

Ohio State University Horticulture and Crop Science

PRE MIXTURES OF RIMSULFURON, ISOXAFLUTOLE, AND ATRAZINE

USA-07-001

Trial ID: 07PREC2

Study Dir.: Anthony F. Dobbels

Location: WESTERN BRANCH F-8

Investigator: Dr. Mark M. Loux

GENERAL TRIAL INFORMATION

Study Director: Anthony F. Dobbels

Affiliation: OSU

Investigator: Dr. Mark M. Loux

Affiliation: OSU

TRIAL LOCATION

Trial Status: Complete

State/Prov.: Ohio

Initiation Date: Apr/01/2007

Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

| Weed Code | Common Name | Scientific Name |
|-----------|------------------------|-------------------------|
| 1. SETFA | Giant foxtail | Setaria faberi |
| 2. CHEAL | Common lambsquarters | Chenopodium album |
| 3. ABUTH | Velvetleaf | Abutilon theophrasti |
| 4. AMBTR | Giant ragweed | Ambrosia trifida |
| 5. AMARE | Redroot pigweed | Amaranthus retroflexus |
| 6. POLPY | Pennsylvania smartweed | Polygonum pensylvanicum |

Crop 1: ZEAMX CORN, FIELD

Variety: SEED CONSULTANTS SC 1116

Planting Date: Apr/22/2007

Planting Method: JOHN DEERE 7200

Rate: 32097 SEED/A

Depth: 1.5 IN

Row Spacing: 30 IN

Seed Bed: CONVENTIONAL

SITE AND DESIGN

Plot Width, Unit: 6.67 FT

Plot Length, Unit: 30 FT **Reps:** 3

Tillage Type: CONVENTIONAL

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

| | | | |
|--------------|------|-------------------|-----------|
| % OM: | 2.4 | Texture: | SILT LOAM |
| pH: | 6.2 | Soil Name: | KOKOMO |
| CEC: | 16.4 | | |

Overall Moisture Conditions: POOR

APPLICATION DESCRIPTION

A

Application Date: Apr/22/2007

Time of Day: 7:00 P.M.

Application Method: SPRAY

Application Timing: PRE

Applic. Placement: BROADCAST

Air Temp., Unit: 76 F

% Relative Humidity: 30

Wind Velocity, Unit: 7 S

Soil Temp., Unit: 56 F

Soil Moisture: DRY MOIST

% Cloud Cover: 10

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: ZEAMX .

Stage Scale: .

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WEED STAGE AT EACH APPLICATION

A

Weed 1 Code, Stage: SETFA .
Stage Scale: .
Density, Unit: 124 M2
Weed 2 Code, Stage: CHEAL .
Stage Scale: .
Density, Unit: 134 M2
Weed 3 Code, Stage: ABUTH .
Stage Scale: .
Density, Unit: 17.3 M2
Weed 4 Code, Stage: AMBTR .
Stage Scale: .
Density, Unit: 9.3 M2
Weed 5 Code, Stage: AMARE .
Stage Scale: .
Density, Unit: 17.3 M2
Weed 6 Code, Stage: POLPY .
Stage Scale: .
Density, Unit: 1.3 M2

APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 50
Nozzle Type: DG
Nozzle Size: 11002
Nozzle Spacing, Unit: 18 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 20 GPA
Propellant: CO2

