

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #
 Trial ID: 20BAYERPRPO Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: HP20USAE01 Investigator: Dr. Mark M. Loux
 Project ID: LOCAL_PROJ Study Director: Riley, Eric
 Sponsor Contact: Rod Stevenson, Bayer

General Trial Information

Study Director: Riley, Eric
Investigator: Dr. Mark M. Loux

Discipline: H herbicide
Trial Status: E established

ARM Trial Created On: Mar-26-2020 **Trial Usage/Type:** 0 Research and Development
Initiation Date: Apr-22-2020 **Planned Completion Date:** Nov-1-2020
Completion Date: Jul-16-2020

Trial Location

Address (Location): 7721 South Charleston Pike
City: South Charleston **Country:** USA United States
State/Prov.: Ohio
Postal Code: 45368

Latitude of LL Corner °: 39.85945 N
Longitude of LL Corner °: -83.675 W
Altitude of LL Corner: 1094.00 FT

Conducted Under GLP: No
Conducted Under GEP: Yes

Keywords: PHYTOTOX EFFICACY

Contacts

Study Director: Riley, Eric

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: C ZEAMX Zea mays **Corn** **BBCH Scale:** BCOR
Entry Date: Apr-23-2020 **Stage Scale:** BBCH
Variety: Dekalb DKC59-81RIB **Maturity Group:** 109
Attributes: Glyphosate and Glufosinate Resistant
Seed Lot No: 781KX77JXG **Seed Source:** Dekalb
% Germination: 95
Seed Size: 1577 S/LB
Seed Treatment Products: Acceleron
Planting Rate: 32097 S/A
Planting Date: Apr-22-2020
Depth: 2 IN
Rows per Plot: 4
Row Spacing: 30 IN
Planting Method: PLANTD planted
Planting Equipment: FPP finger pickup planter
Seed Bed: MEDIUM medium
Soil Temperature: 54 F
Soil Moisture: NORMAL normal, adequate
Emergence Date: May-14-2020

Pest Description

Pest 1 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Giant foxtail **Entry Date:** May-28-2020

Pest 2 Type: W **Code:** AMBTR **W**
Common Name: Giant ragweed **Entry Date:** May-28-2020

Pest 3 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: common lambsquarters **Entry Date:** Apr-23-2020

Site and Design

Treated Plot Width: 6.67 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 200.1 FT2 **Treatments:** 12 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

Trial Initiation Comments:

Fall Chisel Plow, spring finishing tool with disc, field cultivator, drag harrow, and rolling basket

Previous

No. Crop Year
 1. GLXMA 2019

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Soil Description

Description Name: G-6

% Sand: 32 % OM: 2.2 Texture: SICL silty clay loam

% Silt: 53 pH: 5.9 Soil Name: Kokomo

% Clay: 15 CEC: 14.8 Fert. Level: G good

Soil Drainage: G good

Application Description

| | A | B | C |
|---------------------------------|-------------|-------------|------------|
| Application Date | Apr-22-2020 | May-23-2020 | Jun-9-2020 |
| Appl. Start Time | 4:00 PM | 9:00 AM | 8:00 AM |
| Appl. Stop Time | 4:30 PM | 9:30 AM | 8:30 AM |
| Interval to Prev. Appl. | | 31 DAYS | 17 DAYS |
| Application Method | SPRAY | SPRAY | SPRAY |
| Application Timing | PREPRE | EAPOCR | SPRAY |
| Application Placement | BROSOI | BROFOL | BROFOL |
| Applied By | Loux | Dobbels | Kimmet |
| Appl. Entry Date | Apr-23-2020 | May-28-2020 | Jun-9-2020 |
| Air Temperature Start, Stop | 56 57 F | 65 65 F | 69 69 F |
| % Relative Humidity Start, Stop | 38 38 | 90 90 | 64 64 |
| Wind Velocity+Dir. Start | 7 MPH S | 4 MPH E | 8 MPH ESE |
| Wind Velocity+Dir. Stop | 7 MPH S | 4 MPH E | 8 MPH ESE |
| Wind Velocity+Dir. Max | 7 MPH S | 4 MPH E | 8 MPH ESE |
| Wet Leaves (Y/N) | N no | N no | N no |
| Soil Temperature | 54 F | 57 F | 68 F |
| Soil Moisture | NORMAL | WET | DRY |
| Soil Surface Condition | MEDIUM | MEDIUM | MEDIUM |
| % Cloud Cover | 30 | 33 | 15 |
| Next Moisture Occurred On | Apr-23-2020 | May-23-2020 | Jun-9-2020 |
| Time to Next Moisture | 18 HR | 10 HR | 10 HR |
| Moisture 6 Hours after Appl. | 0 IN | 0 IN | 0 IN |
| Moisture 1 Week after Appl. | 1.24 IN | 1.07 IN | 0.37 IN |

Protocol Application Directions:

Objective:

The objectives of this study are to continue to provide internal and external exposure of Bayer's corn herbicide portfolio and to continue to showcase the Bayer corn herbicide portfolio with academics to gain support of potential recommendations for use in corn vs. key competitors.

Adjuvants:

If glyphosate-resistant weeds are present or are used based on local recommendations, then add respective adjuvants to increase the control of POST herbicides. Common adjuvants to add are the following: HSOC, COC or MSO. Refer to individual labels for further details.

Agronomics and Trial Setup:

Plant a corn hybrid which contains Roundup Ready® 2 Technology. Typical agronomic inputs for commercially grown corn, following best local agronomic practices.

Start clean with tillage or a blanket burndown herbicide application across entire trial prior to planting. Use burndown products that are effective on weeds present and DO NOT have residual activity.

APPLICATION:

At application, record crop and weed growth stage along with application information.

