory

**Pest 3 Type:** W **Code:** AMBEL Ambrosia artemisiifolia
**Common Name:** Common ragweed

**Pest 4 Type:** W **Code:** AMBTR Ambrosia trifida
**Common Name:** Giant ragweed

**Pest 5 Type:** W **Code:** XANST Xanthium strumarium
**Common Name:** Common cocklebur

**Pest 6 Type:** W **Code:** ABUTH Abutilon theophrasti
**Common Name:** velvetleaf

**Pest 7 Type:** W **Code:** SETFA Setaria faberi
**Common Name:** Giant foxtail

**Pest 8 Type:** W **Code:** GGGAN Annual grasses
**Common Name:** Annual grasses

**Pest 9 Type:** W **Code:** ECHCG Echinochloa crus-galli
**Common Name:** Common barnyard grass

**Pest10 Type:** W **Code:** HIBTR Hibiscus trionum
**Common Name:** Venice mallow

### Site and Design

**Treated Plot Width:** 10 FT
**Treated Plot Length:** 30 FT
**Treated Plot Area:** 300 FT2 **Treatments:** 14
**Replications:** 4

**Site Type:** FIELD field
**Experimental Unit:** 1 PLOT plot
**Tillage Type:** CONTIL conventional-till
**Study Design:** RACOBL Randomized Complete Block (RCB)

**Field Prep./Maintenance:**
To remove existing vegetation, overspray plots with Gramoxone SL 2 qt/A + NIS 0.25% just prior to planting and application of PRE herbicide treatments.

### Soil Description

**Description Name:** F-7 East
**% OM:** 1.8 **Texture:** SIL silt loam
**pH:** 5.7 **Soil Name:** Crosby
**CEC:** 16.2 **Fert. Level:** G good
**Soil Drainage:** G good

### Application Description

| | A |
|---|---|
| **Application Date:** | May-19-2017 |
| **Appl. Start Time:** | 10:00 AM |
| **Appl. Stop Time:** | 10:20 AM |
| **Application Method:** | SPRAY |
| **Application Timing:** | PRE |
| **Application Placement:** | BROADC |
| **Applied By:** | LAMB |
| **Air Temperature, Unit:** | 77 F |
| **% Relative Humidity:** | 67 |
| **Wind Velocity, Unit:** | 1.5 MPH |
| **Wind Direction:** | SE |
| **Dew Presence (Y/N):** | N no |
| **Soil Temperature, Unit:** | 68 F |
| **Soil Moisture:** | VERWET |
| **% Cloud Cover:** | 30 |
| **Next Moisture Occurred On:** | May-19-2017 |
| **Time to Next Moisture, Unit:** | 0 DAY |

### Crop Stage At Each Application

| | A |
|---|---|
| **Crop 1 Code, BBCH Scale:** | GLXMA BSOY |

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**Pest Stage At Each Application**

| | A |
|---|---|
| **Pest 1 Code, Type, Scale:** | IPOHE W |
| **Density, Unit:** | 4 m2 |
| **Pest 2 Code, Type, Scale:** | IPOLA W |
| **Pest 3 Code, Type, Scale:** | AMBEL W |
| **Pest 4 Code, Type, Scale:** | AMBTR W |
| **Density, Unit:** | 7 m2 |
| **Pest 5 Code, Type, Scale:** | XANST W |
| **Pest 6 Code, Type, Scale:** | ABUTH W |
| **Density, Unit:** | 1 m2 |
| **Pest 7 Code, Type, Scale:** | SETFA W |
| **Density, Unit:** | 58 m2 |
| **Pest 8 Code, Type, Scale:** | GGGAN W |
| **Pest 9 Code, Type, Scale:** | ECHCG W |
| **Density, Unit:** | 14 m2 |
| **Pest10 Code, Type, Scale:** | HIBTR W |

**Application Equipment**

| | A |
|---|---|
| **Appl. Equipment:** | 10' BACKPACK |
| **Equipment Type:** | BACCAI |
| **Operation Pressure, Unit:** | 44 PSI |
| **Nozzle Type:** | AIXR |
| **Nozzle Size:** | 11015 |
| **Nozzle Spacing, Unit:** | 18 IN |
| **Nozzles/Row:** | 6 |
| **Boom Length, Unit:** | 10 FT |
| **Boom Height, Unit:** | 20 IN |
| **Ground Speed, Unit:** | 3 MPH |
| **Carrier:** | WATER |
| **Spray Volume, Unit:** | 15 gal/ac |
| **Mix Size, Unit:** | 2 liters |
| **Propellant:** | COMCO2 |

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Project ID: 17C05H043 Study Director: Mark Loux
Sponsor Contact: Joe Argentine, AMVAC