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PRE MIXTURES OF RIMSULFURON, ISOXAFLUTOLE, AND ATRAZINE

USA-07-001

Trial ID: 07PREC2

Study Dir.: Anthony F. Dobbels

Location: WESTERN BRANCH F-8

Investigator: Dr. Mark M. Loux

| Weed Code | SETFA | ABUTH | AMBTR | POLPY | ZEAMX |
|--------------------|-------------|-------------|-------------|-------------|-------------|
| Crop Code | ZEAMX | | | | ZEAMX |
| Rating Data Type | PHYTO | CONTROL | CONTROL | CONTROL | PHYTO |
| Rating Unit | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT |
| Rating Date | May/11/2007 | May/11/2007 | May/11/2007 | May/11/2007 | May/23/2007 |
| Trt-Eval Interval | 19 DA-A | 19 DA-A | 19 DA-A | 19 DA-A | 31 DA-A |
| # Subsamples, Dec. | 0 | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Product | Product | Appl | 1 | 2 | 3 | 4 | 5 | 6 |
|---------|----------------|---------------|-----------|-----------|------|-----|------|------|------|-------|-----|
| | | Rate Unit | Rate | Rate Unit | Code | | | | | | |
| 1 | ATRAZINE | 16 oz ai/a | 2 pt/a | A | A | 0 a | 13 b | 23 b | 17 b | 33 b | 0 a |
| 2 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 1 a | 86 a | 82 a | 73 a | 100 a | 0 a |
| 3 | RESOLVE | 0.375 oz ai/a | 1.5 oz/a | A | A | 1 a | 92 a | 88 a | 80 a | 100 a | 0 a |
| 4 | BALANCE PRO | 0.375 oz ai/a | 0.75 oz/a | A | A | 0 a | 88 a | 87 a | 77 a | 93 a | 0 a |
| 5 | BALANCE PRO | 0.5 oz ai/a | 1 oz/a | A | A | 1 a | 88 a | 91 a | 72 a | 100 a | 0 a |
| 6 | BALANCE PRO | 0.625 oz ai/a | 1.25 oz/a | A | A | 0 a | 91 a | 88 a | 75 a | 100 a | 0 a |
| 7 | BALANCE PRO | 0.75 oz ai/a | 1.5 oz/a | A | A | 4 a | 96 a | 97 a | 77 a | 100 a | 0 a |
| 8 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 1 a | 88 a | 98 a | 87 a | 100 a | 0 a |
| 8 | BALANCE PRO | 0.375 oz ai/a | 0.75 oz/a | A | A | | | | | | |
| 9 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 3 a | 96 a | 90 a | 75 a | 100 a | 0 a |
| 9 | BALANCE PRO | 0.5 oz ai/a | 1 oz/a | A | A | | | | | | |
| 10 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 3 a | 96 a | 96 a | 88 a | 100 a | 0 a |
| 10 | BALANCE PRO | 0.625 oz ai/a | 1.25 oz/a | A | A | | | | | | |
| 11 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 3 a | 96 a | 97 a | 92 a | 100 a | 0 a |
| 11 | BALANCE PRO | 0.75 oz ai/a | 1.5 oz/a | A | A | | | | | | |
| 12 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 2 a | 90 a | 96 a | 88 a | 100 a | 0 a |
| 12 | BALANCE PRO | 0.375 oz ai/a | 0.75 oz/a | A | A | | | | | | |
| 12 | ATRAZINE | 16 oz ai/a | 2 pt/a | A | A | | | | | | |
| 13 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 3 a | 93 a | 99 a | 87 a | 100 a | 0 a |
| 13 | BALANCE PRO | 0.5 oz ai/a | 1 oz/a | A | A | | | | | | |
| 13 | ATRAZINE | 16 oz ai/a | 2 pt/a | A | A | | | | | | |
| 14 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 3 a | 97 a | 95 a | 88 a | 100 a | 0 a |
| 14 | BALANCE PRO | 0.625 oz ai/a | 1.25 oz/a | A | A | | | | | | |
| 14 | ATRAZINE | 16 oz ai/a | 2 pt/a | A | A | | | | | | |
| 15 | RESOLVE | 0.25 oz ai/a | 1 oz/a | A | A | 5 a | 99 a | 96 a | 88 a | 100 a | 0 a |
| 15 | BALANCE PRO | 0.75 oz ai/a | 1.5 oz/a | A | A | | | | | | |
| 15 | ATRAZINE | 16 oz ai/a | 2 pt/a | A | A | | | | | | |
| 16 | RESOLVE | 0.375 oz ai/a | 1.5 oz/a | A | A | 3 a | 88 a | 98 a | 85 a | 98 a | 0 a |
| 16 | BALANCE PRO | 0.375 oz ai/a | 0.75 oz/a | A | A | | | | | | |
| 17 | RESOLVE | 0.375 oz ai/a | 1.5 oz/a | A | A | 4 a | 94 a | 98 a | 88 a | 92 a | 0 a |
| 17 | BALANCE PRO | 0.5 oz ai/a | 1 oz/a | A | A | | | | | | |
| 18 | RESOLVE | 0.375 oz ai/a | 1.5 oz/a | A | A | 2 a | 93 a | 93 a | 83 a | 100 a | 0 a |
| 18 | BALANCE PRO | 0.625 oz ai/a | 1.25 oz/a | A | A | | | | | | |
| 19 | RESOLVE | 0.375 oz ai/a | 1.5 oz/a | A | A | 2 a | 87 a | 91 a | 83 a | 100 a | 0 a |
| 19 | BALANCE PRO | 0.75 oz ai/a | 1.5 oz/a | A | A | | | | | | |