- A= PREPRE = apply pre emergence at time of planting
- B= EAPOCR = apply V1/V2 corn stage
- C= MIPOCR = 2-4" weeds or 11" corn whichever comes first

TREATMENTS:

One of the primary objectives of this trial is for field researchers to further gain first hand experience

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with the Bayer herbicide portfolio. We recognize that differing acetochlor/atrazine PREMIXs are used throughout the country so feel free to substitute either Harness Xtra or Degree Xtra herbicides for the Harness Xtra 5.6 in specified treatments. Please match up the best you can on acetochlor rates if you choose to switch out. Be mindful of the specific comments in the protocol treatment list related to rate flexibility [*high local rate*], [*local ATZ rate*], [*local setup rate*], [*reduced local rate*], and [*low local rate*]. If a treatment line does not have a specified comment, please use the rate that is included on the protocol. **Please DO NOT adjust treatment order of the core treatments (1-12).**

It is encouraged for internal and external locations to add treatments to the END of the protocol to help provide local recommendations.

CROP DESTRUCT REQUIREMENTS:

No Yield Data required for this study.

All treatments and active ingredients (AI's) are registered for use in corn, so NO crop destruct is required. After final evaluations, the trial is considered completed.

ASSESSMENT:

Photos would be appreciated for FINAL weed control ratings.

Crop tolerance - PE12AD1- percent crop injury on 0-100% scale of all inclusive crop injury vs. the baseline in the untreated control plots. This needs to be just a general crop injury evaluation. Do not separate into various types (chlorosis, necrosis, etc).

Target evaluations (CI):

- 0 days after "B"---(B0-day of application)
- 0 days after "C"---(C0-day of application)
- 14 days after "C" (C3- range 11-18 days)
- Note if injury persists

Weed Control - EE22AD3 - percent weed control on 0-100% scale. Please rate % weed control for each individual species. Record percent ground cover of each weed in UTC.

Target evaluations (WC):

- 0 days after "B"---(B0-day of application)
- 0 days after "C"---(C0-day of application)
- 14 days after "C" (C3- range 11-18 days)
- 35 days after "C" (C5-range 26-44 days)

Reporting Dates:

Final reports due: **September 15, 2020**

Sample Orders:

All herbicides for this protocol should be ordered by the crop protection TDR for internal and external locations that have been assigned in SCOUT.

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Crop Stage At Each Application

| Crop 1 Code, BBCH Scale | A | | B | | C | |
|-------------------------|-------|------|-------|------|-------|------|
| | ZEAMX | BCOR | ZEAMX | BCOR | ZEAMX | BCOR |
| Days after Emergence | -22 | | 9 | | 26 | |
| Stage Scale Used | BBCH | | BBCH | | BBCH | |
| Stage Majority, Percent | | | 12 | 100 | 16 | 100 |
| Stage Minimum, Percent | | | 12 | 100 | | |
| Stage Maximum, Percent | | | 12 | 100 | | |
| Height Average | | | 3 | IN | 18 | IN |
| Height Minimum, Maximum | | | 3 | 3 | 16 | 20 |

Pest Stage At Each Application

| Pest 1 Code, Type, Scale | A | | B | | C | |
|--------------------------|-------|---|-------|-----|-------|--------|
| | SETFA | W | SETFA | W | SETFA | W |
| Stage Majority, Percent | 00 | | 12 | 90 | 12 | 100 |
| Stage Minimum, Percent | | | 11 | 10 | | |
| Stage Maximum, Percent | | | 12 | 90 | | |
| Height Average | | | | | 3 | IN |
| Height Minimum, Maximum | | | | | 3 | 3 |
| Density Average | | | | | 511 | PLA/m2 |
| Density Min, Max | | | | | 128 | 772 |
| Pest 2 Code, Type, Scale | AMBTR | | W | | AMBTR | |
| Stage Majority, Percent | 00 | | 12 | 100 | 14 | 100 |
| Height Average | | | | | 3 | IN |
| Height Minimum, Maximum | | | | | 3 | 3 |
| Density Average | | | | | 11 | PLA/m2 |
| Density Min, Max | | | | | 4 | 32 |
| Pest 3 Code, Type, Scale | CHEAL | | W | | CHEAL | |
| Density Average | | | | | 78 | PLA/m2 |
| Density Min, Max | | | | | 8 | 112 |

Application Equipment

| Appl. Equipment | A | | B | | C | |
|--------------------|------------|--|-----------|--|-----------|--|
| | 6 Foot TTI | | 6' AIXR | | 10' AIXR | |
| Equipment Type | BACCAI | | BACCAI | | BACCAI | |
| Operation Pressure | 48 PSI | | 44 PSI | | 44 PSI | |
| Nozzle Type | TTI | | AIXR | | AIXR | |
| Nozzle Size | 110015 | | 1110015 | | 110015 | |
| Nozzle Spacing | 18 IN | | 18 IN | | 18 IN | |
| Boom Length | 6.67 FT | | 6.67 FT | | 10 FT | |
| Boom Height | 20 IN | | 20 IN | | 20 IN | |
| Ground Speed | 3 MPH | | 3 MPH | | 3 MPH | |
| Carrier | WATER | | WATER | | WATER | |
| Application Amount | 15 GAL/AC | | 15 GAL/AC | | 15 GAL/AC | |
| Mix Size | 2 L | | 1 L | | 2 L | |
| Propellant | COMCO2 | | COMCO2 | | COMCO2 | |

| Pest Type | W Weed | W Weed | W Weed | W Weed |
|-------------------------------|----------------|-----------------|-----------------|----------------|
| Pest Code | SETFA | AMBTR | CHEAL | SETFA |
| Pest Scientific Name | Setaria faberi | Ambrosia trifi> | Chenopodium al> | Setaria faberi |
| Pest Name | Giant foxtail | Giant ragweed | common lambsqu> | Giant foxtail |
| Rating Date | May-22-2020 | May-22-2020 | May-22-2020 | Jun-8-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples | 1 | 1 | 1 | 1 |
| Assessed By | Dobbels | Dobbels | Dobbels | |
| Data Entry Date | May-28-2020 | May-28-2020 | May-28-2020 | Jun-8-2020 |
| Rating Timing | AT EPO | AT EPO | AT EPO | |
| Days After First/Last Applic. | 30 30 | 30 30 | 30 30 | 47 16 |
| Trt-Eval Interval | 30 DA-A | 30 DA-A | 30 DA-A | AT POST |
| Plant-Eval Interval | 30 DP-1 | 30 DP-1 | 30 DP-1 | 47 DP-1 |
| Days After Emergence | 8 DE-1 | 8 DE-1 | 8 DE-1 | 25 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |

| Trt Treatment | Rate | Other | Other | Appl | | | | | | |
|---------------|------|-------|-------|------|------|------|-----|-----|-----|-----|
| No. Name | Rate | Unit | Rate | Rate | Unit | Code | 1* | 2* | 3* | 4* |
| 1 UNTREATED | | | | | | | 0 c | 0 f | 0 b | 0 g |