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pest Type | | | O Other | W Weed | W Weed | W Weed | W Weed |
| Pest Code | | | | SETFA | ECHCG | AMBTR | AMARE |
| Pest Scientific Name | | | | Setaria faberi | Echinochloa cr> | Ambrosia trifi> | Amaranthus ret> |
| Pest Name | | | | Giant foxtail | Common barnyar> | Giant ragweed | Redroot pigweed |
| Crop Code | | | GLXMA | | | | |
| BBCH Scale | | | BSOY | | | | |
| Crop Scientific Name | | | Glycine max | | | | |
| Crop Name | | | Soybean | | | | |
| Rating Date | | | Jun-6-2017 | Jun-6-2017 | Jun-6-2017 | Jun-6-2017 | Jun-6-2017 |
| Rating Type | | | PHYGEN | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | | | % | % | % | % | % |
| Number of Subsamples | | | 1 | 1 | 1 | 1 | 1 |
| SE Group No. | | | 13 | 1 | 2 | 3 | 4 |
| Days After First/Last Applic. | | | 18 18 | 18 18 | 18 18 | 18 18 | 18 18 |
| Trt-Eval Interval | | | 18 DA-A | 20 DA-A | 20 DA-A | 20 DA-A | 20 DA-A |
| Plant-Eval Interval | | | 20 DP-1 | 20 DP-1 | 20 DP-1 | 20 DP-1 | 20 DP-1 |
| Days After Emergence | | | 8 DE-1 | 8 DE-1 | 8 DE-1 | 8 DE-1 | 8 DE-1 |
| Trt No. | Treatment Name | Rate Rate Unit | Appl Code | 1 | 2 | 3 | 4 | 5 |
| 1 | UNTREATED CONTROL | | | 0.0 a | 0.0 d | 0.0 e | 0.0 c | 0.0 c |
| 2 | SCEPTER | 2.8 oz/a | A | 0.0 a | 70.0 c | 66.7 d | 53.3 a | 96.7 b |
| 3 | BOUNDARY | 1.5 pt/a | A | 0.0 a | 100.0 a | 100.0 a | 26.7 b | 100.0 a |
| 4 | DUAL MAGNUM | 1 pt/a | A | 0.0 a | 96.7 ab | 96.7 a | 60.0 a | 100.0 a |
| 4 | SCEPTER | 2.1 oz/a | A | | | | | |
| 5 | DUAL MAGNUM | 1 pt/a | A | 0.0 a | 100.0 a | 100.0 a | 50.0 ab | 100.0 a |
| 5 | SCEPTER | 2.8 oz/a | A | | | | | |
| 6 | CANOPY DF | 6 oz/a | A | 0.0 a | 80.0 c | 80.0 cd | 53.3 a | 100.0 a |
| 7 | DUAL MAGNUM | 1 pt/a | A | 0.0 a | 98.3 ab | 98.3 a | 53.3 a | 100.0 a |
| 7 | CANOPY DF | 6 oz/a | A | | | | | |
| 8 | METRIBUZIN | 0.5 lb/a | A | 0.0 a | 73.3 c | 76.7 cd | 58.3 a | 100.0 a |
| 8 | SCEPTER | 2.1 oz/a | A | | | | | |
| 9 | METRIBUZIN | 0.5 lb/a | A | 0.0 a | 83.3 bc | 81.7 bc | 50.0 ab | 100.0 a |
| 9 | SCEPTER | 2.8 oz/a | A | | | | | |
| 10 | DUAL MAGNUM | 1 pt/a | A | 0.0 a | 100.0 a | 100.0 a | 56.7 a | 100.0 a |
| 10 | SCEPTER | 2.1 oz/a | A | | | | | |
| 10 | METRIBUZIN | 0.5 lb/a | A | | | | | |
| 11 | DUAL MAGNUM | 1 pt/a | A | 0.0 a | 98.3 ab | 95.0 ab | 53.3 a | 100.0 a |
| 11 | SCEPTER | 2.8 oz/a | A | | | | | |
| 11 | METRIBUZIN | 0.5 lb/a | A | | | | | |
| 12 | ENGENIA | 12.8 fl oz/a | A | 0.0 a | 74.3 c | 74.3 cd | 73.3 a | 98.3 ab |
| 12 | SCEPTER | 2.1 oz/a | A | | | | | |
| 13 | DUAL MAGNUM | 1 pt/a | A | 0.0 a | 100.0 a | 100.0 a | 58.3 a | 100.0 a |
| 13 | ENGENIA | 12.8 fl oz/a | A | | | | | |
| 13 | SCEPTER | 2.1 oz/a | A | | | | | |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pest Type | | | O Other | W Weed | W Weed | W Weed | W Weed |
| Pest Code | | | | SETFA | ECHCG | AMBTR | AMARE |
| Pest Scientific Name | | | | Setaria faberi | Echinochloa cr> | Ambrosia trifi> | Amaranthus ret> |
| Pest Name | | | | Giant foxtail | Common barnyar> | Giant ragweed | Redroot pigweed |
| Crop Code | | | GLXMA | | | | |
| BBCH Scale | | | BSOY | | | | |
| Crop Scientific Name | | | Glycine max | | | | |
| Crop Name | | | Soybean | | | | |
| Rating Date | | | Jun-6-2017 | Jun-6-2017 | Jun-6-2017 | Jun-6-2017 | Jun-6-2017 |
| Rating Type | | | PHYGEN | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | | | % | % | % | % | % |
| Number of Subsamples | | | 1 | 1 | 1 | 1 | 1 |
| SE Group No. | | | 13 | 1 | 2 | 3 | 4 |
| Days After First/Last Applic. | | | 18 18 | 18 18 | 18 18 | 18 18 | 18 18 |
| Trt-Eval Interval | | | 18 DA-A | 20 DA-A | 20 DA-A | 20 DA-A | 20 DA-A |
| Plant-Eval Interval | | | 20 DP-1 | 20 DP-1 | 20 DP-1 | 20 DP-1 | 20 DP-1 |
| Days After Emergence | | | 8 DE-1 | 8 DE-1 | 8 DE-1 | 8 DE-1 | 8 DE-1 |
| Trt No. | Treatment Name | Rate Rate Unit | Appl Code | 1 | 2 | 3 | 4 | 5 |
| 14 | DUAL MAGNUM | 1 pt/a | A | 0.0 a | 96.7 ab | 96.7 a | 60.0 a | 100.0 a |
| 14 | SCEPTER | 2.1 oz/a | A | | | | | |
| 14 | VALOR | 2.4 oz/a | A | | | | | |
| LSD P=.05 | | | | . | 15.26 | 14.17 | 24.64 | 2.80 |
| Standard Deviation | | | | 0.00 | 9.09 | 8.44 | 14.68 | 1.67 |
| CV | | | | 0.0 | 10.87 | 10.14 | 29.08 | 1.81 |
| Bartlett's X2 | | | | 0.0 | 15.487 | 13.449 | 4.141 | 0.877 |
| P(Bartlett's X2) | | | | . | 0.05 | 0.097 | 0.981 | 0.349 |
| Replicate F | | | | 0.000 | 4.864 | 7.006 | 6.376 | 1.918 |
| Replicate Prob(F) | | | | 1.0000 | 0.0160 | 0.0037 | 0.0056 | 0.1671 |
| Treatment F | | | | 0.000 | 25.773 | 29.744 | 4.298 | 762.312 |
| Treatment Prob(F) | | | | 1.0000 | 0.0001 | 0.0001 | 0.0008 | 0.0001 |

