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## TO DETERMINE THE HERBICIDAL EFFICACY AND SELECTIVITY WHEN HARROW IS FALL APPLIED PREPLANT TO CORN IN 2013

Trial ID: HZEAMXRIM2THI1302 Protocol ID: HZEAMXRIM2THI1302  
 Location: USA Study Director:  
 Project ID: HZEAMXRIM2THI1302 Investigator: Dr. Bill Johnson  
 Sponsor Contact: Cheminova - Jim Barrentine

### General Trial Information

**Study Director:** Bill Johnson  
**Investigator:** Dr. Bill Johnson **Title:** Professor

**Discipline:** H herbicide  
**Trial Status:** E established  
**Initiation Date:** Nov-7-2013

### Trial Location

**City:** Lafayette  
**State/Prov.:** IN  
**Postal Code:** 47909  
**Country:** USA

**Keywords:** CORN, HARROW (CHA-057), RIMSULFURON 50%, THIFENSULFURON 25%, GLYFOS X-TRA , BASIS, EFFICACY, CROP RESPONSE, BURNDOWN, FALL APPLIED

### Objectives:

COMPARE HARROW AS A FALL PREPLANT TO BASIS HERBICIDE WHEN APPLIED IN THE FALL OF 2013 FOR CORN IN 2014.

### Personnel

**Study Director:** Bill Johnson  
**Investigator:** Dr. Bill Johnson **Title:** Professor  
**Affiliation:** Purdue University  
**Address:** 915 W State Street  
**Location:** West Lafayette, IN, USA  
**Postal Code:** 47907 **E-mail:** wj@purdue.edu  
**Phone No.:** 765-494-4656 **Mobile No.:** 765-404-9801

### Cooperator/Landowner

**Cooperator:** Throckmorton Purdue Ag Center **Role:** Purdue Ag Center  
**Organization:** Purdue University  
**Address 1:** 8343 US 231 S  
**City:** Lafayette **Phone No.:** 765-538-3422  
**State/Prov.:** IN **Fax No.:** 765-538-3423  
**Postal Code:** 47909 **E-mail:** jayyoung@purdue.edu  
**Country:** USA United States

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** Dikalb DKC 62-08  
**BBCH Scale:** BCOR **Planting Date:** Apr-30-2014  
**Planting Method:** SEEDED seeded **Rate, Unit:** 33000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Emergence Date:** May-9-2014

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## Pest Description

**Pest 1 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion

**Pest 2 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed

**Pest 3 Type:** W **Code:** ERICA *Conyza canadensis*  
**Common Name:** Canada horseweed

**Pest 4 Type:** W **Code:** THLSS *Thlaspi* sp.  
**Common Name:** Pennycress

**Pest 5 Type:** W **Code:** BROTE *Bromus tectorum*  
**Common Name:** Downy brome

## Site and Design

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 30 FT **Experimental Unit:** 1 PLOT plot  
**Plot Area, Unit:** 300 FT<sup>2</sup> **Tillage Type:** NOTILL no-till  
**Replications:** 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

## Maintenance

| No. | Date        | Maintenance Treatment Name | Rate | Rate Unit | Tank Mix |
|-----|-------------|----------------------------|------|-----------|----------|
| 1.  | Jun-13-2014 | Roundup PowerMax           | 32   | OZ/A      | no       |

**Comment:** Applied to all treatments

## Soil Description

**Description Name:** TPAC - Field 5  
**% OM:** 2.3 **Texture:** SIL silt loam  
**pH:** 6.6 **Soil Name:** Longlois  
**CEC:** 9.9

## Application Description

|                                | A           |
|--------------------------------|-------------|
| <b>Application Date:</b>       | Nov-11-2013 |
| <b>Application Method:</b>     | SPRAY       |
| <b>Application Timing:</b>     | A           |
| <b>Application Placement:</b>  | SOIL        |
| <b>Air Temperature, Unit:</b>  | 44 F        |
| <b>% Relative Humidity:</b>    | 59          |
| <b>Wind Velocity, Unit:</b>    | 3 mph       |
| <b>Wind Direction:</b>         | S           |
| <b>Dew Presence (Y/N):</b>     | N no        |
| <b>Soil Temperature, Unit:</b> | 53 F        |
| <b>Soil Moisture:</b>          | SLIWET      |
| <b>% Cloud Cover:</b>          | 0           |

## Crop Stage At Each Application

|                                 | A          |
|---------------------------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | ZEAMX BCOR |

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## Pest Stage At Each Application

|                                  | A       |
|----------------------------------|---------|
| <b>Pest 1 Code, Type, Scale:</b> | TAROF W |
| <b>Height, Unit:</b>             | 3 IN    |
| <b>Density, Unit:</b>            | 6 YD2   |
| <b>Pest 2 Code, Type, Scale:</b> | STEME W |
| <b>Height, Unit:</b>             | 0.5 IN  |
| <b>Density, Unit:</b>            | 10 FT2  |
| <b>Pest 3 Code, Type, Scale:</b> | ERICA W |
| <b>Height, Unit:</b>             | 0.5 IN  |
| <b>Density, Unit:</b>            | 3 FT2   |
| <b>Pest 4 Code, Type, Scale:</b> | THLSS W |
| <b>Height, Unit:</b>             | 0.25 IN |
| <b>Density, Unit:</b>            | 3 YD2   |
| <b>Pest 5 Code, Type, Scale:</b> | BROTE W |
| <b>Height, Unit:</b>             | 2.5 IN  |
| <b>Density, Unit:</b>            | 5 YD2   |

## Application Equipment

|                                  | A          |
|----------------------------------|------------|
| <b>Appl. Equipment:</b>          | CUB        |
| <b>Equipment Type:</b>           | TRMOSP     |
| <b>Operation Pressure, Unit:</b> | 20 PSI     |
| <b>Nozzle Type:</b>              | FLAT FAN   |
| <b>Nozzle Size:</b>              | 110 02 XR  |
| <b>Nozzle Spacing, Unit:</b>     | 20 IN      |
| <b>Nozzles/Row:</b>              | 6          |
| <b>Boom Length, Unit:</b>        | 10 FT      |
| <b>Ground Speed, Unit:</b>       | 2.2 MPH    |
| <b>Carrier:</b>                  | ACRE       |
| <b>Spray Volume, Unit:</b>       | 20 gal/ac  |
| <b>Mix Size, Unit:</b>           | 2.5 liters |
| <b>Propellant:</b>               | CO2        |

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Trial ID: HZEAMXRIM2THI1302      Protocol ID: HZEAMXRIM2THI1302  
 Location: USA      Study Director:  
 Project ID: HZEAMXRIM2THI1302      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Cheminova - Jim Barrentine

Reps: 4      Plots: 10 by 30 feet  
 Spray vol: 20 gal/ac      Mix size: 2.5 liters (min 2.0856)

| Trt No. | Treatment Name  | Form Conc  | Form Unit | Form Type         | Rate          | Rate Unit | Other Rate | Other Unit | Growth Stage | Appl Code        | Appl Description | Amt Product to Measure | Rep 1 | Rep 2 | Rep 3 | Rep 4 |
|---------|-----------------|------------|-----------|-------------------|---------------|-----------|------------|------------|--------------|------------------|------------------|------------------------|-------|-------|-------|-------|
| 1       | UNTREATED       |            |           |                   |               |           |            |            |              |                  |                  |                        | 101   | 402   | 603   | 801   |
| 2       | HARROW          | 75 %W/W    | WDG       | 0.0117 lb ai/a    | 0.25 oz/a     |           |            |            | PREPLA A     | FALL APPLICATION | 0.2337 g/mx      | 102                    | 303   | 503   | 902   |       |
|         | GLYFOS X-TRA    | 3 LBAE/GAL | SL        | 0.75 lb ae/a      | 32 fl oz/a    |           |            |            | PREPLA A     | FALL APPLICATION | 31.25 ml/mx      |                        |       |       |       |       |
|         | NIS             |            | L         | 0.25 % v/v        | 0.25 % v/v    |           |            |            | PREPLA A     | FALL APPLICATION | 6.249 ml/mx      |                        |       |       |       |       |
|         | AMS - Liquid    | 3.4 LB/GAL | SL        | 8.5 lb ai/100 gal | 10 qt/100 gal |           |            |            | PREPLA A     | FALL APPLICATION | 62.49 ml/mx      |                        |       |       |       |       |
| 3       | HARROW          | 75 %W/W    | WDG       | 0.0234 lb ai/a    | 0.50 oz/a     |           |            |            | PREPLA A     | FALL APPLICATION | 0.4673 g/mx      | 103                    | 401   | 601   | 1001  |       |
|         | GLYFOS X-TRA    | 3 LBAE/GAL | SL        | 0.75 lb ae/a      | 32 fl oz/a    |           |            |            | PREPLA A     | FALL APPLICATION | 31.25 ml/mx      |                        |       |       |       |       |
|         | NIS             |            | L         | 0.25 % v/v        | 0.25 % v/v    |           |            |            | PREPLA A     | FALL APPLICATION | 6.249 ml/mx      |                        |       |       |       |       |
|         | AMS - Liquid    | 3.4 LB/GAL | SL        | 8.5 lb ai/100 gal | 10 qt/100 gal |           |            |            | PREPLA A     | FALL APPLICATION | 62.49 ml/mx      |                        |       |       |       |       |
| 4       | HARROW          | 75 %W/W    | WDG       | 0.047 lb ai/a     | 1 oz/a        |           |            |            | PREPLA A     | FALL APPLICATION | 0.9386 g/mx      | 201                    | 302   | 702   | 901   |       |
|         | GLYFOS X-TRA    | 3 LBAE/GAL | SL        | 0.75 lb ae/a      | 32 fl oz/a    |           |            |            | PREPLA A     | FALL APPLICATION | 31.25 ml/mx      |                        |       |       |       |       |
|         | NIS             |            | L         | 0.25 % v/v        | 0.25 % v/v    |           |            |            | PREPLA A     | FALL APPLICATION | 6.249 ml/mx      |                        |       |       |       |       |
|         | AMS - Liquid    | 3.4 LB/GAL | SL        | 8.5 lb ai/100 gal | 10 qt/100 gal |           |            |            | PREPLA A     | FALL APPLICATION | 62.49 ml/mx      |                        |       |       |       |       |
| 5       | BASIS           | 75 %W/W    | WDG       | 0.0234 lb ai/a    | 0.50 oz/a     |           |            |            | PREPLA A     | FALL APPLICATION | 0.4673 g/mx      | 202                    | 502   | 701   | 803   |       |
|         | GLYFOS X-TRA    | 3 LBAE/GAL | SL        | 0.75 lb ae/a      | 32 fl oz/a    |           |            |            | PREPLA A     | FALL APPLICATION | 31.25 ml/mx      |                        |       |       |       |       |
|         | NIS             |            | L         | 0.25 % v/v        | 0.25 % v/v    |           |            |            | PREPLA A     | FALL APPLICATION | 6.249 ml/mx      |                        |       |       |       |       |
|         | AMS - Liquid    | 3.4 LB/GAL | SL        | 8.5 lb ai/100 gal | 10 qt/100 gal |           |            |            | PREPLA A     | FALL APPLICATION | 62.49 ml/mx      |                        |       |       |       |       |
| 6       | GLYFOS X-TRA    | 3 LBAE/GAL | SL        | 0.75 lb ae/a      | 32 fl oz/a    |           |            |            | PREPLA A     | FALL APPLICATION | 31.25 ml/mx      | 203                    | 403   | 703   | 903   |       |
|         | NIS             |            | L         | 0.25 % v/v        | 0.25 % v/v    |           |            |            | PREPLA A     | FALL APPLICATION | 6.249 ml/mx      |                        |       |       |       |       |
|         | AMS - Liquid    | 3.4 LB/GAL | SL        | 8.5 lb ai/100 gal | 10 qt/100 gal |           |            |            | PREPLA A     | FALL APPLICATION | 62.49 ml/mx      |                        |       |       |       |       |
| 7       | Untreated Check |            |           |                   |               |           |            |            |              |                  |                  | 301                    | 501   | 602   | 802   |       |