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Protocol ID: HP20USAE01

Project ID: LOCAL_PROJ

Location: Western Branch G-6

Trial Year: 2020

Investigator: Dr. Mark M. Loux

Study Director: Riley, Eric

Sponsor Contact: Rod Stevenson, Bayer

| | | | | |
|----------------------------------|----------------|------------------|----------------------|----------------|
| Pest Type | W Weed | W Weed | W Weed | W Weed |
| Pest Code | SETFA | AMBTR | CHEAL | SETFA |
| Pest Scientific Name | Setaria faberi | Ambrosia trifida | Chenopodium album | Setaria faberi |
| Pest Name | Giant foxtail | Giant ragweed | common lambsquarters | Giant foxtail |
| Rating Date | May-22-2020 | May-22-2020 | May-22-2020 | Jun-8-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples Assessed By | 1 | 1 | 1 | 1 |
| Data Entry Date | Dobbels | Dobbels | Dobbels | Jun-8-2020 |
| Rating Timing | May-28-2020 | May-28-2020 | May-28-2020 | |
| Days After First/Last Applic. | AT EPO | AT EPO | AT EPO | |
| Trt-Eval Interval | 30 DA-A | 30 DA-A | 30 DA-A | AT POST |
| Plant-Eval Interval | 30 DP-1 | 30 DP-1 | 30 DP-1 | 47 DP-1 |
| Days After Emergence | 8 DE-1 | 8 DE-1 | 8 DE-1 | 25 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Other | Other | Appl | 1* | 2* | 3* | 4* |
|---------|-------------------------|---------------|------------|-----------|------|-------|--------|-------|--------|
| | | Rate Unit | Rate | Rate Unit | Code | | | | |
| 2 | CORVUS HERBICIDE | 190.3 g ai/ha | 5.6 oz/a | | A | 100 a | 93 ab | 100 a | 86 bc |
| 2 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | | A | | | | |
| 3 | BALANCE FLEXX HERBICIDE | 175.4 g ai/ha | 5 oz/a | | A | 100 a | 96 a | 100 a | 84 cd |
| 3 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | | A | | | | |
| 4 | HARNESS MAX | 2532 g ai/ha | 75 oz/a | | A | 100 a | 85 bcd | 100 a | 79 cde |
| 4 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | A | | | | |
| 5 | ACURON HERBICIDE | 2737 g ai/ha | 2.75 qt/a | | A | 100 a | 84 cd | 100 a | 95 ab |
| 6 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | | B | 0 c | 0 f | 0 b | 96 ab |
| 6 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | | B | | | | |
| 6 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 6 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 7 | HARNESS MAX | 2160 g ai/ha | 64 oz/a | | B | 0 c | 0 f | 0 b | 99 a |
| 7 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | B | | | | |
| 7 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 7 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 8 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | | B | 0 c | 0 f | 0 b | 96 ab |
| 8 | DIFLEXX | 295.8 g ai/ha | 8 oz/a | | B | | | | |
| 8 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 8 | CLASS ACT RIDION | 1 % v/v | 1 % v/v | | B | | | | |
| 9 | HALEX GT | 2213 g ai/ha | 1.8 qt/a | | B | 0 c | 0 f | 0 b | 86 bc |
| 9 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | B | | | | |
| 9 | NIS | 0.25 % v/v | 0.25 % v/v | | B | | | | |
| 9 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 10 | CORVUS HERBICIDE | 152.9 g ai/ha | 4.5 oz/a | | A | 94 b | 78 de | 100 a | 58 f |
| 10 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | A | | | | |
| 10 | HARNESS MAX | 1350 g ai/ha | 40 oz/a | | C | | | | |
| 10 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | C | | | | |
| 10 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |
| 11 | BALANCE FLEXX HERBICIDE | 105.2 g ai/ha | 3 oz/a | | A | 100 a | 90 abc | 100 a | 74 de |
| 11 | HARNESS XTRA 5.6L | 2514 g ai/ha | 1.6 qt/a | | A | | | | |
| 11 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | | C | | | | |
| 11 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | C | | | | |
| 11 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |

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 Project ID: LOCAL_PROJ Study Director: Riley, Eric
 Sponsor Contact: Rod Stevenson, Bayer

| | | | | |
|-------------------------------|----------------|------------------|----------------------|----------------|
| Pest Type | W Weed | W Weed | W Weed | W Weed |
| Pest Code | SETFA | AMBTR | CHEAL | SETFA |
| Pest Scientific Name | Setaria faberi | Ambrosia trifida | Chenopodium albidum | Setaria faberi |
| Pest Name | Giant foxtail | Giant ragweed | common lambsquarters | Giant foxtail |
| Rating Date | May-22-2020 | May-22-2020 | May-22-2020 | Jun-8-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples | 1 | 1 | 1 | 1 |
| Assessed By | Dobbels | Dobbels | Dobbels | |
| Data Entry Date | May-28-2020 | May-28-2020 | May-28-2020 | Jun-8-2020 |
| Rating Timing | AT EPO | AT EPO | AT EPO | |
| Days After First/Last Applic. | 30 30 | 30 30 | 30 30 | 47 16 |
| Trt-Eval Interval | 30 DA-A | 30 DA-A | 30 DA-A | AT POST |
| Plant-Eval Interval | 30 DP-1 | 30 DP-1 | 30 DP-1 | 47 DP-1 |
| Days After Emergence | 8 DE-1 | 8 DE-1 | 8 DE-1 | 25 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Other Rate | Other Unit | Appl Unit Code | 1* | 2* | 3* | 4* |
|---------|------------------|--------------|------------|------------|----------------|-------|------|-------|------|
| 12 | ACURON HERBICIDE | 1493 g ai/ha | 1.5 qt/a | | A | 100 a | 70 e | 100 a | 70 e |
| 12 | HALEX GT | 2213 g ai/ha | 1.8 qt/a | | C | | | | |
| 12 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | C | | | | |
| 12 | NIS | 0.25 % v/v | 0.25 % v/v | | C | | | | |
| 12 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |