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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Pest Type | | | | W Weed | W Weed | O Other | W Weed | W Weed |
| Pest Code | | | | CHEAL | IPOHE | | SETFA | ECHCG |
| Pest Scientific Name | | | | Chenopodium al> | Ipomoea hedera> | | Setaria faberi | Echinochloa cr> |
| Pest Name | | | | common lambsqu> | ivy-leaf morni> | | Giant foxtail | Common barnyar> |
| Crop Code | | | | | | GLXMA | | |
| BBCH Scale | | | | | | BSOY | | |
| Crop Scientific Name | | | | | | Glycine max | | |
| Crop Name | | | | | | Soybean | | |
| Rating Date | | | | Jun-6-2017 | Jun-6-2017 | Jun-14-2017 | Jun-14-2017 | Jun-14-2017 |
| Rating Type | | | | CONTRO | CONTRO | PHYGEN | CONTRO | CONTRO |
| Rating Unit | | | | % | % | % | % | % |
| Number of Subsamples | | | | 1 | 1 | 1 | 1 | 1 |
| SE Group No. | | | | 5 | 6 | 14 | 7 | 8 |
| Days After First/Last Applic. | | | | 18 18 | 18 18 | 26 26 | 26 26 | 26 26 |
| Trt-Eval Interval | | | | 20 DA-A | 20 DA-A | 26 DA-A | 28 DA-A | 28 DA-A |
| Plant-Eval Interval | | | | 20 DP-1 | 20 DP-1 | 28 DP-1 | 28 DP-1 | 28 DP-1 |
| Days After Emergence | | | | 8 DE-1 | 8 DE-1 | 16 DE-1 | 16 DE-1 | 16 DE-1 |
| Trt No. | Treatment Name | Rate | Rate Unit | Appl Code | 6 | 7 | 8 | 9 | 10 |
| 1 | UNTREATED CONTROL | | | | 0.0 c | 0.0 b | 0.0 a | 0.0 e | 0.0 c |
| 2 | SCEPTER | 2.8 | oz/a | A | 100.0 a | 90.0 a | 0.0 a | 43.3 d | 40.0 b |
| 3 | BOUNDARY | 1.5 | pt/a | A | 100.0 a | 96.7 a | 0.0 a | 93.3 ab | 91.7 a |
| 4 | DUAL MAGNUM | 1 | pt/a | A | 99.3 b | 100.0 a | 0.0 a | 93.3 ab | 90.0 a |
| 4 | SCEPTER | 2.1 | oz/a | A | | | | | |
| 5 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 96.7 a | 0.0 a | 90.0 ab | 88.3 a |
| 5 | SCEPTER | 2.8 | oz/a | A | | | | | |
| 6 | CANOPY DF | 6 | oz/a | A | 100.0 a | 96.7 a | 0.0 a | 56.7 c | 53.3 b |
| 7 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 100.0 a | 0.0 a | 83.3 b | 83.3 a |
| 7 | CANOPY DF | 6 | oz/a | A | | | | | |
| 8 | METRIBUZIN | 0.5 | lb/a | A | 100.0 a | 93.3 a | 0.0 a | 43.3 d | 46.7 b |
| 8 | SCEPTER | 2.1 | oz/a | A | | | | | |
| 9 | METRIBUZIN | 0.5 | lb/a | A | 100.0 a | 96.7 a | 0.0 a | 53.3 cd | 50.0 b |
| 9 | SCEPTER | 2.8 | oz/a | A | | | | | |
| 10 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 96.7 a | 0.0 a | 96.7 a | 95.0 a |
| 10 | SCEPTER | 2.1 | oz/a | A | | | | | |
| 10 | METRIBUZIN | 0.5 | lb/a | A | | | | | |
| 11 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 93.3 a | 0.0 a | 96.0 a | 91.7 a |
| 11 | SCEPTER | 2.8 | oz/a | A | | | | | |
| 11 | METRIBUZIN | 0.5 | lb/a | A | | | | | |
| 12 | ENGENIA | 12.8 | fl oz/a | A | 100.0 a | 96.7 a | 0.0 a | 63.3 c | 53.3 b |
| 12 | SCEPTER | 2.1 | oz/a | A | | | | | |
| 13 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 96.7 a | 0.0 a | 89.3 ab | 88.3 a |
| 13 | ENGENIA | 12.8 | fl oz/a | A | | | | | |
| 13 | SCEPTER | 2.1 | oz/a | A | | | | | |

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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Pest Type | | | W Weed | W Weed | O Other | W Weed | W Weed |
| Pest Code | | | CHEAL | IPOHE | | SETFA | ECHCG |
| Pest Scientific Name | | | Chenopodium al> | Ipomoea hedera> | | Setaria faberi | Echinochloa cr> |
| Pest Name | | | common lambsqu> | ivy-leaf morni> | | Giant foxtail | Common barnyar> |
| Crop Code | | | | | GLXMA | | |
| BBCH Scale | | | | | BSOY | | |
| Crop Scientific Name | | | | | Glycine max | | |
| Crop Name | | | | | Soybean | | |
| Rating Date | | | Jun-6-2017 | Jun-6-2017 | Jun-14-2017 | Jun-14-2017 | Jun-14-2017 |
| Rating Type | | | CONTRO | CONTRO | PHYGEN | CONTRO | CONTRO |
| Rating Unit | | | % | % | % | % | % |
| Number of Subsamples | | | 1 | 1 | 1 | 1 | 1 |
| SE Group No. | | | 5 | 6 | 14 | 7 | 8 |
| Days After First/Last Applic. | | | 18 18 | 18 18 | 26 26 | 26 26 | 26 26 |
| Trt-Eval Interval | | | 20 DA-A | 20 DA-A | 26 DA-A | 28 DA-A | 28 DA-A |
| Plant-Eval Interval | | | 20 DP-1 | 20 DP-1 | 28 DP-1 | 28 DP-1 | 28 DP-1 |
| Days After Emergence | | | 8 DE-1 | 8 DE-1 | 16 DE-1 | 16 DE-1 | 16 DE-1 |
| Trt No. | Treatment Name | Rate | Rate Unit | Appl Code | 6 | 7 | 8 | 9 | 10 |
| 14 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 100.0 a | 0.0 a | 90.0 ab | 88.3 a |
| 14 | SCEPTER | 2.1 | oz/a | A | | | | | |
| 14 | VALOR | 2.4 | oz/a | A | | | | | |
| LSD P=.05 | | | | | 0.52 | 10.08 | . | 11.73 | 14.35 |
| Standard Deviation | | | | | 0.31 | 6.01 | 0.00 | 6.99 | 8.55 |
| CV | | | | | 0.33 | 6.71 | 0.0 | 9.87 | 12.47 |
| Bartlett's X2 | | | | | 0.0 | 2.808 | 0.0 | 12.847 | 14.469 |
| P(Bartlett's X2) | | | | | . | 0.971 | . | 0.38 | 0.208 |
| Replicate F | | | | | 1.000 | 0.858 | 0.000 | 6.632 | 6.158 |
| Replicate Prob(F) | | | | | 0.3816 | 0.4357 | 1.0000 | 0.0047 | 0.0065 |
| Treatment F | | | | | 22477.925 | 55.838 | 0.000 | 50.245 | 32.910 |
| Treatment Prob(F) | | | | | 0.0001 | 0.0001 | 1.0000 | 0.0001 | 0.0001 |