Ohio State University Horticulture and Crop Science

| Weed Code | | | | | SETFA | ABUTH | AMBTR | POLPY | | | | |
|--------------------|----------------|-------|---------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------|--------|
| Crop Code | | | | | ZEAMX | | | | ZEAMX | | | |
| Rating Data Type | | | | | PHYTO | CONTROL | CONTROL | CONTROL | CONTROL | PHYTO | | |
| Rating Unit | | | | | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | | |
| Rating Date | | | | | May/11/2007 | May/11/2007 | May/11/2007 | May/11/2007 | May/11/2007 | May/23/2007 | | |
| Trt-Eval Interval | | | | | 19 DA-A | 19 DA-A | 19 DA-A | 19 DA-A | 19 DA-A | 31 DA-A | | |
| # Subsamples, Dec. | | | | | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Trt No. | Treatment Name | Rate | Unit | Product Rate | Product Unit | Appl Code | 1 | 2 | 3 | 4 | 5 | 6 |
| 20 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 2 a | 93 a | 91 a | 80 a | 95 a | 0 a |
| 20 | BALANCE PRO | 0.375 | oz ai/a | 0.75 | oz/a | A | | | | | | |
| 20 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 21 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 2 a | 98 a | 95 a | 85 a | 100 a | 0 a |
| 21 | BALANCE PRO | 0.5 | oz ai/a | 1 | oz/a | A | | | | | | |
| 21 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 22 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 1 a | 85 a | 85 a | 78 a | 87 a | 0 a |
| 22 | BALANCE PRO | 0.625 | oz ai/a | 1.25 | oz/a | A | | | | | | |
| 22 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 23 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 2 a | 99 a | 99 a | 82 a | 90 a | 0 a |
| 23 | BALANCE PRO | 0.75 | oz ai/a | 1.5 | oz/a | A | | | | | | |
| 23 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 24 | BALANCE PRO | 0.75 | oz ai/a | 1.5 | oz/a | A | 1 a | 98 a | 98 a | 78 a | 100 a | 0 a |
| 24 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 25 | KEYSTONE | 27.37 | oz ai/a | 1.3 | qt/a | A | 1 a | 98 a | 83 a | 78 a | 100 a | 0 a |
| 26 | KEYSTONE | 54.6 | oz ai/a | 2.6 | qt/a | A | 3 a | 99 a | 91 a | 87 a | 92 a | 0 a |
| 27 | LUMAX | 23.69 | oz ai/a | 1.5 | qt/a | A | 2 a | 96 a | 94 a | 92 a | 100 a | 0 a |
| 28 | LUMAX | 47.38 | oz ai/a | 3 | qt/a | A | 2 a | 99 a | 99 a | 83 a | 98 a | 0 a |
| 29 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 4 a | 99 a | 92 a | 78 a | 100 a | 0 a |
| 29 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 30 | UTC | | | | | | 0 a | 0 b | 0 c | 0 c | 0 c | 0 a |
| LSD (P=.05) | | | | | | | 3.4 | 14.8 | 15.7 | 13.7 | 20.9 | 0.0 |
| Standard Deviation | | | | | | | 2.1 | 9.1 | 9.6 | 8.4 | 12.8 | 0.0 |
| CV | | | | | | | 97.52 | 10.33 | 10.99 | 10.81 | 13.81 | 0.0 |
| Bartlett's X2 | | | | | | | 46.491 | 77.548 | 73.851 | 30.543 | 23.45 | 0.0 |
| P(Bartlett's X2) | | | | | | | 0.015* | 0.001* | 0.001* | 0.338 | 0.003* | . |
| Replicate F | | | | | | | 0.647 | 0.793 | 2.958 | 10.054 | 0.389 | 0.000 |
| Replicate Prob(F) | | | | | | | 0.5271 | 0.4571 | 0.0598 | 0.0002 | 0.6796 | 1.0000 |
| Treatment F | | | | | | | 1.200 | 18.592 | 14.857 | 16.592 | 8.408 | 0.000 |
| Treatment Prob(F) | | | | | | | 0.2723 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 1.0000 |