| | | | | |
|--------------------|----------|----------|----------|----------|
| LSD P=.05 | 3.1 | 9.3 | . | 10.1 |
| Standard Deviation | 2.2 | 6.5 | 0.0 | 7.0 |
| CV | 3.77 | 13.06 | 0.0 | 9.14 |
| Grand Mean | 57.8 | 49.6 | 58.3 | 76.8 |
| Levene's F | 23.902 | 5.68 | 0.00 | 1.413 |
| Levene's Prob(F) | 0.001* | 0.001* | . | 0.209 |
| Rank X2 | . | . | . | . |
| P(Rank X2) | . | . | . | . |
| Skewness | -0.3415 | -0.2373 | -0.3491 | -1.9206* |
| Kurtosis | -1.9579* | -1.9168* | -1.9617* | 3.3184* |
| Replicate F | 0.920 | 2.729 | 0.000 | 1.719 |
| Replicate Prob(F) | 0.4419 | 0.0596 | 1.0000 | 0.1822 |
| Treatment F | 2198.789 | 186.886 | 0.000 | 59.829 |
| Treatment Prob(F) | 0.0001 | 0.0001 | 1.0000 | 0.0001 |

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| | | | | |
|-------------------------------|----------------|-----------------|---------------|----------------|
| Pest Type | W Weed | W Weed | W Weed | W Weed |
| Pest Code | AMBTR | CHEAL | IPOSS | SETFA |
| Pest Scientific Name | Ambrosia trif> | Chenopodium al> | Ipomoea sp. | Setaria faberi |
| Pest Name | Giant ragweed | common lambsqu> | Morning glory | Giant foxtail |
| Rating Date | Jun-8-2020 | Jun-8-2020 | Jun-8-2020 | Jun-25-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples | 1 | 1 | 1 | 1 |
| Assessed By | | | | |
| Data Entry Date | Jun-8-2020 | Jun-8-2020 | Jun-8-2020 | Jun-26-2020 |
| Rating Timing | | | | |
| Days After First/Last Applic. | 47 16 | 47 16 | 47 16 | 64 16 |
| Trt-Eval Interval | AT POST | AT POST | AT POST | 16 DA-C |
| Plant-Eval Interval | 47 DP-1 | 47 DP-1 | 47 DP-1 | 64 DP-1 |
| Days After Emergence | 25 DE-1 | 25 DE-1 | 25 DE-1 | 42 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |
| Trt Treatment | Rate | Other | Other | Appl |
| No. Name | Rate Unit | Rate | Rate Unit | Code |
| | | 5* | 6* | 7* |
| 1 UNTREATED | | 0 e | 0 b | -6 - 0 e |

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| | | | | |
|----------------------------------|------------------|----------------------|---------------|-----------------|
| Pest Type | W Weed | W Weed | W Weed | W Weed |
| Pest Code | AMBTR | CHEAL | IPOSS | SETFA |
| Pest Scientific Name | Ambrosia trifida | Chenopodium album | Ipomoea sp. | Setaria faberii |
| Pest Name | Giant ragweed | common lambsquarters | Morning glory | Giant foxtail |
| Rating Date | Jun-8-2020 | Jun-8-2020 | Jun-8-2020 | Jun-25-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples Assessed By | 1 | 1 | 1 | 1 |
| Data Entry Date | Jun-8-2020 | Jun-8-2020 | Jun-8-2020 | Jun-26-2020 |
| Rating Timing | | | | |
| Days After First/Last Applic. | 47 16 | 47 16 | 47 16 | 64 16 |
| Trt-Eval Interval | AT POST | AT POST | AT POST | 16 DA-C |
| Plant-Eval Interval | 47 DP-1 | 47 DP-1 | 47 DP-1 | 64 DP-1 |
| Days After Emergence | 25 DE-1 | 25 DE-1 | 25 DE-1 | 42 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Other Rate | Other Unit | Appl Unit Code | 5* | 6* | 7* | 8* |
|---------|-------------------------|---------------|------------|------------|----------------|--------|-------|-------|--------|
| 2 | CORVUS HERBICIDE | 190.3 g ai/ha | 5.6 oz/a | | A | 63 cd | 100 a | 59 - | 74 d |
| 2 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | | A | | | | |
| 3 | BALANCE FLEXX HERBICIDE | 175.4 g ai/ha | 5 oz/a | | A | 71 abc | 100 a | 35 - | 68 d |
| 3 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | | A | | | | |
| 4 | HARNESS MAX | 2532 g ai/ha | 75 oz/a | | A | 70 bc | 100 a | 53 - | 71 d |
| 4 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | A | | | | |
| 5 | ACURON HERBICIDE | 2737 g ai/ha | 2.75 qt/a | | A | 75 ab | 100 a | 62 - | 85 c |
| 6 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | | B | 76 ab | 100 a | 85 - | 86 bc |
| 6 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | | B | | | | |
| 6 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 6 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 7 | HARNESS MAX | 2160 g ai/ha | 64 oz/a | | B | 80 ab | 100 a | 93 - | 88 bc |
| 7 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | B | | | | |
| 7 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 7 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 8 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | | B | 83 a | 100 a | 72 - | 86 bc |
| 8 | DIFLEXX | 295.8 g ai/ha | 8 oz/a | | B | | | | |
| 8 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 8 | CLASS ACT RIDION | 1 % v/v | 1 % v/v | | B | | | | |
| 9 | HALEX GT | 2213 g ai/ha | 1.8 qt/a | | B | 76 ab | 100 a | | 75 d |
| 9 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | B | | | | |
| 9 | NIS | 0.25 % v/v | 0.25 % v/v | | B | | | | |
| 9 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 10 | CORVUS HERBICIDE | 152.9 g ai/ha | 4.5 oz/a | | A | 55 d | 100 a | -10 - | 94 abc |
| 10 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | A | | | | |
| 10 | HARNESS MAX | 1350 g ai/ha | 40 oz/a | | C | | | | |
| 10 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | C | | | | |
| 10 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |
| 11 | BALANCE FLEXX HERBICIDE | 105.2 g ai/ha | 3 oz/a | | A | 58 d | 100 a | -10 - | 99 a |
| 11 | HARNESS XTRA 5.6L | 2514 g ai/ha | 1.6 qt/a | | A | | | | |
| 11 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | | C | | | | |
| 11 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | C | | | | |
| 11 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #
 Trial ID: 20BAYERPRPO Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: HP20USAE01 Investigator: Dr. Mark M. Loux
 Project ID: LOCAL_PROJ Study Director: Riley, Eric
 Sponsor Contact: Rod Stevenson, Bayer