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Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

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| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Pest Type | | | | W Weed | W Weed | W Weed | W Weed | W Weed | | |
| Pest Code | | | | AMBTR | AMARE | CHEAL | IPOHE | SETFA | | |
| Pest Scientific Name | | | | Ambrosia trifi> | Amaranthus ret> | Chenopodium al> | Ipomoea hedera> | Setaria faberi | | |
| Pest Name | | | | Giant ragweed | Redroot pigweed | common lambsqu> | ivy-leaf morni> | Giant foxtail | | |
| Crop Code | | | | | | | | | | |
| BBCH Scale | | | | | | | | | | |
| Crop Scientific Name | | | | | | | | | | |
| Crop Name | | | | | | | | | | |
| Rating Date | | | | Jun-14-2017 | Jun-14-2017 | Jun-14-2017 | Jun-14-2017 | Jun-27-2017 | | |
| Rating Type | | | | CONTRO | CONTRO | CONTRO | CONTRO | CONTRO | | |
| Rating Unit | | | | % | % | % | % | % | | |
| Number of Subsamples | | | | 1 | 1 | 1 | 1 | 1 | | |
| SE Group No. | | | | 9 | 10 | 11 | 12 | 15 | | |
| Days After First/Last Applic. | | | | 26 26 | 26 26 | 26 26 | 26 26 | 39 39 | | |
| Trt-Eval Interval | | | | 28 DA-A | 28 DA-A | 28 DA-A | 28 DA-A | 39 DA-A | | |
| Plant-Eval Interval | | | | 28 DP-1 | 28 DP-1 | 28 DP-1 | 28 DP-1 | 41 DP-1 | | |
| Days After Emergence | | | | 16 DE-1 | 16 DE-1 | 16 DE-1 | 16 DE-1 | 29 DE-1 | | |
| Trt No. | Treatment Name | Rate | Rate Unit | Appl Code | 11 | 12 | 13 | 14 | 15 | |
| 1 | UNTREATED CONTROL | | | | 0.0 c | 0.0 c | 0.0 c | 0.0 e | 0.0 d | |
| 2 | SCEPTER | 2.8 | oz/a | A | 43.3 b | 98.3 b | 98.3 a | 83.3 a-d | 65.0 bc | |
| 3 | BOUNDARY | 1.5 | pt/a | A | 10.0 c | 100.0 a | 90.0 b | 93.3 ab | 90.0 a | |
| 4 | DUAL MAGNUM | 1 | pt/a | A | 43.3 b | 100.0 a | 96.7 a | 85.0 a-d | 88.3 a | |
| 4 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 5 | DUAL MAGNUM | 1 | pt/a | A | 40.0 b | 100.0 a | 100.0 a | 80.0 bcd | 91.7 a | |
| 5 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 6 | CANOPY DF | 6 | oz/a | A | 50.0 b | 100.0 a | 100.0 a | 86.7 a-d | 50.0 c | |
| 7 | DUAL MAGNUM | 1 | pt/a | A | 46.7 b | 100.0 a | 100.0 a | 81.7 a-d | 85.0 a | |
| 7 | CANOPY DF | 6 | oz/a | A | | | | | | |
| 8 | METRIBUZIN | 0.5 | lb/a | A | 50.0 b | 100.0 a | 100.0 a | 73.3 d | 65.0 bc | |
| 8 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 9 | METRIBUZIN | 0.5 | lb/a | A | 46.7 b | 100.0 a | 100.0 a | 76.7 cd | 78.3 ab | |
| 9 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 10 | DUAL MAGNUM | 1 | pt/a | A | 43.3 b | 100.0 a | 100.0 a | 86.7 a-d | 92.7 a | |
| 10 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 10 | METRIBUZIN | 0.5 | lb/a | A | | | | | | |
| 11 | DUAL MAGNUM | 1 | pt/a | A | 53.3 b | 100.0 a | 100.0 a | 88.3 abc | 94.3 a | |
| 11 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 11 | METRIBUZIN | 0.5 | lb/a | A | | | | | | |
| 12 | ENGENIA | 12.8 | fl oz/a | A | 75.0 a | 100.0 a | 100.0 a | 95.0 a | 85.0 a | |
| 12 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 13 | DUAL MAGNUM | 1 | pt/a | A | 55.0 ab | 100.0 a | 100.0 a | 93.3 ab | 92.7 a | |
| 13 | ENGENIA | 12.8 | fl oz/a | A | | | | | | |
| 13 | SCEPTER | 2.1 | oz/a | A | | | | | | |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pest Type | | | W Weed | W Weed | W Weed | W Weed | W Weed |
| Pest Code | | | AMBTR | AMARE | CHEAL | IPOHE | SETFA |
| Pest Scientific Name | | | Ambrosia trifi> | Amaranthus ret> | Chenopodium al> | Ipomoea hedera> | Setaria faberi |
| Pest Name | | | Giant ragweed | Redroot pigweed | common lambsqu> | ivy-leaf morni> | Giant foxtail |
| Crop Code | | | | | | | |
| BBCH Scale | | | | | | | |
| Crop Scientific Name | | | | | | | |
| Crop Name | | | | | | | |
| Rating Date | | | Jun-14-2017 | Jun-14-2017 | Jun-14-2017 | Jun-14-2017 | Jun-27-2017 |
| Rating Type | | | CONTRO | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | | | % | % | % | % | % |
| Number of Subsamples | | | 1 | 1 | 1 | 1 | 1 |
| SE Group No. | | | 9 | 10 | 11 | 12 | 15 |
| Days After First/Last Applic. | | | 26 26 | 26 26 | 26 26 | 26 26 | 39 39 |
| Trt-Eval Interval | | | 28 DA-A | 28 DA-A | 28 DA-A | 28 DA-A | 39 DA-A |
| Plant-Eval Interval | | | 28 DP-1 | 28 DP-1 | 28 DP-1 | 28 DP-1 | 41 DP-1 |
| Days After Emergence | | | 16 DE-1 | 16 DE-1 | 16 DE-1 | 16 DE-1 | 29 DE-1 |
| Trt No. | Treatment Name | Rate Rate Unit | Appl Code | 11 | 12 | 13 | 14 | 15 |
| 14 | DUAL MAGNUM | 1 pt/a | A | 53.3 b | 100.0 a | 100.0 a | 91.7 ab | 91.0 a |
| 14 | SCEPTER | 2.1 oz/a | A | | | | | |
| 14 | VALOR | 2.4 oz/a | A | | | | | |
| LSD P=.05 | | | | 20.84 | 1.29 | 5.07 | 14.69 | 17.73 |
| Standard Deviation | | | | 12.42 | 0.77 | 3.02 | 8.75 | 10.57 |
| CV | | | | 28.5 | 0.83 | 3.29 | 10.99 | 13.84 |
| Bartlett's X2 | | | | 2.542 | 0.0 | 2.583 | 10.222 | 19.5 |
| P(Bartlett's X2) | | | | 0.996 | . | 0.275 | 0.597 | 0.034* |
| Replicate F | | | | 3.103 | 1.000 | 2.548 | 2.121 | 1.572 |
| Replicate Prob(F) | | | | 0.0619 | 0.3816 | 0.0976 | 0.1401 | 0.2268 |
| Treatment F | | | | 6.658 | 3591.770 | 232.226 | 22.195 | 17.712 |
| Treatment Prob(F) | | | | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