Sort Order: Treatment

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 Location: USA      Study Director:  
 Project ID: HZEAMXRIM2THI1302      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Cheminova - Jim Barrentine

| Pest Type                     | W Weed          | W Weed          | W Weed      | W Weed          | W Weed           | W Weed          |
|-------------------------------|-----------------|-----------------|-------------|-----------------|------------------|-----------------|
| Pest Code                     | TAROF           | STEME           | THLSS       | BROTE           | ERICA            | STEME           |
| Pest Scientific Name          | Taraxacum offi> | Stellaria media | Thlaspi sp. | Bromus tectorum | Conyza canadens> | Stellaria media |
| Pest Name                     | Common dandel>  | Common chickwe> | Pennycress  | Downy brome     | Canada horsewe>  | Common chickwe> |
| Crop Code                     |                 |                 |             |                 |                  |                 |
| BBCH Scale                    |                 |                 |             |                 |                  |                 |
| Crop Scientific Name          |                 |                 |             |                 |                  |                 |
| Crop Name                     |                 |                 |             |                 |                  |                 |
| Description                   |                 |                 |             |                 |                  |                 |
| Rating Date                   | Nov-23-2013     | Nov-23-2013     | Nov-23-2013 | Nov-23-2013     | Nov-23-2013      | Dec-6-2013      |
| Rating Type                   | CONTRO          | CONTRO          | CONTRO      | CONTRO          | CONTRO           | CONTRO          |
| Rating Unit                   | %               | %               | %           | %               | %                | %               |
| Sample Size, Unit             | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          | 1 PLOT           | 1 PLOT          |
| Number of Subsamples          | 1               | 1               | 1           | 1               | 1                | 1               |
| Pest Stage Majority           |                 | 2"              | .25"        |                 | 3"               |                 |
| Pest Density, Unit            |                 | 4 YD2           | 10 FT2      |                 | 15 FT2           |                 |
| Days After First/Last Applic. | 12 12           | 12 12           | 12 12       | 12 12           | 12 12            | 25 25           |
| Trt-Eval Interval             | -189 DA-B       | -202 DA-B       | -202 DA-B   | -202 DA-B       | -202 DA-B        | -189 DA-B       |
| Plant-Eval Interval           | -158 DP-1       | -158 DP-1       | -158 DP-1   | -158 DP-1       | -158 DP-1        | -145 DP-1       |
| Days After Emergence          | -167 DE-1       | -167 DE-1       | -167 DE-1   | -167 DE-1       | -167 DE-1        | -154 DE-1       |
| Trt Treatment                 |                 |                 |             |                 |                  |                 |
| No. Name                      | 1               | 2               | 3           | 4               | 5                | 6               |
| 1 UNTREATED                   | 0.0             | 0.0             | 0.0         | 0.0             | 0.0              | 0.0             |
|                               | 0.0             | 0.0             | 0.0         | 0.0             | 0.0              | 0.0             |
|                               | 0.0             | 0.0             | 0.0         | 0.0             | 0.0              | 0.0             |
|                               | 0.0             | 0.0             | 0.0         | 0.0             | 0.0              | 0.0             |
| Mean =                        | 0.0             | 0.0             | 0.0         | 0.0             | 0.0              | 0.0             |
| 2 HARROW                      | 50.0            | 75.0            | 99.0        | 90.0            | 99.0             | 50.0            |
| GLYFOS X-TRA                  | 50.0            | 85.0            | 99.0        | 90.0            | 99.0             | 70.0            |
| NIS                           | 30.0            | 90.0            | 99.0        | 60.0            | 99.0             | 40.0            |
| AMS - Liquid                  | 10.0            | 99.0            | 99.0        | 90.0            | 99.0             | 90.0            |
| Mean =                        | 35.0            | 87.3            | 99.0        | 82.5            | 99.0             | 62.5            |
| 3 HARROW                      | 80.0            | 65.0            | 99.0        | 95.0            | 99.0             | 60.0            |
| GLYFOS X-TRA                  | 20.0            | 95.0            | 99.0        | 90.0            | 99.0             | 75.0            |
| NIS                           | 30.0            | 99.0            | 99.0        | 90.0            | 99.0             | 70.0            |
| AMS - Liquid                  | 60.0            | 99.0            | 99.0        | 60.0            | 99.0             | 85.0            |
| Mean =                        | 47.5            | 89.5            | 99.0        | 83.8            | 99.0             | 72.5            |
| 4 HARROW                      | 60.0            | 90.0            | 99.0        | 85.0            | 99.0             | 93.0            |
| GLYFOS X-TRA                  | 40.0            | 90.0            | 99.0        | 85.0            | 99.0             | 99.0            |
| NIS                           | 40.0            | 90.0            | 99.0        | 95.0            | 99.0             | 70.0            |
| AMS - Liquid                  | 50.0            | 99.0            | 99.0        | 90.0            | 99.0             | 90.0            |
| Mean =                        | 47.5            | 92.3            | 99.0        | 88.8            | 99.0             | 88.0            |
| 5 BASIS                       | 70.0            | 99.0            | 99.0        | 80.0            | 99.0             | 80.0            |
| GLYFOS X-TRA                  | 85.0            | 99.0            | 99.0        | 93.0            | 99.0             | 85.0            |
| NIS                           | 99.0            | 99.0            | 99.0        | 85.0            | 99.0             | 99.0            |
| AMS - Liquid                  | 60.0            | 85.0            | 99.0        | 75.0            | 99.0             | 99.0            |
| Mean =                        | 78.5            | 95.5            | 99.0        | 83.3            | 99.0             | 90.8            |

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| Pest Type                     | W Weed            | W Weed          | W Weed      | W Weed          | W Weed           | W Weed          |      |      |
|-------------------------------|-------------------|-----------------|-------------|-----------------|------------------|-----------------|------|------|
| Pest Code                     | TAROF             | STEME           | THLSS       | BROTE           | ERICA            | STEME           |      |      |
| Pest Scientific Name          | Taraxacum offi>   | Stellaria media | Thlaspi sp. | Bromus tectorum | Conyza canadens> | Stellaria media |      |      |
| Pest Name                     | Common dandelion> | Common chickwe> | Pennycress  | Downy brome     | Canada horsewe>  | Common chickwe> |      |      |
| Crop Code                     |                   |                 |             |                 |                  |                 |      |      |
| BBCH Scale                    |                   |                 |             |                 |                  |                 |      |      |
| Crop Scientific Name          |                   |                 |             |                 |                  |                 |      |      |
| Crop Name                     |                   |                 |             |                 |                  |                 |      |      |
| Description                   |                   |                 |             |                 |                  |                 |      |      |
| Rating Date                   | Nov-23-2013       | Nov-23-2013     | Nov-23-2013 | Nov-23-2013     | Nov-23-2013      | Dec-6-2013      |      |      |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO      | CONTRO          | CONTRO           | CONTRO          |      |      |
| Rating Unit                   | %                 | %               | %           | %               | %                | %               |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT      | 1 PLOT          | 1 PLOT           | 1 PLOT          |      |      |
| Number of Subsamples          | 1                 | 1               | 1           | 1               | 1                | 1               |      |      |
| Pest Stage Majority           |                   | 2"              | .25"        |                 | 3"               |                 |      |      |
| Pest Density, Unit            |                   | 4 YD2           | 10 FT2      |                 | 15 FT2           |                 |      |      |
| Days After First/Last Applic. | 12 12             | 12 12           | 12 12       | 12 12           | 12 12            | 25 25           |      |      |
| Trt-Eval Interval             | -189 DA-B         | -202 DA-B       | -202 DA-B   | -202 DA-B       | -202 DA-B        | -189 DA-B       |      |      |
| Plant-Eval Interval           | -158 DP-1         | -158 DP-1       | -158 DP-1   | -158 DP-1       | -158 DP-1        | -145 DP-1       |      |      |
| Days After Emergence          | -167 DE-1         | -167 DE-1       | -167 DE-1   | -167 DE-1       | -167 DE-1        | -154 DE-1       |      |      |
| Trt Treatment                 | Rate              | Appl            |             |                 |                  |                 |      |      |
| No. Name                      | Rate Unit         | Code Plot       | 1           | 2               | 3                | 4               | 5    | 6    |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A 203           | 50.0        | 70.0            | 99.0             | 85.0            | 99.0 | 65.0 |
| NIS                           | 0.25 % v/v        | A 403           | 20.0        | 70.0            | 99.0             | 50.0            | 99.0 | 50.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A 703           | 80.0        | 99.0            | 99.0             | 90.0            | 99.0 | 99.0 |
|                               |                   | 903             | 75.0        | 99.0            | 99.0             | 85.0            | 99.0 | 90.0 |
|                               |                   | Mean =          | 56.3        | 84.5            | 99.0             | 77.5            | 99.0 | 76.0 |
| 7 Untreated Check             |                   | 301             | 0.0         | 0.0             | 0.0              | 0.0             | 0.0  | 0.0  |
|                               |                   | 501             | 0.0         | 0.0             | 0.0              | 0.0             | 0.0  | 0.0  |
|                               |                   | 602             | 0.0         | 0.0             | 0.0              | 0.0             | 0.0  | 0.0  |
|                               |                   | 802             | 0.0         | 0.0             | 0.0              | 0.0             | 0.0  | 0.0  |
|                               |                   | Mean =          | 0.0         | 0.0             | 0.0              | 0.0             | 0.0  | 0.0  |