| | | | | |
|-------------------------------|-----------------|----------------------|---------------|-----------------|
| Pest Type | W Weed | W Weed | W Weed | W Weed |
| Pest Code | AMBTR | CHEAL | IPOSS | SETFA |
| Pest Scientific Name | Ambrosia trifid | Chenopodium albidum | Ipomoea sp. | Setaria faberii |
| Pest Name | Giant ragweed | common lambsquarters | Morning glory | Giant foxtail |
| Rating Date | Jun-8-2020 | Jun-8-2020 | Jun-8-2020 | Jun-25-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples | 1 | 1 | 1 | 1 |
| Assessed By | | | | |
| Data Entry Date | Jun-8-2020 | Jun-8-2020 | Jun-8-2020 | Jun-26-2020 |
| Rating Timing | | | | |
| Days After First/Last Applic. | 47 16 | 47 16 | 47 16 | 64 16 |
| Trt-Eval Interval | AT POST | AT POST | AT POST | 16 DA-C |
| Plant-Eval Interval | 47 DP-1 | 47 DP-1 | 47 DP-1 | 64 DP-1 |
| Days After Emergence | 25 DE-1 | 25 DE-1 | 25 DE-1 | 42 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Other Rate | Other Unit | Appl Code | 5* | 6* | 7* | 8* |
|---------|------------------|--------------|------------|------------|-----------|-------|-------|------|-------|
| 12 | ACURON HERBICIDE | 1493 g ai/ha | 1.5 qt/a | | A | 63 cd | 100 a | 20 - | 95 ab |
| 12 | HALEX GT | 2213 g ai/ha | 1.8 qt/a | | C | | | | |
| 12 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | C | | | | |
| 12 | NIS | 0.25 % v/v | 0.25 % v/v | | C | | | | |
| 12 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |

| | | | | |
|--------------------|----------|----------|---------|----------|
| LSD P=.05 | 12.2 | . | 40.8 | 9.3 |
| Standard Deviation | 8.5 | 0.0 | 20.8 | 6.4 |
| CV | 13.22 | 0.0 | 44.48 | 8.42 |
| Grand Mean | 64.1 | 91.7 | 46.7 | 76.5 |
| Levene's F | 0.837 | 0.00 | 0.00 | 1.099 |
| Levene's Prob(F) | 0.606 | . | . | 0.39 |
| Rank X2 | . | . | . | . |
| P(Rank X2) | . | . | . | . |
| Skewness | -1.8089* | -3.1133* | 0.0568 | -2.2036* |
| Kurtosis | 3.2236* | 8.0253* | -1.4928 | 4.5107* |
| Replicate F | 2.040 | 0.000 | 0.562 | 0.419 |
| Replicate Prob(F) | 0.1273 | 1.0000 | 0.6682 | 0.7406 |
| Treatment F | 27.028 | 0.000 | 5.094 | 65.084 |
| Treatment Prob(F) | 0.0001 | 1.0000 | 0.0653 | 0.0001 |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #

Trial ID: 20BAYERPRPO

Location: Western Branch G-6

Trial Year: 2020

Protocol ID: HP20USAE01

Investigator: Dr. Mark M. Loux

Project ID: LOCAL_PROJ

Study Director: Riley, Eric

Sponsor Contact: Rod Stevenson, Bayer

| | | | | |
|-------------------------------|-----------------|-----------------|----------------------|----------------|
| Pest Type | W Weed | W Weed | W Weed | W Weed |
| Pest Code | AMBTR | CHEAL | IPOSS | SETFA |
| Pest Scientific Name | Ambrosia trifi> | Chenopodium al> | Ipomoea sp. | Setaria faberi |
| Pest Name | Giant ragweed | common lambsqu> | Morning glory | foxtail, giant |
| Rating Date | Jun-25-2020 | Jun-25-2020 | Jun-25-2020 | Jul-13-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples | 1 | 1 | 1 | 1 |
| Assessed By | | | | |
| Data Entry Date | Jun-26-2020 | Jun-26-2020 | Jun-26-2020 | Jul-13-2020 |
| Rating Timing | | | | |
| Days After First/Last Applic. | 64 16 | 64 16 | 64 16 | 82 34 |
| Trt-Eval Interval | 16 DA-C | 16 DA-C | 16 DA-C | 34 DA-C |
| Plant-Eval Interval | 64 DP-1 | 64 DP-1 | 64 DP-1 | 82 DP-1 |
| Days After Emergence | 42 DE-1 | 42 DE-1 | 42 DE-1 | 60 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |
| Trt Treatment No. Name | Rate Rate Unit | Other Rate | Other Rate Unit Code | Appl Code |
| | 9* | 10* | 11* | 12* |
| 1 UNTREATED | 0 e | 0 c | 0 e | 0 e |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #