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Weed Code | SETFA | AMBTR | CHEAL | ABUTH | AMARE | POLPY |
| Crop Code | | | | | | |
| Rating Data Type | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL |
| Rating Unit | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT |
| Rating Date | May/23/2007 | May/23/2007 | May/23/2007 | May/23/2007 | May/23/2007 | May/23/2007 |
| Trt-Eval Interval | 31 DA-A | 31 DA-A | 31 DA-A | 31 DA-A | 31 DA-A | 31 DA-A |
| # Subsamples, Dec. | 0 | 0 | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Unit | Product Rate | Product Unit | Appl Code | Rating Data | | | | | |
|---------|----------------|----------|------|--------------|--------------|-----------|-------------|-------|--------|--------|-------|-------|
| | | | | | | | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | 7 d | 17 ab | 7 f | 0 d | 100 a | 17 b |
| 2 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 67 abc | 20 ab | 50 e | 50 c | 75 a | 97 a |
| 3 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 65 abc | 30 ab | 60 de | 57 bc | 78 a | 90 a |
| 4 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | 60 abc | 23 ab | 70 b-e | 78 abc | 57 a | 77 a |
| 5 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | 45 bc | 13 ab | 70 b-e | 82 abc | 50 a | 100 a |
| 6 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | 71 abc | 27 ab | 67 cde | 80 abc | 50 a | 100 a |
| 7 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | 78 abc | 47 ab | 93 abc | 98 ab | 82 a | 92 a |
| 8 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 62 abc | 47 ab | 81 a-d | 90 abc | 89 a | 100 a |
| 8 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | |
| 9 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 69 abc | 27 ab | 75 a-d | 82 abc | 82 a | 73 a |
| 9 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | | | | | | |
| 10 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 77 abc | 47 ab | 88 a-d | 93 ab | 83 a | 100 a |
| 10 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | | | | | | |
| 11 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 83 abc | 60 a | 89 abc | 93 ab | 87 a | 100 a |
| 11 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | | | | | | |
| 12 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 62 abc | 53 a | 80 a-d | 86 abc | 84 a | 97 a |
| 12 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | |
| 12 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | |
| 13 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 75 abc | 63 a | 96 ab | 93 ab | 99 a | 100 a |
| 13 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | | | | | | |
| 13 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | |
| 14 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 80 abc | 57 a | 85 a-d | 90 abc | 94 a | 97 a |
| 14 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | | | | | | |
| 14 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | |
| 15 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 89 ab | 57 a | 90 abc | 97 ab | 53 a | 90 a |
| 15 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | | | | | | |
| 15 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | |
| 16 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 38 c | 30 ab | 73 a-e | 83 abc | 73 a | 77 a |
| 16 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | |
| 17 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 65 abc | 27 ab | 68 b-e | 85 abc | 90 a | 53 a |
| 17 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | | | | | | |
| 18 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 62 abc | 33 ab | 77 a-d | 78 abc | 87 a | 100 a |
| 18 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | | | | | | |
| 19 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 57 abc | 37 ab | 72 a-e | 82 abc | 73 a | 100 a |
| 19 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | | | | | | |
| 20 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 55 abc | 17 ab | 72 a-e | 80 abc | 82 a | 92 a |
| 20 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | |
| 20 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | |

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|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Weed Code | SETFA | AMBTR | CHEAL | ABUTH | AMARE | POLPY |
| Crop Code | | | | | | |
| Rating Data Type | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL |
| Rating Unit | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT |
| Rating Date | May/23/2007 | May/23/2007 | May/23/2007 | May/23/2007 | May/23/2007 | May/23/2007 |
| Trt-Eval Interval | 31 DA-A | 31 DA-A | 31 DA-A | 31 DA-A | 31 DA-A | 31 DA-A |
| # Subsamples, Dec. | 0 | 0 | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Unit | Product Rate | Product Unit | Appl Code | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------|----------------|-------|---------|--------------|--------------|-----------|--------|--------|--------|--------|--------|--------|
| 21 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 79 abc | 50 ab | 85 a-d | 86 abc | 97 a | 92 a |
| 21 | BALANCE PRO | 0.5 | oz ai/a | 1 | oz/a | A | | | | | | |
| 21 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 22 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 68 abc | 23 ab | 77 a-d | 89 abc | 97 a | 78 a |
| 22 | BALANCE PRO | 0.625 | oz ai/a | 1.25 | oz/a | A | | | | | | |
| 22 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 23 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 78 abc | 33 ab | 84 a-d | 89 abc | 83 a | 77 a |
| 23 | BALANCE PRO | 0.75 | oz ai/a | 1.5 | oz/a | A | | | | | | |
| 23 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 24 | BALANCE PRO | 0.75 | oz ai/a | 1.5 | oz/a | A | 83 abc | 27 ab | 93 abc | 100 a | 85 a | 93 a |
| 24 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 25 | KEYSTONE | 27.37 | oz ai/a | 1.3 | qt/a | A | 89 ab | 33 ab | 78 a-d | 57 bc | 99 a | 68 a |
| 26 | KEYSTONE | 54.6 | oz ai/a | 2.6 | qt/a | A | 99 a | 50 ab | 98 a | 83 abc | 99 a | 67 a |
| 27 | LUMAX | 23.69 | oz ai/a | 1.5 | qt/a | A | 68 abc | 50 ab | 78 a-d | 97 ab | 84 a | 85 a |
| 28 | LUMAX | 47.38 | oz ai/a | 3 | qt/a | A | 90 ab | 42 ab | 91 abc | 100 a | 99 a | 87 a |
| 29 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 73 abc | 23 ab | 80 a-d | 70 abc | 100 a | 90 a |
| 29 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | |
| 30 | UTC | | | | | | 0 d | 0 b | 0 f | 0 d | 0 b | 0 b |
| LSD (P=.05) | | | | | | | 25.1 | 27.4 | 15.0 | 22.7 | 29.1 | 32.0 |
| Standard Deviation | | | | | | | 15.3 | 16.8 | 9.2 | 13.9 | 17.7 | 19.6 |
| CV | | | | | | | 23.06 | 47.36 | 12.4 | 17.77 | 21.98 | 23.66 |
| Bartlett's X2 | | | | | | | 55.374 | 22.988 | 18.965 | 19.219 | 16.845 | 23.861 |
| P(Bartlett's X2) | | | | | | | 0.002* | 0.686 | 0.871 | 0.786 | 0.72 | 0.249 |
| Replicate F | | | | | | | 2.558 | 4.677 | 10.295 | 3.298 | 0.571 | 0.289 |
| Replicate Prob(F) | | | | | | | 0.0862 | 0.0131 | 0.0001 | 0.0440 | 0.5689 | 0.7502 |
| Treatment F | | | | | | | 6.007 | 2.639 | 17.333 | 9.367 | 4.293 | 4.371 |
| Treatment Prob(F) | | | | | | | 0.0001 | 0.0008 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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| Weed Code | | | | | | SETFA | AMBTR | CHEAL | ABUTH | AMARE | POLPY | | |
|--------------------|----------------|----------|------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|-------|
| Crop Code | | | | | | ZEAMX | | | | | | | |
| Rating Data Type | | | | | | PHYTO | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL | | |
| Rating Unit | | | | | | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | | |
| Rating Date | | | | | | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | | |
| Trt-Eval Interval | | | | | | 58 DA-A | 58 DA-A | 58 DA-A | 58 DA-A | 58 DA-A | 58 DA-A | | |
| # Subsamples, Dec. | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Trt No. | Treatment Name | Rate | Unit | Product Rate | Product Unit | Appl Code | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | 0 a | 65 a | 27 abc | 0 e | 10 de | 75 ab | 30 ab |
| 2 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 62 a | 17 abc | 47 d | 30 cde | 57 ab | 57 ab |
| 3 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 0 a | 60 a | 30 abc | 53 cd | 33 b-e | 57 ab | 100 a |
| 4 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | 0 a | 52 a | 33 abc | 67 a-d | 63 a-d | 30 bc | 77 ab |
| 5 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | 0 a | 43 a | 13 bc | 77 a-d | 65 a-d | 30 bc | 83 ab |
| 6 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | 0 a | 57 a | 33 abc | 67 a-d | 73 abc | 43 abc | 83 ab |
| 7 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | 0 a | 75 a | 30 abc | 93 a | 93 abc | 45 abc | 77 ab |
| 8 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 62 a | 50 abc | 77 a-d | 67 a-d | 60 ab | 100 a |
| 8 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | | |
| 9 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 70 a | 23 abc | 65 a-d | 67 a-d | 58 ab | 100 a |
| 9 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | | | | | | | |
| 10 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 80 a | 47 abc | 78 a-d | 93 abc | 67 ab | 100 a |
| 10 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | | | | | | | |
| 11 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 77 a | 63 ab | 80 abc | 90 abc | 71 ab | 100 a |
| 11 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | | | | | | | |
| 12 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 65 a | 53 abc | 73 a-d | 80 abc | 84 ab | 87 ab |
| 12 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | | |
| 12 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | | |
| 13 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 65 a | 60 ab | 72 a-d | 80 abc | 81 ab | 100 a |
| 13 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | | | | | | | |
| 13 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | | |
| 14 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 77 a | 62 ab | 70 a-d | 78 abc | 86 ab | 77 ab |
| 14 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | | | | | | | |
| 14 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | | |
| 15 | RESOLVE | 0.25 oz | ai/a | 1 oz/a | | A | 0 a | 80 a | 63 ab | 83 abc | 97 ab | 56 ab | 90 ab |
| 15 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | | | | | | | |
| 15 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | | |
| 16 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 0 a | 53 a | 30 abc | 57 bcd | 80 abc | 50 abc | 73 ab |
| 16 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | | |
| 17 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 0 a | 78 a | 43 abc | 65 a-d | 53 a-e | 60 ab | 27 ab |
| 17 | BALANCE PRO | 0.5 oz | ai/a | 1 oz/a | | A | | | | | | | |
| 18 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 0 a | 50 a | 40 abc | 70 a-d | 80 abc | 67 ab | 70 ab |
| 18 | BALANCE PRO | 0.625 oz | ai/a | 1.25 oz/a | | A | | | | | | | |
| 19 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 0 a | 47 a | 47 abc | 70 a-d | 50 a-e | 37 bc | 45 ab |
| 19 | BALANCE PRO | 0.75 oz | ai/a | 1.5 oz/a | | A | | | | | | | |
| 20 | RESOLVE | 0.375 oz | ai/a | 1.5 oz/a | | A | 0 a | 48 a | 20 abc | 60 bcd | 57 a-e | 76 ab | 30 ab |
| 20 | BALANCE PRO | 0.375 oz | ai/a | 0.75 oz/a | | A | | | | | | | |
| 20 | ATRAZINE | 16 oz | ai/a | 2 pt/a | | A | | | | | | | |