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| Pest Type                     | W Weed            | W Weed      | W Weed          | W Weed          | W Weed          | W Weed          |      |      |      |      |
|-------------------------------|-------------------|-------------|-----------------|-----------------|-----------------|-----------------|------|------|------|------|
| Pest Code                     | TAROF             | THLSS       | BROTE           | ERICA           | BROTE           | STEME           |      |      |      |      |
| Pest Scientific Name          | Taraxacum offi>   | Thlaspi sp. | Bromus tectorum | Conyza canad>   | Bromus tectorum | Stellaria media |      |      |      |      |
| Pest Name                     | Common dandel>    | Pennycress  | Downy brome     | Canada horsewe> | Downy brome     | Common chickwe> |      |      |      |      |
| Crop Code                     |                   |             |                 |                 |                 |                 |      |      |      |      |
| BBCH Scale                    |                   |             |                 |                 |                 |                 |      |      |      |      |
| Crop Scientific Name          |                   |             |                 |                 |                 |                 |      |      |      |      |
| Crop Name                     |                   |             |                 |                 |                 |                 |      |      |      |      |
| Description                   |                   |             |                 |                 |                 |                 |      |      |      |      |
| Rating Date                   | Dec-6-2013        | Dec-6-2013  | Dec-6-2013      | Dec-6-2013      | Apr-9-2014      | Apr-9-2014      |      |      |      |      |
| Rating Type                   | CONTRO            | CONTRO      | CONTRO          | CONTRO          | CONTRO          | CONTRO          |      |      |      |      |
| Rating Unit                   | %                 | %           | %               | %               | %               | %               |      |      |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT      | 1 PLOT          | 1 PLOT          | 1 PLOT          | 1 PLOT          |      |      |      |      |
| Number of Subsamples          | 1                 | 1           | 1               | 1               | 1               | 1               |      |      |      |      |
| Pest Stage Majority           |                   |             |                 |                 | 1.5"            | .5"             |      |      |      |      |
| Pest Density, Unit            |                   |             |                 |                 | 4 YD2           | 5 YD2           |      |      |      |      |
| Days After First/Last Applic. | 25 25             | 25 25       | 25 25           | 25 25           | 149 149         | 149 149         |      |      |      |      |
| Trt-Eval Interval             | -189 DA-B         | -189 DA-B   | -189 DA-B       | -189 DA-B       | -30 DA-A        | -30 DA-A        |      |      |      |      |
| Plant-Eval Interval           | -145 DP-1         | -145 DP-1   | -145 DP-1       | -145 DP-1       | -21 DP-1        | -21 DP-1        |      |      |      |      |
| Days After Emergence          | -154 DE-1         | -154 DE-1   | -154 DE-1       | -154 DE-1       | -30 DE-1        | -30 DE-1        |      |      |      |      |
| Trt Treatment                 | Rate              | Appl        |                 |                 |                 |                 |      |      |      |      |
| No. Name                      | Rate              | Unit        | Code            | Plot            | 7               | 8               | 9    | 10   | 11   | 12   |
| 1 UNTREATED                   |                   |             |                 | 101             | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 402             | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 603             | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 801             | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | Mean =          | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
| 2 HARROW                      | 0.0117 lb ai/a    | A           |                 | 102             | 20.0            | 99.0            | 20.0 | 99.0 | 99.0 | 99.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 303             | 40.0            | 99.0            | 40.0 | 99.0 | 99.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 503             | 40.0            | 99.0            | 50.0 | 99.0 | 99.0 | 95.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 902             | 50.0            | 99.0            | 70.0 | 99.0 | 99.0 | 60.0 |
|                               |                   |             |                 | Mean =          | 37.5            | 99.0            | 45.0 | 99.0 | 99.0 | 88.3 |
| 3 HARROW                      | 0.0234 lb ai/a    | A           |                 | 103             | 30.0            | 99.0            | 20.0 | 99.0 | 99.0 | 99.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 401             | 20.0            | 80.0            | 75.0 | 99.0 | 99.0 | 95.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 601             | 40.0            | 65.0            | 40.0 | 99.0 | 99.0 | 85.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 1001            | 70.0            | 99.0            | 60.0 | 99.0 | 99.0 | 60.0 |
|                               |                   |             |                 | Mean =          | 40.0            | 85.8            | 48.8 | 99.0 | 99.0 | 84.8 |
| 4 HARROW                      | 0.047 lb ai/a     | A           |                 | 201             | 70.0            | 99.0            | 99.0 | 99.0 | 99.0 | 93.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 302             | 60.0            | 99.0            | 70.0 | 99.0 | 99.0 | 95.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 702             | 50.0            | 99.0            | 20.0 | 99.0 | 99.0 | 92.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 901             | 65.0            | 99.0            | 50.0 | 99.0 | 99.0 | 95.0 |
|                               |                   |             |                 | Mean =          | 61.3            | 99.0            | 59.8 | 99.0 | 99.0 | 93.8 |
| 5 BASIS                       | 0.0234 lb ai/a    | A           |                 | 202             | 60.0            | 99.0            | 50.0 | 99.0 | 99.0 | 99.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 502             | 60.0            | 99.0            | 50.0 | 99.0 | 99.0 | 93.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 701             | 99.0            | 99.0            | 85.0 | 99.0 | 99.0 | 85.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 803             | 90.0            | 99.0            | 90.0 | 99.0 | 99.0 | 90.0 |
|                               |                   |             |                 | Mean =          | 77.3            | 99.0            | 68.8 | 99.0 | 99.0 | 91.8 |

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| Pest Type                     | W Weed            | W Weed      | W Weed          | W Weed           | W Weed          | W Weed          |      |      |      |      |
|-------------------------------|-------------------|-------------|-----------------|------------------|-----------------|-----------------|------|------|------|------|
| Pest Code                     | TAROF             | THLSS       | BROTE           | ERICA            | BROTE           | STEME           |      |      |      |      |
| Pest Scientific Name          | Taraxacum offi>   | Thlaspi sp. | Bromus tectorum | Conyza canadens> | Bromus tectorum | Stellaria media |      |      |      |      |
| Pest Name                     | Common dandelion> | Pennycress  | Downy brome     | Canada horsewe>  | Downy brome     | Common chickwe> |      |      |      |      |
| Crop Code                     |                   |             |                 |                  |                 |                 |      |      |      |      |
| BBCH Scale                    |                   |             |                 |                  |                 |                 |      |      |      |      |
| Crop Scientific Name          |                   |             |                 |                  |                 |                 |      |      |      |      |
| Crop Name                     |                   |             |                 |                  |                 |                 |      |      |      |      |
| Description                   |                   |             |                 |                  |                 |                 |      |      |      |      |
| Rating Date                   | Dec-6-2013        | Dec-6-2013  | Dec-6-2013      | Dec-6-2013       | Apr-9-2014      | Apr-9-2014      |      |      |      |      |
| Rating Type                   | CONTRO            | CONTRO      | CONTRO          | CONTRO           | CONTRO          | CONTRO          |      |      |      |      |
| Rating Unit                   | %                 | %           | %               | %                | %               | %               |      |      |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT      | 1 PLOT          | 1 PLOT           | 1 PLOT          | 1 PLOT          |      |      |      |      |
| Number of Subsamples          | 1                 | 1           | 1               | 1                | 1               | 1               |      |      |      |      |
| Pest Stage Majority           |                   |             |                 |                  | 1.5"            | .5"             |      |      |      |      |
| Pest Density, Unit            |                   |             |                 |                  | 4 YD2           | 5 YD2           |      |      |      |      |
| Days After First/Last Applic. | 25 25             | 25 25       | 25 25           | 25 25            | 149 149         | 149 149         |      |      |      |      |
| Trt-Eval Interval             | -189 DA-B         | -189 DA-B   | -189 DA-B       | -189 DA-B        | -30 DA-A        | -30 DA-A        |      |      |      |      |
| Plant-Eval Interval           | -145 DP-1         | -145 DP-1   | -145 DP-1       | -145 DP-1        | -21 DP-1        | -21 DP-1        |      |      |      |      |
| Days After Emergence          | -154 DE-1         | -154 DE-1   | -154 DE-1       | -154 DE-1        | -30 DE-1        | -30 DE-1        |      |      |      |      |
| Trt Treatment                 | Rate              | Appl        |                 |                  |                 |                 |      |      |      |      |
| No. Name                      | Rate              | Unit        | Code            | Plot             | 7               | 8               | 9    | 10   | 11   | 12   |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A           |                 | 203              | 50.0            | 99.0            | 60.0 | 99.0 | 99.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 403              | 30.0            | 99.0            | 20.0 | 99.0 | 99.0 | 98.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 703              | 20.0            | 99.0            | 85.0 | 99.0 | 99.0 | 87.0 |
|                               |                   |             |                 | 903              | 85.0            | 99.0            | 90.0 | 99.0 | 99.0 | 70.0 |
|                               |                   |             |                 | Mean =           | 46.3            | 99.0            | 63.8 | 99.0 | 99.0 | 88.5 |
| 7 Untreated Check             |                   |             |                 | 301              | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 501              | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 602              | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 802              | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | Mean =           | 0.0             | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |

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| Pest Type                     | W Weed            | W Weed      | W Weed          | W Weed          | W Weed      | W Weed          |      |      |      |      |
|-------------------------------|-------------------|-------------|-----------------|-----------------|-------------|-----------------|------|------|------|------|
| Pest Code                     | TAROF             | THLSS       | TAROF           | LAMAM           | THLSS       | STEME           |      |      |      |      |
| Pest Scientific Name          | Taraxacum offi>   | Thlaspi sp. | Taraxacum offi> | Lamium amplexi> | Thlaspi sp. | Stellaria media |      |      |      |      |
| Pest Name                     | Common dandel>    | Pennycress  | Common dandel>  | Henbit          | Pennycress  | Common chickwe> |      |      |      |      |
| Crop Code                     |                   |             |                 |                 |             |                 |      |      |      |      |
| BCH Scale                     |                   |             |                 |                 |             |                 |      |      |      |      |
| Crop Scientific Name          |                   |             |                 |                 |             |                 |      |      |      |      |
| Crop Name                     |                   |             |                 |                 |             |                 |      |      |      |      |
| Description                   |                   |             |                 |                 |             |                 |      |      |      |      |
| Rating Date                   | Apr-9-2014        | Apr-9-2014  | Apr-30-2014     | Apr-30-2014     | Apr-30-2014 | Apr-30-2014     |      |      |      |      |
| Rating Type                   | CONTRO            | CONTRO      | CONTRO          | CONTRO          | CONTRO      | CONTRO          |      |      |      |      |
| Rating Unit                   | %                 | %           | %               | %               | %           | %               |      |      |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT      | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          |      |      |      |      |
| Number of Subsamples          | 1                 | 1           | 1               | 1               | 1           | 1               |      |      |      |      |
| Pest Stage Majority           | .5"               | 1"          | 6"              | 4"              | 8"          | 3"              |      |      |      |      |
| Pest Density, Unit            | 3 YD2             | 1 YD2       | 5 YD2           | 2 FT2           | 3 YD2       | 5 FT2           |      |      |      |      |
| Days After First/Last Applic. | 149 149           | 149 149     | 170 170         | 170 170         | 170 170     | 170 170         |      |      |      |      |
| Trt-Eval Interval             | -30 DA-A          | -30 DA-A    | -9 DA-A         | -9 DA-A         | -9 DA-A     | -9 DA-A         |      |      |      |      |
| Plant-Eval Interval           | -21 DP-1          | -21 DP-1    | 0 DP-1          | 0 DP-1          | 0 DP-1      | 0 DP-1          |      |      |      |      |
| Days After Emergence          | -30 DE-1          | -30 DE-1    | -9 DE-1         | -9 DE-1         | -9 DE-1     | -9 DE-1         |      |      |      |      |
| Trt Treatment                 | Rate              | Appl        |                 |                 |             |                 |      |      |      |      |
| No. Name                      | Rate              | Unit        | Code            | Plot            | 13          | 14              | 15   | 16   | 17   | 18   |
| 1 UNTREATED                   |                   |             |                 | 101             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 402             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 603             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 801             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | Mean =          | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
| 2 HARROW                      | 0.0117 lb ai/a    | A           |                 | 102             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 97.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 303             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 503             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 902             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
|                               |                   |             |                 | Mean =          | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 98.5 |
| 3 HARROW                      | 0.0234 lb ai/a    | A           |                 | 103             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 95.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 401             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 601             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 1001            | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
|                               |                   |             |                 | Mean =          | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 98.0 |
| 4 HARROW                      | 0.047 lb ai/a     | A           |                 | 201             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 302             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 702             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 901             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
|                               |                   |             |                 | Mean =          | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| 5 BASIS                       | 0.0234 lb ai/a    | A           |                 | 202             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 | 502             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 701             | 99.0        | 99.0            | 95.0 | 99.0 | 99.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 803             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
|                               |                   |             |                 | Mean =          | 99.0        | 99.0            | 98.0 | 99.0 | 99.0 | 99.0 |