Trial ID: 20BAYERPRPO Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: HP20USAE01 Investigator: Dr. Mark M. Loux
 Project ID: LOCAL_PROJ Study Director: Riley, Eric
 Sponsor Contact: Rod Stevenson, Bayer

| Pest Type | W Weed | W Weed | W Weed | W Weed |
|-------------------------------|-----------------|-----------------|---------------|----------------|
| Pest Code | AMBTR | CHEAL | IPOSS | SETFA |
| Pest Scientific Name | Ambrosia trifi> | Chenopodium al> | Ipomoea sp. | Setaria faberi |
| Pest Name | Giant ragweed | common lambsqu> | Morning glory | foxtail, giant |
| Rating Date | Jun-25-2020 | Jun-25-2020 | Jun-25-2020 | Jul-13-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples | 1 | 1 | 1 | 1 |
| Assessed By | | | | |
| Data Entry Date | Jun-26-2020 | Jun-26-2020 | Jun-26-2020 | Jul-13-2020 |
| Rating Timing | | | | |
| Days After First/Last Applic. | 64 16 | 64 16 | 64 16 | 82 34 |
| Trt-Eval Interval | 16 DA-C | 16 DA-C | 16 DA-C | 34 DA-C |
| Plant-Eval Interval | 64 DP-1 | 64 DP-1 | 64 DP-1 | 82 DP-1 |
| Days After Emergence | 42 DE-1 | 42 DE-1 | 42 DE-1 | 60 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Other Rate | Appl Unit | Code | 9* | 10* | 11* | 12* |
|---------|-------------------------|---------------|------------|-----------|------|-------|-------|--------|-------|
| 2 | CORVUS HERBICIDE | 190.3 g ai/ha | 5.6 oz/a | A | A | 56 d | 100 a | 54 cd | 70 cd |
| 2 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | A | A | | | | |
| 3 | BALANCE FLEXX HERBICIDE | 175.4 g ai/ha | 5 oz/a | A | A | 58 d | 100 a | 40 d | 69 d |
| 3 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | A | A | | | | |
| 4 | HARNESS MAX | 2532 g ai/ha | 75 oz/a | A | A | 55 d | 95 b | 43 d | 68 d |
| 4 | ATRAZINE | 1122 g ai/ha | 1 qt/a | A | A | | | | |
| 5 | ACURON HERBICIDE | 2737 g ai/ha | 2.75 qt/a | A | A | 77 bc | 100 a | 52 cd | 83 ab |
| 6 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | B | B | 65 cd | 100 a | 80 abc | 87 a |
| 6 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | B | B | | | | |
| 6 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | B | B | | | | |
| 6 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | B | B | | | | |
| 7 | HARNESS MAX | 2160 g ai/ha | 64 oz/a | B | B | 79 b | 100 a | 93 ab | 83 ab |
| 7 | ATRAZINE | 1122 g ai/ha | 1 qt/a | B | B | | | | |
| 7 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | B | B | | | | |
| 7 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | B | B | | | | |
| 8 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | B | B | 79 b | 100 a | 61 bcd | 85 a |
| 8 | DIFLEXX | 295.8 g ai/ha | 8 oz/a | B | B | | | | |
| 8 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | B | B | | | | |
| 8 | CLASS ACT RIDION | 1 % v/v | 1 % v/v | B | B | | | | |
| 9 | HALEX GT | 2213 g ai/ha | 1.8 qt/a | B | B | 64 d | 100 a | 90 abc | 77 bc |
| 9 | ATRAZINE | 1122 g ai/ha | 1 qt/a | B | B | | | | |
| 9 | NIS | 0.25 % v/v | 0.25 % v/v | B | B | | | | |
| 9 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | B | B | | | | |
| 10 | CORVUS HERBICIDE | 152.9 g ai/ha | 4.5 oz/a | A | A | 84 b | 100 a | 94 a | 86 a |
| 10 | ATRAZINE | 1122 g ai/ha | 1 qt/a | A | A | | | | |
| 10 | HARNESS MAX | 1350 g ai/ha | 40 oz/a | C | C | | | | |
| 10 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | C | C | | | | |
| 10 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | C | C | | | | |
| 11 | BALANCE FLEXX HERBICIDE | 105.2 g ai/ha | 3 oz/a | A | A | 98 a | 100 a | 60 cd | 85 a |
| 11 | HARNESS XTRA 5.6L | 2514 g ai/ha | 1.6 qt/a | A | A | | | | |
| 11 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | C | C | | | | |
| 11 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | C | C | | | | |
| 11 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | C | C | | | | |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #

Trial ID: 20BAYERPRPO Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: HP20USAE01 Investigator: Dr. Mark M. Loux
 Project ID: LOCAL_PROJ Study Director: Riley, Eric
 Sponsor Contact: Rod Stevenson, Bayer

| | | | | |
|-------------------------------|-----------------|-----------------|---------------|----------------|
| Pest Type | W Weed | W Weed | W Weed | W Weed |
| Pest Code | AMBTR | CHEAL | IPOSS | SETFA |
| Pest Scientific Name | Ambrosia trifi> | Chenopodium al> | Ipomoea sp. | Setaria faberi |
| Pest Name | Giant ragweed | common lambsqu> | Morning glory | foxtail, giant |
| Rating Date | Jun-25-2020 | Jun-25-2020 | Jun-25-2020 | Jul-13-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % | % |
| Number of Subsamples | 1 | 1 | 1 | 1 |
| Assessed By | | | | |
| Data Entry Date | Jun-26-2020 | Jun-26-2020 | Jun-26-2020 | Jul-13-2020 |
| Rating Timing | | | | |
| Days After First/Last Applic. | 64 16 | 64 16 | 64 16 | 82 34 |
| Trt-Eval Interval | 16 DA-C | 16 DA-C | 16 DA-C | 34 DA-C |
| Plant-Eval Interval | 64 DP-1 | 64 DP-1 | 64 DP-1 | 82 DP-1 |
| Days After Emergence | 42 DE-1 | 42 DE-1 | 42 DE-1 | 60 DE-1 |
| Number of Decimals | 0 | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Unit | Other Rate | Other Unit | Appl Code | 9* | 10* | 11* | 12* |
|---------|------------------|--------------|------|------------|------------|-----------|------|-------|------|------|
| 12 | ACURON HERBICIDE | 1493 g ai/ha | | 1.5 qt/a | | A | 98 a | 100 a | 94 a | 86 a |
| 12 | HALEX GT | 2213 g ai/ha | | 1.8 qt/a | | C | | | | |
| 12 | ATRAZINE | 1122 g ai/ha | | 1 qt/a | | C | | | | |
| 12 | NIS | 0.25 % v/v | | 0.25 % v/v | | C | | | | |
| 12 | N-PAK AMS LIQUID | 2.5 % v/v | | 2.5 % v/v | | C | | | | |