| | | | | | | |
|---|---|---|---|---|---|---|
| Pest Type | | | W Weed | W Weed | W Weed | W Weed |
| Pest Code | | | ECHCG | AMBTR | AMARE | CHEAL |
| Pest Scientific Name | | | Echinochloa cr> | Ambrosia trifi> | Amaranthus ret> | Chenopodium al> |
| Pest Name | | | Common barnyar> | Giant ragweed | Redroot pigweed | common lambsqu> |
| Crop Code | | | | | | |
| BBCH Scale | | | | | | |
| Crop Scientific Name | | | | | | |
| Crop Name | | | | | | |
| Rating Date | | | Jun-27-2017 | Jun-27-2017 | Jun-27-2017 | Jun-27-2017 |
| Rating Type | | | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | | | % | % | % | % |
| Number of Subsamples | | | 1 | 1 | 1 | 1 |
| SE Group No. | | | 16 | 17 | 18 | 19 |
| Days After First/Last Applic. | | | 39 39 | 39 39 | 39 39 | 39 39 |
| Trt-Eval Interval | | | 39 DA-A | 39 DA-A | 39 DA-A | 39 DA-A |
| Plant-Eval Interval | | | 41 DP-1 | 41 DP-1 | 41 DP-1 | 41 DP-1 |
| Days After Emergence | | | 29 DE-1 | 29 DE-1 | 29 DE-1 | 29 DE-1 |
| Trt No. | Treatment Name | Rate Unit | Appl Code | 16 | 17 | 18 | 19 |
| 1 | UNTREATED CONTROL | | | 0.0 c | 0.0 a | 0.0 c | 0.0 b |
| 2 | SCEPTER | 2.8 oz/a | A | 36.7 b | 36.7 a | 96.7 ab | 96.7 a |
| 3 | BOUNDARY | 1.5 pt/a | A | 90.0 a | 0.0 a | 95.0 b | 95.0 a |
| 4 | DUAL MAGNUM | 1 pt/a | A | 85.0 a | 30.0 a | 100.0 a | 96.7 a |
| 4 | SCEPTER | 2.1 oz/a | A | | | | |
| 5 | DUAL MAGNUM | 1 pt/a | A | 88.3 a | 33.3 a | 100.0 a | 96.7 a |
| 5 | SCEPTER | 2.8 oz/a | A | | | | |
| 6 | CANOPY DF | 6 oz/a | A | 43.3 b | 30.0 a | 100.0 a | 100.0 a |
| 7 | DUAL MAGNUM | 1 pt/a | A | 86.7 a | 33.3 a | 99.3 a | 100.0 a |
| 7 | CANOPY DF | 6 oz/a | A | | | | |
| 8 | METRIBUZIN | 0.5 lb/a | A | 43.3 b | 30.0 a | 100.0 a | 100.0 a |
| 8 | SCEPTER | 2.1 oz/a | A | | | | |
| 9 | METRIBUZIN | 0.5 lb/a | A | 43.3 b | 56.7 a | 100.0 a | 100.0 a |
| 9 | SCEPTER | 2.8 oz/a | A | | | | |
| 10 | DUAL MAGNUM | 1 pt/a | A | 85.0 a | 43.3 a | 100.0 a | 100.0 a |
| 10 | SCEPTER | 2.1 oz/a | A | | | | |
| 10 | METRIBUZIN | 0.5 lb/a | A | | | | |
| 11 | DUAL MAGNUM | 1 pt/a | A | 88.3 a | 40.0 a | 100.0 a | 100.0 a |
| 11 | SCEPTER | 2.8 oz/a | A | | | | |
| 11 | METRIBUZIN | 0.5 lb/a | A | | | | |
| 12 | ENGENIA | 12.8 fl oz/a | A | 43.3 b | 55.0 a | 100.0 a | 100.0 a |
| 12 | SCEPTER | 2.1 oz/a | A | | | | |
| 13 | DUAL MAGNUM | 1 pt/a | A | 83.3 a | 36.7 a | 98.3 ab | 100.0 a |
| 13 | ENGENIA | 12.8 fl oz/a | A | | | | |
| 13 | SCEPTER | 2.1 oz/a | A | | | | |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