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| Pest Type                     | W Weed            | W Weed      | W Weed          | W Weed          | W Weed      | W Weed          |      |      |      |      |
|-------------------------------|-------------------|-------------|-----------------|-----------------|-------------|-----------------|------|------|------|------|
| Pest Code                     | TAROF             | THLSS       | TAROF           | LAMAM           | THLSS       | STEME           |      |      |      |      |
| Pest Scientific Name          | Taraxacum offi>   | Thlaspi sp. | Taraxacum offi> | Lamium amplexi> | Thlaspi sp. | Stellaria media |      |      |      |      |
| Pest Name                     | Common dandel>    | Pennycress  | Common dandel>  | Henbit          | Pennycress  | Common chickwe> |      |      |      |      |
| Crop Code                     |                   |             |                 |                 |             |                 |      |      |      |      |
| BBCH Scale                    |                   |             |                 |                 |             |                 |      |      |      |      |
| Crop Scientific Name          |                   |             |                 |                 |             |                 |      |      |      |      |
| Crop Name                     |                   |             |                 |                 |             |                 |      |      |      |      |
| Description                   |                   |             |                 |                 |             |                 |      |      |      |      |
| Rating Date                   | Apr-9-2014        | Apr-9-2014  | Apr-30-2014     | Apr-30-2014     | Apr-30-2014 | Apr-30-2014     |      |      |      |      |
| Rating Type                   | CONTRO            | CONTRO      | CONTRO          | CONTRO          | CONTRO      | CONTRO          |      |      |      |      |
| Rating Unit                   | %                 | %           | %               | %               | %           | %               |      |      |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT      | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          |      |      |      |      |
| Number of Subsamples          | 1                 | 1           | 1               | 1               | 1           | 1               |      |      |      |      |
| Pest Stage Majority           | .5"               | 1"          | 6"              | 4"              | 8"          | 3"              |      |      |      |      |
| Pest Density, Unit            | 3 YD2             | 1 YD2       | 5 YD2           | 2 FT2           | 3 YD2       | 5 FT2           |      |      |      |      |
| Days After First/Last Applic. | 149 149           | 149 149     | 170 170         | 170 170         | 170 170     | 170 170         |      |      |      |      |
| Trt-Eval Interval             | -30 DA-A          | -30 DA-A    | -9 DA-A         | -9 DA-A         | -9 DA-A     | -9 DA-A         |      |      |      |      |
| Plant-Eval Interval           | -21 DP-1          | -21 DP-1    | 0 DP-1          | 0 DP-1          | 0 DP-1      | 0 DP-1          |      |      |      |      |
| Days After Emergence          | -30 DE-1          | -30 DE-1    | -9 DE-1         | -9 DE-1         | -9 DE-1     | -9 DE-1         |      |      |      |      |
| Trt Treatment                 | Rate              | Appl        |                 |                 |             |                 |      |      |      |      |
| No. Name                      | Rate              | Unit        | Code            | Plot            | 13          | 14              | 15   | 16   | 17   | 18   |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A           |                 | 203             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 95.0 |
| NIS                           | 0.25 % v/v        | A           |                 | 403             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 | 703             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
|                               |                   |             |                 | 903             | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 99.0 |
|                               |                   |             |                 | Mean =          | 99.0        | 99.0            | 99.0 | 99.0 | 99.0 | 98.0 |
| 7 Untreated Check             |                   |             |                 | 301             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 501             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 602             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | 802             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |             |                 | Mean =          | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |

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| Pest Type                     | W Weed            | W Weed          | W Weed          | W Weed          | W Weed      | W Weed          |      |      |      |      |
|-------------------------------|-------------------|-----------------|-----------------|-----------------|-------------|-----------------|------|------|------|------|
| Pest Code                     | THLSS             | BROTE           | TAROF           | BROTE           | THLSS       | STEME           |      |      |      |      |
| Pest Scientific Name          | Thlaspi sp.       | Bromus tectorum | Taraxacum offi> | Bromus tectorum | Thlaspi sp. | Stellaria media |      |      |      |      |
| Pest Name                     | Pennycress        | Downy brome     | Common dandel>  | Downy brome     | Pennycress  | Common chickwe> |      |      |      |      |
| Crop Code                     |                   |                 |                 |                 |             |                 |      |      |      |      |
| BBCH Scale                    |                   |                 |                 |                 |             |                 |      |      |      |      |
| Crop Scientific Name          |                   |                 |                 |                 |             |                 |      |      |      |      |
| Crop Name                     |                   |                 |                 |                 |             |                 |      |      |      |      |
| Description                   | Seedling          |                 |                 |                 |             |                 |      |      |      |      |
| Rating Date                   | Apr-30-2014       | Apr-30-2014     | May-19-2014     | May-19-2014     | May-19-2014 | May-19-2014     |      |      |      |      |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO          | CONTRO          | CONTRO      | CONTRO          |      |      |      |      |
| Rating Unit                   | %                 | %               | %               | %               | %           | %               |      |      |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          |      |      |      |      |
| Number of Subsamples          | 1                 | 1               | 1               | 1               | 1           | 1               |      |      |      |      |
| Pest Stage Majority           |                   | 9"              | 6"              | 14"             | 16"         | 5"              |      |      |      |      |
| Pest Density, Unit            |                   | 5 FT2           | 4 YD2           | 6 FT2           | 7 FT2       | 5 FT2           |      |      |      |      |
| Days After First/Last Applic. | 170 170           | 170 170         | 189 189         | 189 189         | 189 189     | 189 189         |      |      |      |      |
| Trt-Eval Interval             | -9 DA-A           | -9 DA-A         | 10 DA-A         | 10 DA-A         | 10 DA-A     | 10 DA-A         |      |      |      |      |
| Plant-Eval Interval           | 0 DP-1            | 0 DP-1          | 19 DP-1         | 19 DP-1         | 19 DP-1     | 19 DP-1         |      |      |      |      |
| Days After Emergence          | -9 DE-1           | -9 DE-1         | 10 DE-1         | 10 DE-1         | 10 DE-1     | 10 DE-1         |      |      |      |      |
| Trt Treatment                 | Rate              | Appl            |                 |                 |             |                 |      |      |      |      |
| No. Name                      | Rate              | Unit            | Code            | Plot            | 19          | 20              | 21   | 22   | 23   | 24   |
| 1 UNTREATED                   |                   |                 |                 | 101             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | 402             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | 603             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | 801             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | Mean =          | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
| 2 HARROW                      | 0.0117 lb ai/a    | A               |                 | 102             | 99.0        | 99.0            | 99.0 | 97.0 | 99.0 | 99.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 | 303             | 70.0        | 99.0            | 99.0 | 99.0 | 85.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A               |                 | 503             | 60.0        | 99.0            | 99.0 | 98.0 | 75.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 | 902             | 40.0        | 99.0            | 99.0 | 99.0 | 99.0 | 95.0 |
|                               |                   |                 |                 | Mean =          | 67.3        | 99.0            | 99.0 | 98.3 | 89.5 | 98.0 |
| 3 HARROW                      | 0.0234 lb ai/a    | A               |                 | 103             | 99.0        | 99.0            | 99.0 | 95.0 | 99.0 | 99.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 | 401             | 99.0        | 99.0            | 99.0 | 93.0 | 99.0 | 95.0 |
| NIS                           | 0.25 % v/v        | A               |                 | 601             | 70.0        | 99.0            | 99.0 | 99.0 | 99.0 | 90.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 | 1001            | 60.0        | 99.0            | 99.0 | 99.0 | 99.0 | 87.0 |
|                               |                   |                 |                 | Mean =          | 79.8        | 99.0            | 99.0 | 96.5 | 99.0 | 92.8 |
| 4 HARROW                      | 0.047 lb ai/a     | A               |                 | 201             | 87.0        | 99.0            | 99.0 | 99.0 | 99.0 | 95.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 | 302             | 93.0        | 99.0            | 99.0 | 99.0 | 99.0 | 97.0 |
| NIS                           | 0.25 % v/v        | A               |                 | 702             | 87.0        | 99.0            | 99.0 | 99.0 | 99.0 | 95.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 | 901             | 80.0        | 99.0            | 99.0 | 99.0 | 99.0 | 85.0 |
|                               |                   |                 |                 | Mean =          | 86.8        | 99.0            | 99.0 | 99.0 | 99.0 | 93.0 |
| 5 BASIS                       | 0.0234 lb ai/a    | A               |                 | 202             | 93.0        | 99.0            | 99.0 | 99.0 | 99.0 | 95.0 |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 | 502             | 80.0        | 99.0            | 99.0 | 97.0 | 99.0 | 93.0 |
| NIS                           | 0.25 % v/v        | A               |                 | 701             | 60.0        | 95.0            | 99.0 | 97.0 | 60.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 | 803             | 90.0        | 99.0            | 99.0 | 97.0 | 99.0 | 90.0 |
|                               |                   |                 |                 | Mean =          | 80.8        | 98.0            | 99.0 | 97.5 | 89.3 | 94.3 |

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| Pest Type                     | W Weed            | W Weed          | W Weed          | W Weed          | W Weed      | W Weed          |      |      |      |      |
|-------------------------------|-------------------|-----------------|-----------------|-----------------|-------------|-----------------|------|------|------|------|
| Pest Code                     | THLSS             | BROTE           | TAROF           | BROTE           | THLSS       | STEME           |      |      |      |      |
| Pest Scientific Name          | Thlaspi sp.       | Bromus tectorum | Taraxacum offi> | Bromus tectorum | Thlaspi sp. | Stellaria media |      |      |      |      |
| Pest Name                     | Pennycress        | Downy brome     | Common dandel>  | Downy brome     | Pennycress  | Common chickwe> |      |      |      |      |
| Crop Code                     |                   |                 |                 |                 |             |                 |      |      |      |      |
| BBCH Scale                    |                   |                 |                 |                 |             |                 |      |      |      |      |
| Crop Scientific Name          |                   |                 |                 |                 |             |                 |      |      |      |      |
| Crop Name                     |                   |                 |                 |                 |             |                 |      |      |      |      |
| Description                   | Seedling          |                 |                 |                 |             |                 |      |      |      |      |
| Rating Date                   | Apr-30-2014       | Apr-30-2014     | May-19-2014     | May-19-2014     | May-19-2014 | May-19-2014     |      |      |      |      |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO          | CONTRO          | CONTRO      | CONTRO          |      |      |      |      |
| Rating Unit                   | %                 | %               | %               | %               | %           | %               |      |      |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          |      |      |      |      |
| Number of Subsamples          | 1                 | 1               | 1               | 1               | 1           | 1               |      |      |      |      |
| Pest Stage Majority           |                   | 9"              | 6"              | 14"             | 16"         | 5"              |      |      |      |      |
| Pest Density, Unit            |                   | 5 FT2           | 4 YD2           | 6 FT2           | 7 FT2       | 5 FT2           |      |      |      |      |
| Days After First/Last Applic. | 170 170           | 170 170         | 189 189         | 189 189         | 189 189     | 189 189         |      |      |      |      |
| Trt-Eval Interval             | -9 DA-A           | -9 DA-A         | 10 DA-A         | 10 DA-A         | 10 DA-A     | 10 DA-A         |      |      |      |      |
| Plant-Eval Interval           | 0 DP-1            | 0 DP-1          | 19 DP-1         | 19 DP-1         | 19 DP-1     | 19 DP-1         |      |      |      |      |
| Days After Emergence          | -9 DE-1           | -9 DE-1         | 10 DE-1         | 10 DE-1         | 10 DE-1     | 10 DE-1         |      |      |      |      |
| Trt Treatment                 | Rate              | Appl            |                 |                 |             |                 |      |      |      |      |
| No. Name                      | Rate              | Unit            | Code            | Plot            | 19          | 20              | 21   | 22   | 23   | 24   |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A               |                 | 203             | 0.0         | 99.0            | 99.0 | 90.0 | 65.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A               |                 | 403             | 0.0         | 97.0            | 99.0 | 99.0 | 60.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 | 703             | 0.0         | 96.0            | 99.0 | 90.0 | 90.0 | 70.0 |
|                               |                   |                 |                 | 903             | 0.0         | 99.0            | 99.0 | 93.0 | 30.0 | 99.0 |
|                               |                   |                 |                 | Mean =          | 0.0         | 97.8            | 99.0 | 93.0 | 61.3 | 91.8 |
| 7 Untreated Check             |                   |                 |                 | 301             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | 501             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | 602             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | 802             | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |
|                               |                   |                 |                 | Mean =          | 0.0         | 0.0             | 0.0  | 0.0  | 0.0  | 0.0  |