Ohio State University Horticulture and Crop Science

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|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Weed Code | | SETFA | AMBTR | CHEAL | ABUTH | AMARE | POLPY |
| Crop Code | ZEAMX | | | | | | |
| Rating Data Type | PHYTO | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL | CONTROL |
| Rating Unit | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT |
| Rating Date | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 | Jun/19/2007 |
| Trt-Eval Interval | 58 DA-A | 58 DA-A | 58 DA-A | 58 DA-A | 58 DA-A | 58 DA-A | 58 DA-A |
| # Subsamples, Dec. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Unit | Product Rate | Product Unit | Appl Code | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|--------------------|----------------|-------|---------|--------------|--------------|-----------|--------|--------|--------|--------|--------|--------|--------|
| 21 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 0 a | 82 a | 40 abc | 70 a-d | 47 a-e | 80 ab | 47 ab |
| 21 | BALANCE PRO | 0.5 | oz ai/a | 1 | oz/a | A | | | | | | | |
| 21 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | | |
| 22 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 0 a | 60 a | 37 abc | 72 a-d | 78 abc | 80 ab | 35 ab |
| 22 | BALANCE PRO | 0.625 | oz ai/a | 1.25 | oz/a | A | | | | | | | |
| 22 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | | |
| 23 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 0 a | 83 a | 43 abc | 87 ab | 100 a | 77 ab | 77 ab |
| 23 | BALANCE PRO | 0.75 | oz ai/a | 1.5 | oz/a | A | | | | | | | |
| 23 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | | |
| 24 | BALANCE PRO | 0.75 | oz ai/a | 1.5 | oz/a | A | 0 a | 82 a | 42 abc | 93 a | 87 abc | 78 ab | 60 ab |
| 24 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | | |
| 25 | KEYSTONE | 27.37 | oz ai/a | 1.3 | qt/a | A | 0 a | 80 a | 37 abc | 60 bcd | 10 de | 81 ab | 60 ab |
| 26 | KEYSTONE | 54.6 | oz ai/a | 2.6 | qt/a | A | 0 a | 88 a | 60 ab | 83 abc | 62 a-d | 100 a | 67 ab |
| 27 | LUMAX | 23.69 | oz ai/a | 1.5 | qt/a | A | 0 a | 65 a | 70 a | 77 a-d | 85 abc | 51 abc | 60 ab |
| 28 | LUMAX | 47.38 | oz ai/a | 3 | qt/a | A | 0 a | 83 a | 53 abc | 82 abc | 100 a | 76 ab | 65 ab |
| 29 | RESOLVE | 0.375 | oz ai/a | 1.5 | oz/a | A | 0 a | 82 a | 33 abc | 68 a-d | 57 a-e | 100 a | 100 a |
| 29 | ATRAZINE | 16 | oz ai/a | 2 | pt/a | A | | | | | | | |
| 30 | UTC | | | | | | 0 a | 0 b | 0 c | 0 e | 0 e | 0 c | 0 b |
| LSD (P=.05) | | | | | | | 0.0 | 26.7 | 29.5 | 17.9 | 34.8 | 33.8 | 48.4 |
| Standard Deviation | | | | | | | 0.0 | 16.3 | 18.0 | 11.0 | 21.3 | 20.5 | 29.3 |
| CV | | | | | | | 0.0 | 24.89 | 45.09 | 16.32 | 32.53 | 32.03 | 42.41 |
| Bartlett's X2 | | | | | | | 0.0 | 48.774 | 22.707 | 23.972 | 18.671 | 16.025 | 5.365 |
| P(Bartlett's X2) | | | | | | | . | 0.009* | 0.649 | 0.632 | 0.85 | 0.914 | 0.997 |
| Replicate F | | | | | | | 0.000 | 0.911 | 3.453 | 7.259 | 2.402 | 11.411 | 0.317 |
| Replicate Prob(F) | | | | | | | 1.0000 | 0.4079 | 0.0383 | 0.0015 | 0.1002 | 0.0001 | 0.7303 |
| Treatment F | | | | | | | 0.000 | 3.591 | 2.542 | 11.198 | 4.842 | 3.463 | 2.451 |
| Treatment Prob(F) | | | | | | | 1.0000 | 0.0001 | 0.0013 | 0.0001 | 0.0001 | 0.0001 | 0.0037 |

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.