| | | | | | | |
|---|---|---|---|---|---|---|
| Pest Type | | | W Weed | W Weed | W Weed | W Weed |
| Pest Code | | | ECHCG | AMBTR | AMARE | CHEAL |
| Pest Scientific Name | | | Echinochloa cr> | Ambrosia trifi> | Amaranthus ret> | Chenopodium al> |
| Pest Name | | | Common barnyar> | Giant ragweed | Redroot pigweed | common lambsqu> |
| Crop Code | | | | | | |
| BBCH Scale | | | | | | |
| Crop Scientific Name | | | | | | |
| Crop Name | | | | | | |
| Rating Date | | | Jun-27-2017 | Jun-27-2017 | Jun-27-2017 | Jun-27-2017 |
| Rating Type | | | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | | | % | % | % | % |
| Number of Subsamples | | | 1 | 1 | 1 | 1 |
| SE Group No. | | | 16 | 17 | 18 | 19 |
| Days After First/Last Applic. | | | 39 39 | 39 39 | 39 39 | 39 39 |
| Trt-Eval Interval | | | 39 DA-A | 39 DA-A | 39 DA-A | 39 DA-A |
| Plant-Eval Interval | | | 41 DP-1 | 41 DP-1 | 41 DP-1 | 41 DP-1 |
| Days After Emergence | | | 29 DE-1 | 29 DE-1 | 29 DE-1 | 29 DE-1 |
| Trt No. | Treatment Name | Rate Unit | Appl Code | 16 | 17 | 18 | 19 |
| 14 | DUAL MAGNUM | 1 pt/a | A | 85.0 a | 33.3 a | 100.0 a | 100.0 a |
| 14 | SCEPTER | 2.1 oz/a | A | | | | |
| 14 | VALOR | 2.4 oz/a | A | | | | |
| LSD P=.05 | | | | 16.94 | 36.13 | 3.66 | 5.24 |
| Standard Deviation | | | | 10.09 | 21.53 | 2.18 | 3.12 |
| CV | | | | 15.67 | 65.76 | 2.37 | 3.4 |
| Bartlett's X2 | | | | 13.165 | 5.597 | 4.211 | 0.53 |
| P(Bartlett's X2) | | | | 0.283 | 0.899 | 0.24 | 0.912 |
| Replicate F | | | | 9.331 | 6.327 | 1.296 | 4.944 |
| Replicate Prob(F) | | | | 0.0009 | 0.0058 | 0.2906 | 0.0152 |
| Treatment F | | | | 24.056 | 1.708 | 444.641 | 215.648 |
| Treatment Prob(F) | | | | 0.0001 | 0.1189 | 0.0001 | 0.0001 |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Pest Type | | | | W Weed | W Weed | W Weed | W Weed | W Weed | | |
| Pest Code | | | | IPOHE | SIDSP | SETFA | ECHCG | AMBTR | | |
| Pest Scientific Name | | | | Ipomoea hedera> | Sida spinosa | Setaria faberi | Echinochloa cr> | Ambrosia trifi> | | |
| Pest Name | | | | ivy-leaf morni> | Prickly sida | Giant foxtail | Common barnyar> | Giant ragweed | | |
| Crop Code | | | | | | | | | | |
| BBCH Scale | | | | | | | | | | |
| Crop Scientific Name | | | | | | | | | | |
| Crop Name | | | | | | | | | | |
| Rating Date | | | | Jun-27-2017 | Jun-27-2017 | Jul-10-2017 | Jul-10-2017 | Jul-10-2017 | | |
| Rating Type | | | | CONTRO | CONTRO | CONTRO | CONTRO | CONTRO | | |
| Rating Unit | | | | % | % | % | % | % | | |
| Number of Subsamples | | | | 1 | 1 | 1 | 1 | 1 | | |
| SE Group No. | | | | 20 | 21 | 22 | 23 | 24 | | |
| Days After First/Last Applic. | | | | 39 39 | 39 39 | 52 52 | 52 52 | 52 52 | | |
| Trt-Eval Interval | | | | 39 DA-A | 39 DA-A | 52 DA-A | 52 DA-A | 52 DA-A | | |
| Plant-Eval Interval | | | | 41 DP-1 | 41 DP-1 | 54 DP-1 | 54 DP-1 | 54 DP-1 | | |
| Days After Emergence | | | | 29 DE-1 | 29 DE-1 | 42 DE-1 | 42 DE-1 | 42 DE-1 | | |
| Trt No. | Treatment Name | Rate | Rate Unit | Appl Code | 20 | 21 | 22 | 23 | 24 | |
| 1 | UNTREATED CONTROL | | | | 0.0 e | 0.0 c | 0.0 d | 0.0 d | 0.0 a | |
| 2 | SCEPTER | 2.8 | oz/a | A | 70.0 cd | 96.7 b | 90.0 ab | 46.7 c | 26.7 a | |
| 3 | BOUNDARY | 1.5 | pt/a | A | 78.9 a-d | 100.0 a | 96.0 ab | 96.0 a | 0.0 a | |
| 4 | DUAL MAGNUM | 1 | pt/a | A | 71.7 bcd | 100.0 a | 96.0 ab | 83.3 b | 26.7 a | |
| 4 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 5 | DUAL MAGNUM | 1 | pt/a | A | 76.4 a-d | 100.0 a | 98.3 a | 90.0 ab | 30.0 a | |
| 5 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 6 | CANOPY DF | 6 | oz/a | A | 85.0 a-d | 100.0 a | 71.7 c | 56.7 c | 26.7 a | |
| 7 | DUAL MAGNUM | 1 | pt/a | A | 80.0 a-d | 98.3 ab | 92.7 ab | 85.0 ab | 26.7 a | |
| 7 | CANOPY DF | 6 | oz/a | A | | | | | | |
| 8 | METRIBUZIN | 0.5 | lb/a | A | 86.7 abc | 100.0 a | 93.3 ab | 53.3 c | 26.7 a | |
| 8 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 9 | METRIBUZIN | 0.5 | lb/a | A | 75.0 bcd | 100.0 a | 94.3 ab | 56.7 c | 30.0 a | |
| 9 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 10 | DUAL MAGNUM | 1 | pt/a | A | 68.9 d | 100.0 a | 96.0 ab | 90.0 ab | 43.3 a | |
| 10 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 10 | METRIBUZIN | 0.5 | lb/a | A | | | | | | |
| 11 | DUAL MAGNUM | 1 | pt/a | A | 73.3 bcd | 100.0 a | 95.0 ab | 86.7 ab | 36.7 a | |
| 11 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 11 | METRIBUZIN | 0.5 | lb/a | A | | | | | | |
| 12 | ENGENIA | 12.8 | fl oz/a | A | 93.3 a | 100.0 a | 88.3 b | 53.3 c | 40.0 a | |
| 12 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 13 | DUAL MAGNUM | 1 | pt/a | A | 88.3 ab | 98.3 ab | 95.0 ab | 88.3 ab | 33.3 a | |
| 13 | ENGENIA | 12.8 | fl oz/a | A | | | | | | |
| 13 | SCEPTER | 2.1 | oz/a | A | | | | | | |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pest Type | | | W Weed | W Weed | W Weed | W Weed | W Weed |
| Pest Code | | | IPOHE | SIDSP | SETFA | ECHCG | AMBTR |
| Pest Scientific Name | | | Ipomoea hedera> | Sida spinosa | Setaria faberi | Echinochloa cr> | Ambrosia trifi> |
| Pest Name | | | ivy-leaf morni> | Prickly sida | Giant foxtail | Common barnyar> | Giant ragweed |
| Crop Code | | | | | | | |
| BBCH Scale | | | | | | | |
| Crop Scientific Name | | | | | | | |
| Crop Name | | | | | | | |
| Rating Date | | | Jun-27-2017 | Jun-27-2017 | Jul-10-2017 | Jul-10-2017 | Jul-10-2017 |
| Rating Type | | | CONTRO | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | | | % | % | % | % | % |
| Number of Subsamples | | | 1 | 1 | 1 | 1 | 1 |
| SE Group No. | | | 20 | 21 | 22 | 23 | 24 |
| Days After First/Last Applic. | | | 39 39 | 39 39 | 52 52 | 52 52 | 52 52 |
| Trt-Eval Interval | | | 39 DA-A | 39 DA-A | 52 DA-A | 52 DA-A | 52 DA-A |
| Plant-Eval Interval | | | 41 DP-1 | 41 DP-1 | 54 DP-1 | 54 DP-1 | 54 DP-1 |