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| Pest Type                     | W Weed            | W Weed          | W Weed          |             | W Weed          | W Weed          |
|-------------------------------|-------------------|-----------------|-----------------|-------------|-----------------|-----------------|
| Pest Code                     | LAMAM             | SOLAM           | AMBTR           |             | TAROF           | BROTE           |
| Pest Scientific Name          | Lamium amplexi>   | Solanum americ> | Ambrosia trifi> |             | Taraxacum offi> | Bromus tectorum |
| Pest Name                     | Henbit            | American black> | Giant ragweed   |             | Common dandel>  | Downy brome     |
| Crop Code                     |                   |                 |                 | ZEAMX       |                 |                 |
| BBCB Scale                    |                   |                 |                 | BCOR        |                 |                 |
| Crop Scientific Name          |                   |                 |                 | Zea mays    |                 |                 |
| Crop Name                     |                   |                 |                 | Com         |                 |                 |
| Description                   |                   |                 |                 |             |                 |                 |
| Rating Date                   | May-19-2014       | May-19-2014     | May-19-2014     | May-19-2014 | May-28-2014     | May-28-2014     |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO          | PHYNEC      | CONTRO          | CONTRO          |
| Rating Unit                   | %                 | %               | %               | %           | %               | %               |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          | 1 PLOT          |
| Number of Subsamples          | 1                 | 1               | 1               | 1           | 1               | 1               |
| Pest Stage Majority           |                   |                 |                 |             | 6"              | 24"             |
| Pest Density, Unit            | 3 FT2             |                 |                 |             | 3 YD2           | 10 YD2          |
| Days After First/Last Applic. | 189 189           | 189 189         | 189 189         | 189 189     | 198 198         | 198 198         |
| Trt-Eval Interval             | 10 DA-A           | 10 DA-A         | 10 DA-A         | 10 DA-A     | 19 DA-A         | 19 DA-A         |
| Plant-Eval Interval           | 19 DP-1           | 19 DP-1         | 19 DP-1         | 19 DP-1     | 28 DP-1         | 28 DP-1         |
| Days After Emergence          | 10 DE-1           | 10 DE-1         | 10 DE-1         | 10 DE-1     | 19 DE-1         | 19 DE-1         |
| Trt Treatment                 |                   |                 |                 |             |                 |                 |
| No. Name                      |                   |                 |                 |             |                 |                 |
| Rate                          |                   |                 |                 |             |                 |                 |
| Unit                          |                   |                 |                 |             |                 |                 |
| Appl Code                     |                   |                 |                 |             |                 |                 |
| Plot                          |                   |                 |                 |             |                 |                 |
|                               | 25                | 26              | 27              | 28          | 29              | 30              |
| 1 UNTREATED                   |                   |                 |                 |             |                 |                 |
|                               |                   |                 |                 |             |                 |                 |
|                               |                   |                 |                 |             |                 |                 |
|                               |                   |                 |                 |             |                 |                 |
|                               |                   |                 |                 |             |                 |                 |
| Mean =                        | 0.0               | .               | 0.0             | 0.0         | 0.0             | 0.0             |
| 2 HARROW                      | 0.0117 lb ai/a    |                 |                 | 3.0         | 90.0            | 99.0            |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | 93.0            | 75.0            | 7.0         | 99.0            | 99.0            |
| NIS                           | 0.25 % v/v        | 99.0            | 90.0            | 3.0         | 99.0            | 99.0            |
| AMS - Liquid                  | 8.5 lb ai/100 gal | 99.0            | 70.0            | 0.0         | 50.0            | 90.0            |
| Mean =                        |                   | 99.0            | 87.5            | 3.3         | 84.5            | 96.8            |
| 3 HARROW                      | 0.0234 lb ai/a    |                 |                 | 5.0         | 99.0            | 99.0            |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | 70.0            | 90.0            | 0.0         | 99.0            | 99.0            |
| NIS                           | 0.25 % v/v        | 99.0            | 90.0            | 5.0         | 99.0            | 99.0            |
| AMS - Liquid                  | 8.5 lb ai/100 gal | 99.0            | 70.0            | 5.0         | 99.0            | 99.0            |
| Mean =                        |                   | 99.0            | 87.3            | 3.8         | 99.0            | 99.0            |
| 4 HARROW                      | 0.047 lb ai/a     |                 |                 | 0.0         | 99.0            | 99.0            |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | 70.0            | 99.0            | 0.0         | 99.0            | 99.0            |
| NIS                           | 0.25 % v/v        | 99.0            | 93.0            | 0.0         | 99.0            | 99.0            |
| AMS - Liquid                  | 8.5 lb ai/100 gal | 99.0            | 95.0            | 3.0         | 99.0            | 99.0            |
| Mean =                        |                   | 99.0            | 89.3            | 0.8         | 99.0            | 99.0            |
| 5 BASIS                       | 0.0234 lb ai/a    |                 |                 | 3.0         | 99.0            | 99.0            |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | 99.0            | 60.0            | 0.0         | 99.0            | 99.0            |
| NIS                           | 0.25 % v/v        | 99.0            | 95.0            | 3.0         | 85.0            | 90.0            |
| AMS - Liquid                  | 8.5 lb ai/100 gal | 99.0            | 87.0            | 3.0         | 99.0            | 99.0            |
| Mean =                        |                   | 99.0            | 85.3            | 2.3         | 95.5            | 96.8            |

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| Pest Type                     | W Weed            | W Weed          | W Weed          | W Weed      | W Weed          |     |     |      |      |
|-------------------------------|-------------------|-----------------|-----------------|-------------|-----------------|-----|-----|------|------|
| Pest Code                     | LAMAM             | SOLAM           | AMBTR           |             | TAROF           |     |     |      |      |
| Pest Scientific Name          | Lamium amplexi>   | Solanum americ> | Ambrosia trifi> |             | Taraxacum offi> |     |     |      |      |
| Pest Name                     | Henbit            | American black> | Giant ragweed   |             | Common dandel>  |     |     |      |      |
| Crop Code                     |                   |                 |                 | ZEAMX       |                 |     |     |      |      |
| BBCH Scale                    |                   |                 |                 | BCOR        |                 |     |     |      |      |
| Crop Scientific Name          |                   |                 |                 | Zea mays    |                 |     |     |      |      |
| Crop Name                     |                   |                 |                 | Corn        |                 |     |     |      |      |
| Description                   |                   |                 |                 |             |                 |     |     |      |      |
| Rating Date                   | May-19-2014       | May-19-2014     | May-19-2014     | May-19-2014 | May-28-2014     |     |     |      |      |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO          | PHYNEC      | CONTRO          |     |     |      |      |
| Rating Unit                   | %                 | %               | %               | %           | %               |     |     |      |      |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          |     |     |      |      |
| Number of Subsamples          | 1                 | 1               | 1               | 1           | 1               |     |     |      |      |
| Pest Stage Majority           |                   |                 |                 |             | 6"              |     |     |      |      |
| Pest Density, Unit            | 3 FT2             |                 |                 |             | 3 YD2           |     |     |      |      |
| Days After First/Last Applic. | 189 189           | 189 189         | 189 189         | 189 189     | 198 198         |     |     |      |      |
| Trt-Eval Interval             | 10 DA-A           | 10 DA-A         | 10 DA-A         | 10 DA-A     | 19 DA-A         |     |     |      |      |
| Plant-Eval Interval           | 19 DP-1           | 19 DP-1         | 19 DP-1         | 19 DP-1     | 28 DP-1         |     |     |      |      |
| Days After Emergence          | 10 DE-1           | 10 DE-1         | 10 DE-1         | 10 DE-1     | 19 DE-1         |     |     |      |      |
| Trt No.                       | 25                |                 | 26              |             | 27              |     |     |      |      |
| Treatment Name                | 25                |                 | 26              |             | 27              |     |     |      |      |
| Rate                          | 25                |                 | 26              |             | 27              |     |     |      |      |
| Unit                          | 25                |                 | 26              |             | 27              |     |     |      |      |
| Appl Code                     | 25                |                 | 26              |             | 27              |     |     |      |      |
| Plot                          | 25                |                 | 26              |             | 27              |     |     |      |      |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A               | 203             | 99.0        | 99.0            | 0.0 | 5.0 | 99.0 | 99.0 |
| NIS                           | 0.25 % v/v        | A               | 403             | 99.0        | 95.0            | 0.0 | 2.0 | 75.0 | 99.0 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               | 703             | 99.0        | 99.0            | 0.0 | 2.0 | 60.0 | 87.0 |
|                               |                   |                 | 903             | 99.0        | 99.0            | 0.0 | 0.0 | 99.0 | 99.0 |
|                               |                   |                 | Mean =          | 99.0        | 98.0            | 0.0 | 2.3 | 83.3 | 96.0 |
| 7 Untreated Check             |                   |                 | 301             | 0.0         | .               | 0.0 | 0.0 | 0.0  | 0.0  |
|                               |                   |                 | 501             | 0.0         | .               | 0.0 | 0.0 | 0.0  | 0.0  |
|                               |                   |                 | 602             | 0.0         | .               | 0.0 | 0.0 | 0.0  | 0.0  |
|                               |                   |                 | 802             | 0.0         | .               | 0.0 | 0.0 | 0.0  | 0.0  |
|                               |                   |                 | Mean =          | 0.0         | .               | 0.0 | 0.0 | 0.0  | 0.0  |