| | | | | |
|--------------------|----------|----------|---------|----------|
| LSD P=.05 | 12.2 | 4.2 | 28.6 | 7.8 |
| Standard Deviation | 8.4 | 2.9 | 19.5 | 5.4 |
| CV | 12.49 | 3.16 | 31.58 | 7.44 |
| Grand Mean | 67.6 | 91.3 | 61.8 | 73.2 |
| Levene's F | 2.651 | 1.00 | 0.496 | 1.36 |
| Levene's Prob(F) | 0.013* | 0.465 | 0.888 | 0.234 |
| Rank X2 | . | . | . | . |
| P(Rank X2) | . | . | . | . |
| Skewness | -1.2868* | -3.0614* | -0.4642 | -2.4265* |
| Kurtosis | 1.6363* | 7.7899* | -0.9767 | 5.3347* |
| Replicate F | 0.245 | 1.000 | 0.717 | 2.352 |
| Replicate Prob(F) | 0.8645 | 0.4051 | 0.5517 | 0.0901 |
| Treatment F | 37.752 | 397.364 | 7.526 | 79.001 |
| Treatment Prob(F) | 0.0001 | 0.0001 | 0.0001 | 0.0001 |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #

Trial ID: 20BAYERPRPO Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: HP20USAE01 Investigator: Dr. Mark M. Loux
 Project ID: LOCAL_PROJ Study Director: Riley, Eric
 Sponsor Contact: Rod Stevenson, Bayer

| | | | |
|-------------------------------|----------------|---------------------|----------------|
| Pest Type | W Weed | W Weed | W Weed |
| Pest Code | AMBTR | CHEAL | IPOSS |
| Pest Scientific Name | Ambrosia trif> | Chenopodium al> | Ipomoea sp. |
| Pest Name | ragweed, giant | lambsquarters,> | Morning glory |
| Rating Date | Jul-13-2020 | Jul-13-2020 | Jul-13-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % |
| Number of Subsamples | 1 | 1 | 1 1 |
| Assessed By | | | |
| Data Entry Date | Jul-13-2020 | Jul-13-2020 | Jul-13-2020 |
| Rating Timing | | | |
| Days After First/Last Applic. | 82 34 | 82 34 | 82 34 |
| Trt-Eval Interval | 34 DA-C | 34 DA-C | 34 DA-C |
| Plant-Eval Interval | 82 DP-1 | 82 DP-1 | 82 DP-1 |
| Days After Emergence | 60 DE-1 | 60 DE-1 | 60 DE-1 |
| Number of Decimals | 0 | 0 | 0 |
| Trt Treatment | Rate | Other Other | Appl |
| No. Name | Rate Unit | Rate Rate Unit Code | 13* 14* 15* 16 |
| 1 UNTREATED | | 0 h 0 b 0 d | |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #

Trial ID: 20BAYERPRPO

Location: Western Branch G-6

Trial Year: 2020

Protocol ID: HP20USAE01

Investigator: Dr. Mark M. Loux

Project ID: LOCAL_PROJ

Study Director: Riley, Eric

Sponsor Contact: Rod Stevenson, Bayer

| Pest Type | W Weed | W Weed | W Weed |
|-------------------------------|------------------|-------------------|---------------|
| Pest Code | AMBTR | CHEAL | IPOSS |
| Pest Scientific Name | Ambrosia trifida | Chenopodium album | Ipomoea sp. |
| Pest Name | ragweed, giant | lambsquarters, > | Morning glory |
| Rating Date | Jul-13-2020 | Jul-13-2020 | Jul-13-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % |
| Number of Subsamples | 1 | 1 | 1 1 |
| Assessed By | | | |
| Data Entry Date | Jul-13-2020 | Jul-13-2020 | Jul-13-2020 |
| Rating Timing | | | |
| Days After First/Last Applic. | 82 34 | 82 34 | 82 34 |
| Trt-Eval Interval | 34 DA-C | 34 DA-C | 34 DA-C |
| Plant-Eval Interval | 82 DP-1 | 82 DP-1 | 82 DP-1 |
| Days After Emergence | 60 DE-1 | 60 DE-1 | 60 DE-1 |
| Number of Decimals | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Other Rate | Other Unit | Appl Code | 13* | 14* | 15* | 16 |
|---------|-------------------------|---------------|------------|------------|-----------|--------|-------|--------|----|
| 2 | CORVUS HERBICIDE | 190.3 g ai/ha | 5.6 oz/a | | A | 60 fg | 100 a | 94 ab | |
| 2 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | | A | | | | |
| 3 | BALANCE FLEXX HERBICIDE | 175.4 g ai/ha | 5 oz/a | | A | 68 efg | 100 a | 68 c | |
| 3 | HARNESS XTRA 5.6L | 3143 g ai/ha | 2 qt/a | | A | | | | |
| 4 | HARNESS MAX | 2532 g ai/ha | 75 oz/a | | A | 58 g | 100 a | 88 abc | |
| 4 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | A | | | | |
| 5 | ACURON HERBICIDE | 2737 g ai/ha | 2.75 qt/a | | A | 72 de | 100 a | 83 abc | |
| 6 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | | B | 71 de | 100 a | 90 abc | |
| 6 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | | B | | | | |
| 6 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 6 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 7 | HARNESS MAX | 2160 g ai/ha | 64 oz/a | | B | 76 de | 100 a | 99 a | |
| 7 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | B | | | | |
| 7 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 7 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 8 | DEGREE EXTRA | 3403 g ai/ha | 3 qt/a | | B | 80 cd | 100 a | 88 abc | |
| 8 | DIFLEXX | 295.8 g ai/ha | 8 oz/a | | B | | | | |
| 8 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | B | | | | |
| 8 | CLASS ACT RIDION | 1 % v/v | 1 % v/v | | B | | | | |
| 9 | HALEX GT | 2213 g ai/ha | 1.8 qt/a | | B | 70 def | 100 a | 96 ab | |
| 9 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | B | | | | |
| 9 | NIS | 0.25 % v/v | 0.25 % v/v | | B | | | | |
| 9 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | B | | | | |
| 10 | CORVUS HERBICIDE | 152.9 g ai/ha | 4.5 oz/a | | A | 88 bc | 100 a | 89 abc | |
| 10 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | A | | | | |
| 10 | HARNESS MAX | 1350 g ai/ha | 40 oz/a | | C | | | | |
| 10 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | C | | | | |
| 10 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |
| 11 | BALANCE FLEXX HERBICIDE | 105.2 g ai/ha | 3 oz/a | | A | 96 ab | 100 a | 71 bc | |
| 11 | HARNESS XTRA 5.6L | 2514 g ai/ha | 1.6 qt/a | | A | | | | |
| 11 | CAPRENO HERBICIDE | 119.9 g ai/ha | 3 oz/a | | C | | | | |
| 11 | ROUNDUP POWER MAX | 1263 g ai/ha | 32 oz/a | | C | | | | |
| 11 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #

Trial ID: 20BAYERPRPO Location: Western Branch G-6 Trial Year: 2020
 Protocol ID: HP20USAE01 Investigator: Dr. Mark M. Loux
 Project ID: LOCAL_PROJ Study Director: Riley, Eric
 Sponsor Contact: Rod Stevenson, Bayer

| | | | |
|-------------------------------|------------------|-------------------|---------------|
| Pest Type | W Weed | W Weed | W Weed |
| Pest Code | AMBTR | CHEAL | IPOSS |
| Pest Scientific Name | Ambrosia trifida | Chenopodium album | Ipomoea sp. |
| Pest Name | ragweed, giant | lambsquarters, > | Morning glory |
| Rating Date | Jul-13-2020 | Jul-13-2020 | Jul-13-2020 |
| Rating Type | CONTRO | CONTRO | CONTRO |
| Rating Unit | % | % | % |
| Number of Subsamples | 1 | 1 | 1 1 |
| Assessed By | | | |
| Data Entry Date | Jul-13-2020 | Jul-13-2020 | Jul-13-2020 |
| Rating Timing | | | |
| Days After First/Last Applic. | 82 34 | 82 34 | 82 34 |
| Trt-Eval Interval | 34 DA-C | 34 DA-C | 34 DA-C |
| Plant-Eval Interval | 82 DP-1 | 82 DP-1 | 82 DP-1 |
| Days After Emergence | 60 DE-1 | 60 DE-1 | 60 DE-1 |
| Number of Decimals | 0 | 0 | 0 |

| Trt No. | Treatment Name | Rate | Other Rate | Other Unit | Appl Code | 13* | 14* | 15* | 16 |
|--------------------|------------------|--------------|------------|------------|-----------|---------|----------|---------|----|
| 12 | ACURON HERBICIDE | 1493 g ai/ha | 1.5 qt/a | | A | 100 a | 100 a | 87 abc | |
| 12 | HALEX GT | 2213 g ai/ha | 1.8 qt/a | | C | | | | |
| 12 | ATRAZINE | 1122 g ai/ha | 1 qt/a | | C | | | | |
| 12 | NIS | 0.25 % v/v | 0.25 % v/v | | C | | | | |
| 12 | N-PAK AMS LIQUID | 2.5 % v/v | 2.5 % v/v | | C | | | | |
| LSD P=.05 | | | | | | 11.0 | . | 24.2 | . |
| Standard Deviation | | | | | | 7.6 | 0.0 | 16.7 | . |
| CV | | | | | | 10.95 | 0.0 | 21.4 | . |
| Grand Mean | | | | | | 69.9 | 91.7 | 78.2 | . |
| Levene's F | | | | | | 1.424 | 0.00 | 1.345 | . |
| Levene's Prob(F) | | | | | | 0.205 | . | 0.248 | . |
| Rank X2 | | | | | | . | . | . | . |
| P(Rank X2) | | | | | | . | . | . | . |
| Skewness | | | | | | -1.489* | -3.1133* | -1.703* | . |
| Kurtosis | | | | | | 2.4529* | 8.0253* | 2.0641* | . |
| Replicate F | | | | | | 1.891 | 0.000 | 0.129 | |
| Replicate Prob(F) | | | | | | 0.1504 | 1.0000 | 0.9420 | |
| Treatment F | | | | | | 44.931 | 0.000 | 9.772 | |
| Treatment Prob(F) | | | | | | 0.0001 | 1.0000 | 0.0001 | |

The Ohio State University

Bayer Corn Portfolio Midwest-North/Corn/Grass & Broadleaf/Phyto & Efficacy

Title No. 2: 2020-01-24-01 WALDO #

Trial ID: 20BAYERPRPO Location: Western Branch G-6 Trial Year: 2020
Protocol ID: HP20USAE01 Investigator: Dr. Mark M. Loux
Project ID: LOCAL_PROJ Study Director: Riley, Eric
Sponsor Contact: Rod Stevenson, Bayer

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
CHEAL, Chenopodium album, common lambsquarters = US
IPOSS, Ipomoea sp., Morning glory = US
SETFA, Setaria faberi, foxtail, giant = US
AMBTR, Ambrosia trifida, ragweed, giant = US
CHEAL, Chenopodium album, lambsquarters, common = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

30 DP-1 = 1 ZEAMX Apr-22-2020
47 DP-1 = 1 ZEAMX Apr-22-2020
64 DP-1 = 1 ZEAMX Apr-22-2020
82 DP-1 = 1 ZEAMX Apr-22-2020