| Days After Emergence | | | 29 DE-1 | 29 DE-1 | 42 DE-1 | 42 DE-1 | 42 DE-1 |
| Trt No. | Treatment Name | Rate Unit | Appl Code | 20 | 21 | 22 | 23 | 24 |
| 14 | DUAL MAGNUM | 1 pt/a | A | 76.7 a-d | 100.0 a | 96.7 ab | 81.7 b | 30.0 a |
| 14 | SCEPTER | 2.1 oz/a | A | | | | | |
| 14 | VALOR | 2.4 oz/a | A | | | | | |
| LSD P=.05 | | | | 17.57 | 3.15 | 8.88 | 12.24 | 29.44 |
| Standard Deviation | | | | 10.40 | 1.88 | 5.29 | 7.30 | 17.54 |
| CV | | | | 14.22 | 2.03 | 6.16 | 10.55 | 65.2 |
| Bartlett's X2 | | | | 16.131 | 1.344 | 10.82 | 9.122 | 3.54 |
| P(Bartlett's X2) | | | | 0.136 | 0.511 | 0.458 | 0.521 | 0.981 |
| Replicate F | | | | 1.839 | 1.182 | 0.874 | 6.317 | 6.717 |
| Replicate Prob(F) | | | | 0.1817 | 0.3227 | 0.4293 | 0.0058 | 0.0045 |
| Treatment F | | | | 13.756 | 602.442 | 70.230 | 38.912 | 1.541 |
| Treatment Prob(F) | | | | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.1684 |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Pest Type | | | W Weed | | W Weed | | W Weed | | W Weed | |
| Pest Code | | | AMARE | | CHEAL | | IPOHE | | SIDSP | |
| Pest Scientific Name | | | Amaranthus ret> | | Chenopodium al> | | Ipomoea hedera> | | Sida spinosa | |
| Pest Name | | | Redroot pigweed | | common lambsqu> | | ivy-leaf morni> | | Prickly sida | |
| Crop Code | | | | | | | | | | |
| BBCH Scale | | | | | | | | | | |
| Crop Scientific Name | | | | | | | | | | |
| Crop Name | | | | | | | | | | |
| Rating Date | | | Jul-10-2017 | | Jul-10-2017 | | Jul-10-2017 | | Jul-10-2017 | |
| Rating Type | | | CONTRO | | CONTRO | | CONTRO | | CONTRO | |
| Rating Unit | | | % | | % | | % | | % | |
| Number of Subsamples | | | 1 | | 1 | | 1 | | 1 | 1 |
| SE Group No. | | | 25 | | 26 | | 27 | | 28 | 29 |
| Days After First/Last Applic. | | | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| Trt-Eval Interval | | | 52 DA-A | | 52 DA-A | | 52 DA-A | | 52 DA-A | |
| Plant-Eval Interval | | | 54 DP-1 | | 54 DP-1 | | 54 DP-1 | | 54 DP-1 | |
| Days After Emergence | | | 42 DE-1 | | 42 DE-1 | | 42 DE-1 | | 42 DE-1 | |
| Trt No. | Treatment Name | Rate | Rate Unit | Appl Code | 25 | 26 | 27 | 28 | 29 | |
| 1 | UNTREATED CONTROL | | | | 0.0 b | 0.0 c | 0.0 b | 0.0 c | | |
| 2 | SCEPTER | 2.8 | oz/a | A | 100.0 a | 99.3 ab | 86.7 a | 96.7 ab | | |
| 3 | BOUNDARY | 1.5 | pt/a | A | 100.0 a | 95.0 b | 86.7 a | 100.0 a | | |
| 4 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 96.7 ab | 93.3 a | 98.3 ab | | |
| 4 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 5 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 100.0 a | 93.3 a | 100.0 a | | |
| 5 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 6 | CANOPY DF | 6 | oz/a | A | 100.0 a | 100.0 a | 100.0 a | 100.0 a | | |
| 7 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 100.0 a | 100.0 a | 93.3 b | | |
| 7 | CANOPY DF | 6 | oz/a | A | | | | | | |
| 8 | METRIBUZIN | 0.5 | lb/a | A | 100.0 a | 100.0 a | 93.3 a | 100.0 a | | |
| 8 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 9 | METRIBUZIN | 0.5 | lb/a | A | 100.0 a | 100.0 a | 86.7 a | 100.0 a | | |
| 9 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 10 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 100.0 a | 93.3 a | 100.0 a | | |
| 10 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 10 | METRIBUZIN | 0.5 | lb/a | A | | | | | | |
| 11 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 100.0 a | 90.0 a | 100.0 a | | |
| 11 | SCEPTER | 2.8 | oz/a | A | | | | | | |
| 11 | METRIBUZIN | 0.5 | lb/a | A | | | | | | |
| 12 | ENGENIA | 12.8 | fl oz/a | A | 100.0 a | 100.0 a | 100.0 a | 100.0 a | | |
| 12 | SCEPTER | 2.1 | oz/a | A | | | | | | |
| 13 | DUAL MAGNUM | 1 | pt/a | A | 100.0 a | 100.0 a | 86.7 a | 100.0 a | | |
| 13 | ENGENIA | 12.8 | fl oz/a | A | | | | | | |
| 13 | SCEPTER | 2.1 | oz/a | A | | | | | | |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Pest Type | | | W Weed | W Weed | W Weed | W Weed | | |
| Pest Code | | | AMARE | CHEAL | IPOHE | SIDSP | | |
| Pest Scientific Name | | | Amaranthus ret> | Chenopodium al> | Ipomoea hedera> | Sida spinosa | | |
| Pest Name | | | Redroot pigweed | common lambsqu> | ivy-leaf morni> | Prickly sida | | |
| Crop Code | | | | | | | | |
| BBCH Scale | | | | | | | | |
| Crop Scientific Name | | | | | | | | |
| Crop Name | | | | | | | | |
| Rating Date | | | Jul-10-2017 | Jul-10-2017 | Jul-10-2017 | Jul-10-2017 | | |
| Rating Type | | | CONTRO | CONTRO | CONTRO | CONTRO | | |
| Rating Unit | | | % | % | % | % | | |
| Number of Subsamples | | | 1 | 1 | 1 | 1 | 1 | |
| SE Group No. | | | 25 | 26 | 27 | 28 | 29 | |
| Days After First/Last Applic. | | | 52 52 | 52 52 | 52 52 | 52 52 | | |
| Trt-Eval Interval | | | 52 DA-A | 52 DA-A | 52 DA-A | 52 DA-A | | |
| Plant-Eval Interval | | | 54 DP-1 | 54 DP-1 | 54 DP-1 | 54 DP-1 | | |
| Days After Emergence | | | 42 DE-1 | 42 DE-1 | 42 DE-1 | 42 DE-1 | | |
| Trt No. | Treatment Name | Rate Unit | Appl Code | 25 | 26 | 27 | 28 | 29 |
| 14 | DUAL MAGNUM | 1 pt/a | A | 100.0 a | 100.0 a | 100.0 a | 100.0 a | |
| 14 | SCEPTER | 2.1 oz/a | A | | | | | |
| 14 | VALOR | 2.4 oz/a | A | | | | | |
| LSD P=.05 | | | | . | 4.47 | 16.24 | 5.62 | . |
| Standard Deviation | | | | 0.00 | 2.66 | 9.67 | 3.35 | . |
| CV | | | | 0.0 | 2.89 | 11.19 | 3.64 | . |
| Bartlett's X2 | | | | 0.0 | 5.204 | 3.379 | 3.254 | . |
| P(Bartlett's X2) | | | | . | 0.074 | 0.908 | 0.196 | . |
| Replicate F | | | | 0.000 | 2.444 | 0.534 | 2.600 | |
| Replicate Prob(F) | | | | 1.0000 | 0.1065 | 0.5924 | 0.0935 | |
| Treatment F | | | | 0.000 | 298.601 | 20.738 | 188.592 | |
| Treatment Prob(F) | | | | 1.0000 | 0.0001 | 0.0001 | 0.0001 | |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns:Yates=20
Could not calculate LSD (% mean diff) for columns 1,8,25,29 because error mean square = 0.