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| Pest Type                     | W Weed            | W Weed          | W Weed           | W Weed         | W Weed          | W Weed          |      |      |      |       |
|-------------------------------|-------------------|-----------------|------------------|----------------|-----------------|-----------------|------|------|------|-------|
| Pest Code                     | THLSS             | STEME           | ERICA            | SETFA          | SOLAM           | AMBTR           |      |      |      |       |
| Pest Scientific Name          | Thlaspi sp.       | Stellaria media | Conyza canadens> | Setaria faberi | Solanum americ> | Ambrosia trifi> |      |      |      |       |
| Pest Name                     | Pennycress        | Common chickwe> | Canada horsewe>  | Giant foxtail  | American black> | Giant ragweed   |      |      |      |       |
| Crop Code                     |                   |                 |                  |                |                 |                 |      |      |      |       |
| B BCH Scale                   |                   |                 |                  |                |                 |                 |      |      |      |       |
| Crop Scientific Name          |                   |                 |                  |                |                 |                 |      |      |      |       |
| Crop Name                     |                   |                 |                  |                |                 |                 |      |      |      |       |
| Description                   |                   |                 |                  |                |                 |                 |      |      |      |       |
| Rating Date                   | May-28-2014       | May-28-2014     | May-28-2014      | May-28-2014    | May-28-2014     | May-28-2014     |      |      |      |       |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO           | CONTRO         | CONTRO          | CONTRO          |      |      |      |       |
| Rating Unit                   | %                 | %               | %                | %              | %               | %               |      |      |      |       |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT           | 1 PLOT         | 1 PLOT          | 1 PLOT          |      |      |      |       |
| Number of Subsamples          | 1                 | 1               | 1                | 1              | 1               | 1               |      |      |      |       |
| Pest Stage Majority           | 12"               | 10"             | 12"              |                |                 |                 |      |      |      |       |
| Pest Density, Unit            | 6 FT2             | 4 FT2           | 3 YD2            |                |                 |                 |      |      |      |       |
| Days After First/Last Applic. | 198 198           | 198 198         | 198 198          | 198 198        | 198 198         | 198 198         |      |      |      |       |
| Trt-Eval Interval             | 19 DA-A           | 19 DA-A         | 19 DA-A          | 19 DA-A        | 19 DA-A         | 19 DA-A         |      |      |      |       |
| Plant-Eval Interval           | 28 DP-1           | 28 DP-1         | 28 DP-1          | 28 DP-1        | 28 DP-1         | 28 DP-1         |      |      |      |       |
| Days After Emergence          | 19 DE-1           | 19 DE-1         | 19 DE-1          | 19 DE-1        | 19 DE-1         | 19 DE-1         |      |      |      |       |
| Trt Treatment                 | Rate              | Appl            |                  |                |                 |                 |      |      |      |       |
| No. Name                      | Rate              | Unit            | Code             | Plot           | 31              | 32              | 33   | 34   | 35   | 36    |
| 1 UNTREATED                   |                   |                 |                  | 101            | 0.0             | 0.0             | 0.0  | .    | .    | .     |
|                               |                   |                 |                  | 402            | 0.0             | 0.0             | 0.0  | .    | .    | .     |
|                               |                   |                 |                  | 603            | 0.0             | 0.0             | 0.0  | .    | .    | .     |
|                               |                   |                 |                  | 801            | 0.0             | 0.0             | 0.0  | .    | .    | .     |
|                               |                   |                 |                  | Mean =         | 0.0             | 0.0             | 0.0  | .    | .    | .     |
| 2 HARROW                      | 0.0117 lb ai/a    | A               |                  | 102            | 99.0            | 99.0            | 94.0 | 95.0 | 60.0 | 90.0  |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                  | 303            | 80.0            | 99.0            | 87.0 | 93.0 | 20.0 | 60.0  |
| NIS                           | 0.25 % v/v        | A               |                  | 503            | 90.0            | 99.0            | 75.0 | 92.0 | 75.0 | 60.0  |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                  | 902            | 70.0            | 99.0            | 99.0 | 99.0 | 99.0 | 99.0  |
|                               |                   |                 |                  | Mean =         | 84.8            | 99.0            | 88.8 | 94.8 | 63.5 | 77.3  |
| 3 HARROW                      | 0.0234 lb ai/a    | A               |                  | 103            | 99.0            | 99.0            | 90.0 | 99.0 | 70.0 | 99.0  |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                  | 401            | 99.0            | 99.0            | 95.0 | 90.0 | 80.0 | 30.0  |
| NIS                           | 0.25 % v/v        | A               |                  | 601            | 97.0            | 99.0            | 95.0 | 97.0 | 80.0 | 90.0  |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                  | 1001           | 95.0            | 99.0            | 99.0 | 90.0 | 50.0 | 50.0  |
|                               |                   |                 |                  | Mean =         | 97.5            | 99.0            | 94.8 | 94.0 | 70.0 | 67.3  |
| 4 HARROW                      | 0.047 lb ai/a     | A               |                  | 201            | 99.0            | 99.0            | 99.0 | 97.0 | 50.0 | 99.0  |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                  | 302            | 99.0            | 99.0            | 87.0 | 95.0 | 85.0 | 99.0  |
| NIS                           | 0.25 % v/v        | A               |                  | 702            | 99.0            | 99.0            | 70.0 | 97.0 | 60.0 | 60.0  |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                  | 901            | 99.0            | 99.0            | 87.0 | 95.0 | 85.0 | 80.0  |
|                               |                   |                 |                  | Mean =         | 99.0            | 99.0            | 85.8 | 96.0 | 70.0 | 84.5  |
| 5 BASIS                       | 0.0234 lb ai/a    | A               |                  | 202            | 90.0            | 99.0            | 93.0 | 95.0 | 80.0 | 29.6* |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                  | 502            | 90.0            | 99.0            | 80.0 | 95.0 | 40.0 | 0.0   |
| NIS                           | 0.25 % v/v        | A               |                  | 701            | 60.0            | 99.0            | 50.0 | 90.0 | 20.0 | 0.0   |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                  | 803            | 87.0            | 99.0            | 70.0 | 50.0 | 70.0 | 10.0  |
|                               |                   |                 |                  | Mean =         | 81.8            | 99.0            | 73.3 | 82.5 | 52.5 | 9.9   |

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| Pest Type                     | W Weed            | W Weed           | W Weed            | W Weed         | W Weed              | W Weed           |      |      |      |       |
|-------------------------------|-------------------|------------------|-------------------|----------------|---------------------|------------------|------|------|------|-------|
| Pest Code                     | THLSS             | STEME            | ERICA             | SETFA          | SOLAM               | AMBTR            |      |      |      |       |
| Pest Scientific Name          | Thlaspi sp.       | Stellaria media  | Conyza canadensis | Setaria faberi | Solanum americanum  | Ambrosia trifida |      |      |      |       |
| Pest Name                     | Pennycress        | Common chickweed | Canada horseweed  | Giant foxtail  | American blackberry | Giant ragweed    |      |      |      |       |
| Crop Code                     |                   |                  |                   |                |                     |                  |      |      |      |       |
| BBCH Scale                    |                   |                  |                   |                |                     |                  |      |      |      |       |
| Crop Scientific Name          |                   |                  |                   |                |                     |                  |      |      |      |       |
| Crop Name                     |                   |                  |                   |                |                     |                  |      |      |      |       |
| Description                   |                   |                  |                   |                |                     |                  |      |      |      |       |
| Rating Date                   | May-28-2014       | May-28-2014      | May-28-2014       | May-28-2014    | May-28-2014         | May-28-2014      |      |      |      |       |
| Rating Type                   | CONTRO            | CONTRO           | CONTRO            | CONTRO         | CONTRO              | CONTRO           |      |      |      |       |
| Rating Unit                   | %                 | %                | %                 | %              | %                   | %                |      |      |      |       |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT           | 1 PLOT            | 1 PLOT         | 1 PLOT              | 1 PLOT           |      |      |      |       |
| Number of Subsamples          | 1                 | 1                | 1                 | 1              | 1                   | 1                |      |      |      |       |
| Pest Stage Majority           | 12"               | 10"              | 12"               |                |                     |                  |      |      |      |       |
| Pest Density, Unit            | 6 FT2             | 4 FT2            | 3 YD2             |                |                     |                  |      |      |      |       |
| Days After First/Last Applic. | 198 198           | 198 198          | 198 198           | 198 198        | 198 198             | 198 198          |      |      |      |       |
| Trt-Eval Interval             | 19 DA-A           | 19 DA-A          | 19 DA-A           | 19 DA-A        | 19 DA-A             | 19 DA-A          |      |      |      |       |
| Plant-Eval Interval           | 28 DP-1           | 28 DP-1          | 28 DP-1           | 28 DP-1        | 28 DP-1             | 28 DP-1          |      |      |      |       |
| Days After Emergence          | 19 DE-1           | 19 DE-1          | 19 DE-1           | 19 DE-1        | 19 DE-1             | 19 DE-1          |      |      |      |       |
| Trt Treatment                 | Rate              | Appl             |                   |                |                     |                  |      |      |      |       |
| No. Name                      | Rate              | Unit             | Code              | Plot           | 31                  | 32               | 33   | 34   | 35   | 36    |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A                |                   | 203            | 65.0                | 99.0             | 87.0 | 97.0 | 99.0 | 39.6* |
| NIS                           | 0.25 % v/v        | A                |                   | 403            | 40.0                | 99.0             | 90.0 | 99.0 | 40.0 | 0.0   |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A                |                   | 703            | 30.0                | 99.0             | 80.0 | 99.0 | 99.0 | 0.0   |
|                               |                   |                  |                   | 903            | 95.0                | 99.0             | 95.0 | 90.0 | 70.0 | 40.0  |
|                               |                   |                  |                   | Mean =         | 57.5                | 99.0             | 88.0 | 96.3 | 77.0 | 19.9  |
| 7 Untreated Check             |                   |                  |                   | 301            | 0.0                 | 0.0              | 0.0  | .    | .    | .     |
|                               |                   |                  |                   | 501            | 0.0                 | 0.0              | 0.0  | .    | .    | .     |
|                               |                   |                  |                   | 602            | 0.0                 | 0.0              | 0.0  | .    | .    | .     |
|                               |                   |                  |                   | 802            | 0.0                 | 0.0              | 0.0  | .    | .    | .     |
|                               |                   |                  |                   | Mean =         | 0.0                 | 0.0              | 0.0  | .    | .    | .     |



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|                               |                   |             |            |            |
|-------------------------------|-------------------|-------------|------------|------------|
| Pest Type                     | W Weed            |             |            |            |
| Pest Code                     | CHEAL             |             |            |            |
| Pest Scientific Name          | Chenopodium al>   |             |            |            |
| Pest Name                     | Common lambsqu>   |             |            |            |
| Crop Code                     | ZEAMX             | ZEAMX       | ZEAMX      | ZEAMX      |
| BBCH Scale                    | BCOR              | BCOR        | BCOR       | BCOR       |
| Crop Scientific Name          | Zea mays          | Zea mays    | Zea mays   | Zea mays   |
| Crop Name                     | Corn              | Corn        | Corn       | Corn       |
| Description                   |                   |             |            |            |
| Rating Date                   | May-28-2014       | May-28-2014 | Nov-5-2014 | Nov-5-2014 |
| Rating Type                   | CONTRO            | PHYGEN      | MOICON     | YIELD      |
| Rating Unit                   | %                 |             | %          | bu/ac      |
| Sample Size, Unit             | 1 PLOT            |             |            |            |
| Number of Subsamples          | 1                 | 1           | 1          | 1          |
| Pest Stage Majority           |                   |             |            |            |
| Pest Density, Unit            |                   |             |            |            |
| Days After First/Last Applic. | 198 198           | 198 198     | 359 359    | 359 359    |
| Trt-Eval Interval             | 19 DA-A           | 19 DA-A     | 359 DA-A   | 359 DA-A   |
| Plant-Eval Interval           | 28 DP-1           | 28 DP-1     | 189 DP-1   | 189 DP-1   |
| Days After Emergence          | 19 DE-1           | 19 DE-1     | 180 DE-1   | 180 DE-1   |
| Trt Treatment                 | Rate              | Appl        |            |            |
| No. Name                      | Rate              | Unit        | Code       | Plot       |
|                               |                   |             |            |            |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A           | 203        | 0.0        |
| NIS                           | 0.25 % v/v        | A           | 403        | 0.0        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           | 703        | 0.0        |
|                               |                   |             | 903        | 0.0*       |
|                               |                   |             | Mean =     | 0.0        |
| 7 Untreated Check             |                   |             | 301        | .          |
|                               |                   |             | 501        | 0.0        |
|                               |                   |             | 602        | 0.0        |
|                               |                   |             | 802        | 0.0        |
|                               |                   |             | Mean =     | 0.0        |
|                               |                   |             |            | 17.850     |
|                               |                   |             |            | 27.78      |

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## TO DETERMINE THE HERBICIDAL EFFICACY AND SELECTIVITY WHEN HARROW IS FALL APPLIED PREPLANT TO CORN IN 2013

Trial ID: HZEAMXRIM2THI1302      Protocol ID: HZEAMXRIM2THI1302  
 Location: USA      Study Director:  
 Project ID: HZEAMXRIM2THI1302      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Cheminova - Jim Barrentine

### Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

### Pest Code

TAROF, Taraxacum officinale, = US  
 STEME, Stellaria media, = US  
 THLSS, Thlaspi sp., = US  
 BROTE, Bromus tectorum, = US  
 ERICA, Conyza canadensis, = US  
 LAMAM, Lamium amplexicaule, = US  
 SOLAM, Solanum americanum, = US  
 AMBTR, Ambrosia trifida, = US  
 SETFA, Setaria faberi, = US  
 CHEAL, Chenopodium album, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

CONTRO = control / burndown or knockdown  
 PHYNEC = phytotoxicity - necrosis /burn  
 PHYGEN = phytotoxicity - general / injury  
 MOICON = moisture content  
 YIELD = yield

### Rating Unit

% = percent  
 bu/ac = bushels per acre

PLOT = total plot

YD2 = per square yard  
 FT2 = per square foot

### Plant-Eval Interval

-158 DP-1 = 1 ZEAMX Apr-30-2014  
 -145 DP-1 = 1 ZEAMX Apr-30-2014  
 -21 DP-1 = 1 ZEAMX Apr-30-2014  
 0 DP-1 = 1 ZEAMX Apr-30-2014  
 19 DP-1 = 1 ZEAMX Apr-30-2014  
 28 DP-1 = 1 ZEAMX Apr-30-2014  
 189 DP-1 = 1 ZEAMX Apr-30-2014

# Purdue University

## TO DETERMINE THE HERBICIDAL EFFICACY AND SELECTIVITY WHEN HARROW IS FALL APPLIED PREPLANT TO CORN IN 2013

Trial ID: HZEAMXRIM2THI1302      Protocol ID: HZEAMXRIM2THI1302  
 Location: USA      Study Director:  
 Project ID: HZEAMXRIM2THI1302      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Cheminova - Jim Barrentine

| Pest Type                     | W Weed            | W Weed          | W Weed      | W Weed          | W Weed          | W Weed          |
|-------------------------------|-------------------|-----------------|-------------|-----------------|-----------------|-----------------|
| Pest Code                     | TAROF             | STEME           | THLSS       | BROTE           | ERICA           | STEME           |
| Pest Scientific Name          | Taraxacum offi>   | Stellaria media | Thlaspi sp. | Bromus tectorum | Conyza canad>   | Stellaria media |
| Pest Name                     | Common dandel>    | Common chickwe> | Pennycress  | Downy brome     | Canada horsewe> | Common chickwe> |
| Crop Code                     |                   |                 |             |                 |                 |                 |
| BBCH Scale                    |                   |                 |             |                 |                 |                 |
| Crop Scientific Name          |                   |                 |             |                 |                 |                 |
| Crop Name                     |                   |                 |             |                 |                 |                 |
| Description                   |                   |                 |             |                 |                 |                 |
| Rating Date                   | Nov-23-2013       | Nov-23-2013     | Nov-23-2013 | Nov-23-2013     | Nov-23-2013     | Dec-6-2013      |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO      | CONTRO          | CONTRO          | CONTRO          |
| Rating Unit                   | %                 | %               | %           | %               | %               | %               |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT      | 1 PLOT          | 1 PLOT          | 1 PLOT          |
| Number of Subsamples          | 1                 | 1               | 1           | 1               | 1               | 1               |
| Pest Stage Majority           |                   | 2"              | .25"        |                 | 3"              |                 |
| Pest Density, Unit            |                   | 4 YD2           | 10 FT2      |                 | 15 FT2          |                 |
| Days After First/Last Applic. | 12 12             | 12 12           | 12 12       | 12 12           | 12 12           | 25 25           |
| Trt-Eval Interval             | -189 DA-B         | -202 DA-B       | -202 DA-B   | -202 DA-B       | -202 DA-B       | -189 DA-B       |
| Plant-Eval Interval           | -158 DP-1         | -158 DP-1       | -158 DP-1   | -158 DP-1       | -158 DP-1       | -145 DP-1       |
| Days After Emergence          | -167 DE-1         | -167 DE-1       | -167 DE-1   | -167 DE-1       | -167 DE-1       | -154 DE-1       |
| Trt Treatment                 |                   |                 |             |                 |                 |                 |
| No. Name                      | 1                 | 2               | 3           | 4               | 5               | 6               |
| 1 UNTREATED                   | 0.0 c             | 0.0 b           | 0.0 b       | 0.0 b           | 0.0 b           | 0.0 b           |
| 2 HARROW                      | 35.0 b            | 87.3 a          | 99.0 a      | 82.5 a          | 99.0 a          | 62.5 a          |
| GLYFOS X-TRA                  | 0.0117 lb ai/a    |                 |             |                 |                 |                 |
| NIS                           | 0.75 lb ae/a      |                 |             |                 |                 |                 |
| AMS - Liquid                  | 0.25 % v/v        |                 |             |                 |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                 |             |                 |                 |                 |
| 3 HARROW                      | 47.5 ab           | 89.5 a          | 99.0 a      | 83.8 a          | 99.0 a          | 72.5 a          |
| GLYFOS X-TRA                  | 0.0234 lb ai/a    |                 |             |                 |                 |                 |
| NIS                           | 0.75 lb ae/a      |                 |             |                 |                 |                 |
| AMS - Liquid                  | 0.25 % v/v        |                 |             |                 |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                 |             |                 |                 |                 |
| 4 HARROW                      | 47.5 ab           | 92.3 a          | 99.0 a      | 88.8 a          | 99.0 a          | 88.0 a          |
| GLYFOS X-TRA                  | 0.047 lb ai/a     |                 |             |                 |                 |                 |
| NIS                           | 0.75 lb ae/a      |                 |             |                 |                 |                 |
| AMS - Liquid                  | 0.25 % v/v        |                 |             |                 |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                 |             |                 |                 |                 |
| 5 BASIS                       | 78.5 a            | 95.5 a          | 99.0 a      | 83.3 a          | 99.0 a          | 90.8 a          |
| GLYFOS X-TRA                  | 0.0234 lb ai/a    |                 |             |                 |                 |                 |
| NIS                           | 0.75 lb ae/a      |                 |             |                 |                 |                 |
| AMS - Liquid                  | 0.25 % v/v        |                 |             |                 |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                 |             |                 |                 |                 |
| 6 GLYFOS X-TRA                | 56.3 ab           | 84.5 a          | 99.0 a      | 77.5 a          | 99.0 a          | 76.0 a          |
| NIS                           | 0.75 lb ae/a      |                 |             |                 |                 |                 |
| AMS - Liquid                  | 0.25 % v/v        |                 |             |                 |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                 |             |                 |                 |                 |
| 7 Untreated Check             | 0.0 c             | 0.0 b           | 0.0 b       | 0.0 b           | 0.0 b           | 0.0 b           |
| LSD (P=.05)                   | 27.36             | 13.70           | 0.00        | 17.91           | 0.00            | 19.83           |
| Standard Deviation            | 18.42             | 9.22            | 0.00        | 12.05           | 0.00            | 13.35           |
| CV                            | 48.7              | 14.38           | 0.0         | 20.29           | 0.0             | 23.97           |
| Bartlett's X2                 | 3.401             | 5.873           | 0.0         | 5.539           | 0.0             | 3.63            |
| P(Bartlett's X2)              | 0.493             | 0.209           | .           | 0.236           | .               | 0.458           |
| Replicate F                   | 0.677             | 2.468           | 0.000       | 0.228           | 0.000           | 1.638           |
| Replicate Prob(F)             | 0.5776            | 0.0951          | 1.0000      | 0.8754          | 1.0000          | 0.2159          |
| Treatment F                   | 9.924             | 90.881          | 0.000       | 45.624          | 0.000           | 34.503          |
| Treatment Prob(F)             | 0.0001            | 0.0001          | 1.0000      | 0.0001          | 1.0000          | 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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| Pest Type                     | W Weed            | W Weed      | W Weed          | W Weed           | W Weed          | W Weed          |        |        |
|-------------------------------|-------------------|-------------|-----------------|------------------|-----------------|-----------------|--------|--------|
| Pest Code                     | TAROF             | THLSS       | BROTE           | ERICA            | BROTE           | STEME           |        |        |
| Pest Scientific Name          | Taraxacum offi>   | Thlaspi sp. | Bromus tectorum | Conyza canadens> | Bromus tectorum | Stellaria media |        |        |
| Pest Name                     | Common dandel>    | Pennycress  | Downy brome     | Canada horsewe>  | Downy brome     | Common chickwe> |        |        |
| Crop Code                     |                   |             |                 |                  |                 |                 |        |        |
| BBCH Scale                    |                   |             |                 |                  |                 |                 |        |        |
| Crop Scientific Name          |                   |             |                 |                  |                 |                 |        |        |
| Crop Name                     |                   |             |                 |                  |                 |                 |        |        |
| Description                   |                   |             |                 |                  |                 |                 |        |        |
| Rating Date                   | Dec-6-2013        | Dec-6-2013  | Dec-6-2013      | Dec-6-2013       | Apr-9-2014      | Apr-9-2014      |        |        |
| Rating Type                   | CONTRO            | CONTRO      | CONTRO          | CONTRO           | CONTRO          | CONTRO          |        |        |
| Rating Unit                   | %                 | %           | %               | %                | %               | %               |        |        |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT      | 1 PLOT          | 1 PLOT           | 1 PLOT          | 1 PLOT          |        |        |
| Number of Subsamples          | 1                 | 1           | 1               | 1                | 1               | 1               |        |        |
| Pest Stage Majority           |                   |             |                 |                  | 1.5"            | .5"             |        |        |
| Pest Density, Unit            |                   |             |                 |                  | 4 YD2           | 5 YD2           |        |        |
| Days After First/Last Applic. | 25 25             | 25 25       | 25 25           | 25 25            | 149 149         | 149 149         |        |        |
| Trt-Eval Interval             | -189 DA-B         | -189 DA-B   | -189 DA-B       | -189 DA-B        | -30 DA-A        | -30 DA-A        |        |        |
| Plant-Eval Interval           | -145 DP-1         | -145 DP-1   | -145 DP-1       | -145 DP-1        | -21 DP-1        | -21 DP-1        |        |        |
| Days After Emergence          | -154 DE-1         | -154 DE-1   | -154 DE-1       | -154 DE-1        | -30 DE-1        | -30 DE-1        |        |        |
| Trt Treatment                 |                   |             |                 |                  |                 |                 |        |        |
| No. Name                      |                   |             |                 |                  |                 |                 |        |        |
| Rate                          |                   |             |                 |                  |                 |                 |        |        |
| Unit                          |                   |             |                 |                  |                 |                 |        |        |
| Appl Code                     |                   |             |                 |                  |                 |                 |        |        |
| 7                             |                   |             |                 |                  |                 |                 |        |        |
| 8                             |                   |             |                 |                  |                 |                 |        |        |
| 9                             |                   |             |                 |                  |                 |                 |        |        |
| 10                            |                   |             |                 |                  |                 |                 |        |        |
| 11                            |                   |             |                 |                  |                 |                 |        |        |
| 12                            |                   |             |                 |                  |                 |                 |        |        |
| 1 UNTREATED                   | 0.0 c             | 0.0 b       | 0.0 b           | 0.0 b            | 0.0 b           | 0.0 b           |        |        |
| 2 HARROW                      | 0.0117 lb ai/a    | A           | 37.5 b          | 99.0 a           | 45.0 a          | 99.0 a          | 99.0 a | 88.3 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                  |                 |                 |        |        |
| NIS                           | 0.25 % v/v        | A           |                 |                  |                 |                 |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                  |                 |                 |        |        |
| 3 HARROW                      | 0.0234 lb ai/a    | A           | 40.0 b          | 85.8 a           | 48.8 a          | 99.0 a          | 99.0 a | 84.8 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                  |                 |                 |        |        |
| NIS                           | 0.25 % v/v        | A           |                 |                  |                 |                 |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                  |                 |                 |        |        |
| 4 HARROW                      | 0.047 lb ai/a     | A           | 61.3 ab         | 99.0 a           | 59.8 a          | 99.0 a          | 99.0 a | 93.8 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                  |                 |                 |        |        |
| NIS                           | 0.25 % v/v        | A           |                 |                  |                 |                 |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                  |                 |                 |        |        |
| 5 BASIS                       | 0.0234 lb ai/a    | A           | 77.3 a          | 99.0 a           | 68.8 a          | 99.0 a          | 99.0 a | 91.8 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                  |                 |                 |        |        |
| NIS                           | 0.25 % v/v        | A           |                 |                  |                 |                 |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                  |                 |                 |        |        |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A           | 46.3 b          | 99.0 a           | 63.8 a          | 99.0 a          | 99.0 a | 88.5 a |
| NIS                           | 0.25 % v/v        | A           |                 |                  |                 |                 |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                  |                 |                 |        |        |
| 7 Untreated Check             | 0.0 c             | 0.0 b       | 0.0 b           | 0.0 b            | 0.0 b           | 0.0 b           | 0.0 b  | 0.0 b  |
| LSD (P=.05)                   | 21.77             | 9.25        | 34.50           | 0.00             | 0.00            | 13.56           |        |        |
| Standard Deviation            | 14.65             | 6.23        | 23.22           | 0.00             | 0.00            | 9.13            |        |        |
| CV                            | 39.11             | 9.05        | 56.84           | 0.0              | 0.0             | 14.3            |        |        |
| Bartlett's X2                 | 4.328             | 0.0         | 1.081           | 0.0              | 0.0             | 13.148          |        |        |
| P(Bartlett's X2)              | 0.363             | .           | 0.897           | .                | .               | 0.011*          |        |        |
| Replicate F                   | 2.994             | 1.000       | 0.692           | 0.000            | 0.000           | 4.596           |        |        |
| Replicate Prob(F)             | 0.0581            | 0.4155      | 0.5685          | 1.0000           | 1.0000          | 0.0148          |        |        |
| Treatment F                   | 15.648            | 230.295     | 6.277           | 0.000            | 0.000           | 91.692          |        |        |
| Treatment Prob(F)             | 0.0001            | 0.0001      | 0.0011          | 1.0000           | 1.0000          | 0.0001          |        |        |