# The Ohio State University

**SCEPTER TANK MIXTURES FOR PRE APPLICATIONS IN SOYBEANS**

Trial ID: 17 PRES1 Location: South Charleston, OH Trial Year: 2017
Protocol ID: 17 PRES 1 Investigator: Dr. Mark M. Loux
Project ID: 17C05H043 Study Director: Mark Loux
Sponsor Contact: Joe Argentine, AMVAC

Pest Type
O, Other, G-BYRO7, G-OthStg = Other animal or nematode
W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
Pest Code
SETFA, Setaria faberi, Giant foxtail = US
ECHCG, Echinochloa crus-galli, Common barnyard grass = US
AMBTR, Ambrosia trifida, Giant ragweed = US
AMARE, Amaranthus retroflexus, Redroot pigweed = US
CHEAL, Chenopodium album, common lambsquarters = US
IPOHE, Ipomoea hederacea, ivy-leaf morning glory = US
SIDSP, Sida spinosa, Prickly sida = US
Crop Code
GLXMA, BSOY, Glycine max, Soybean = US
Rating Type
PHYGEN = phytotoxicity - general / injury
CONTRO = control / burndown or knockdown
Rating Unit
% = percent
Plant-Eval Interval
20 DP-1 = 1 GLXMA May-17-2017
28 DP-1 = 1 GLXMA May-17-2017
41 DP-1 = 1 GLXMA May-17-2017
54 DP-1 = 1 GLXMA May-17-2017