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| Pest Type                     | W Weed            | W Weed      | W Weed          | W Weed          | W Weed      | W Weed          | W Weed      |        |           |        |
|-------------------------------|-------------------|-------------|-----------------|-----------------|-------------|-----------------|-------------|--------|-----------|--------|
| Pest Code                     | TAROF             | THLSS       | TAROF           | LAMAM           | THLSS       | STEME           | THLSS       |        |           |        |
| Pest Scientific Name          | Taraxacum offi>   | Thlaspi sp. | Taraxacum offi> | Lamium amplexi> | Thlaspi sp. | Stellaria media | Thlaspi sp. |        |           |        |
| Pest Name                     | Common dandel>    | Pennycress  | Common dandel>  | Henbit          | Pennycress  | Common chickwe> | Pennycress  |        |           |        |
| Crop Code                     |                   |             |                 |                 |             |                 |             |        |           |        |
| BBCH Scale                    |                   |             |                 |                 |             |                 |             |        |           |        |
| Crop Scientific Name          |                   |             |                 |                 |             |                 |             |        |           |        |
| Crop Name                     |                   |             |                 |                 |             |                 |             |        |           |        |
| Description                   |                   |             |                 |                 |             |                 | Seedling    |        |           |        |
| Rating Date                   | Apr-9-2014        | Apr-9-2014  | Apr-30-2014     | Apr-30-2014     | Apr-30-2014 | Apr-30-2014     | Apr-30-2014 |        |           |        |
| Rating Type                   | CONTRO            | CONTRO      | CONTRO          | CONTRO          | CONTRO      | CONTRO          | CONTRO      |        |           |        |
| Rating Unit                   | %                 | %           | %               | %               | %           | %               | %           |        |           |        |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT      | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          | 1 PLOT      |        |           |        |
| Number of Subsamples          | 1                 | 1           | 1               | 1               | 1           | 1               | 1           |        |           |        |
| Pest Stage Majority           | .5"               | 1"          | 6"              | 4"              | 8"          | 3"              |             |        |           |        |
| Pest Density, Unit            | 3 YD2             | 1 YD2       | 5 YD2           | 2 FT2           | 3 YD2       | 5 FT2           |             |        |           |        |
| Days After First/Last Applic. | 149 149           | 149 149     | 170 170         | 170 170         | 170 170     | 170 170         | 170 170     |        |           |        |
| Trt-Eval Interval             | -30 DA-A          | -30 DA-A    | -9 DA-A         | -9 DA-A         | -9 DA-A     | -9 DA-A         | -9 DA-A     |        |           |        |
| Plant-Eval Interval           | -21 DP-1          | -21 DP-1    | 0 DP-1          | 0 DP-1          | 0 DP-1      | 0 DP-1          | 0 DP-1      |        |           |        |
| Days After Emergence          | -30 DE-1          | -30 DE-1    | -9 DE-1         | -9 DE-1         | -9 DE-1     | -9 DE-1         | -9 DE-1     |        |           |        |
| Trt Treatment                 | Rate              | Appl        |                 |                 |             |                 |             |        |           |        |
| No. Name                      | Rate              | Unit        | Code            | 13              | 14          | 15              | 16          | 17     | 18        | 19     |
| 1 UNTREATED                   |                   |             |                 | 0.0 b           | 0.0 b       | 0.0 b           | 0.0 b       | 0.0 b  | 0.0 b     | 0.0 b  |
| 2 HARROW                      | 0.0117 lb ai/a    | A           |                 | 99.0 a          | 99.0 a      | 99.0 a          | 99.0 a      | 99.0 a | 98.5 a    | 67.3 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                 |             |                 |             |        |           |        |
| NIS                           | 0.25 % v/v        | A           |                 |                 |             |                 |             |        |           |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                 |             |                 |             |        |           |        |
| 3 HARROW                      | 0.0234 lb ai/a    | A           |                 | 99.0 a          | 99.0 a      | 99.0 a          | 99.0 a      | 99.0 a | 98.0 a    | 79.8 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                 |             |                 |             |        |           |        |
| NIS                           | 0.25 % v/v        | A           |                 |                 |             |                 |             |        |           |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                 |             |                 |             |        |           |        |
| 4 HARROW                      | 0.047 lb ai/a     | A           |                 | 99.0 a          | 99.0 a      | 99.0 a          | 99.0 a      | 99.0 a | 99.0 a    | 86.8 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                 |             |                 |             |        |           |        |
| NIS                           | 0.25 % v/v        | A           |                 |                 |             |                 |             |        |           |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                 |             |                 |             |        |           |        |
| 5 BASIS                       | 0.0234 lb ai/a    | A           |                 | 99.0 a          | 99.0 a      | 98.0 a          | 99.0 a      | 99.0 a | 99.0 a    | 80.8 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A           |                 |                 |             |                 |             |        |           |        |
| NIS                           | 0.25 % v/v        | A           |                 |                 |             |                 |             |        |           |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                 |             |                 |             |        |           |        |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A           |                 | 99.0 a          | 99.0 a      | 99.0 a          | 99.0 a      | 99.0 a | 98.0 a    | 0.0 b  |
| NIS                           | 0.25 % v/v        | A           |                 |                 |             |                 |             |        |           |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A           |                 |                 |             |                 |             |        |           |        |
| 7 Untreated Check             |                   |             |                 | 0.0 b           | 0.0 b       | 0.0 b           | 0.0 b       | 0.0 b  | 0.0 b     | 0.0 b  |
| LSD (P=.05)                   |                   |             |                 | 0.00            | 0.00        | 1.12            | 0.00        | 0.00   | 1.41      | 17.21  |
| Standard Deviation            |                   |             |                 | 0.00            | 0.00        | 0.76            | 0.00        | 0.00   | 0.95      | 11.58  |
| CV                            |                   |             |                 | 0.0             | 0.0         | 1.07            | 0.0         | 0.0    | 1.35      | 25.78  |
| Bartlett's X2                 |                   |             |                 | 0.0             | 0.0         | 0.0             | 0.0         | 0.0    | 1.506     | 5.13   |
| P(Bartlett's X2)              |                   |             |                 | .               | .           | .               | .           | .      | 0.471     | 0.163  |
| Replicate F                   |                   |             |                 | 0.000           | 0.000       | 1.000           | 0.000       | 0.000  | 3.947     | 2.755  |
| Replicate Prob(F)             |                   |             |                 | 1.0000          | 1.0000      | 0.4155          | 1.0000      | 1.0000 | 0.0251    | 0.0725 |
| Treatment F                   |                   |             |                 | 0.000           | 0.000       | 16270.002       | 0.000       | 0.000  | 10213.633 | 53.674 |
| Treatment Prob(F)             |                   |             |                 | 1.0000          | 1.0000      | 0.0001          | 1.0000      | 1.0000 | 0.0001    | 0.0001 |

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| Pest Type                     | W Weed            | W Weed          | W Weed          | W Weed      | W Weed          | W Weed          |
|-------------------------------|-------------------|-----------------|-----------------|-------------|-----------------|-----------------|
| Pest Code                     | BROTE             | TAROF           | BROTE           | THLSS       | STEME           | LAMAM           |
| Pest Scientific Name          | Bromus tectorum   | Taraxacum offi> | Bromus tectorum | Thlaspi sp. | Stellaria media | Lamium amplexi> |
| Pest Name                     | Downy brome       | Common dandel>  | Downy brome     | Pennycress  | Common chickwe> | Henbit          |
| Crop Code                     |                   |                 |                 |             |                 |                 |
| BBCH Scale                    |                   |                 |                 |             |                 |                 |
| Crop Scientific Name          |                   |                 |                 |             |                 |                 |
| Crop Name                     |                   |                 |                 |             |                 |                 |
| Description                   |                   |                 |                 |             |                 |                 |
| Rating Date                   | Apr-30-2014       | May-19-2014     | May-19-2014     | May-19-2014 | May-19-2014     | May-19-2014     |
| Rating Type                   | CONTRO            | CONTRO          | CONTRO          | CONTRO      | CONTRO          | CONTRO          |
| Rating Unit                   | %                 | %               | %               | %           | %               | %               |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          | 1 PLOT          |
| Number of Subsamples          | 1                 | 1               | 1               | 1           | 1               | 1               |
| Pest Stage Majority           | 9"                | 6"              | 14"             | 16"         | 5"              |                 |
| Pest Density, Unit            | 5 FT2             | 4 YD2           | 6 FT2           | 7 FT2       | 5 FT2           | 3 FT2           |
| Days After First/Last Applic. | 170 170           | 189 189         | 189 189         | 189 189     | 189 189         | 189 189         |
| Trt-Eval Interval             | -9 DA-A           | 10 DA-A         | 10 DA-A         | 10 DA-A     | 10 DA-A         | 10 DA-A         |
| Plant-Eval Interval           | 0 DP-1            | 19 DP-1         | 19 DP-1         | 19 DP-1     | 19 DP-1         | 19 DP-1         |
| Days After Emergence          | -9 DE-1           | 10 DE-1         | 10 DE-1         | 10 DE-1     | 10 DE-1         | 10 DE-1         |
| Trt Treatment                 |                   |                 |                 |             |                 |                 |
| No. Name                      |                   |                 |                 |             |                 |                 |
| Rate                          |                   |                 |                 |             |                 |                 |
| Unit                          |                   |                 |                 |             |                 |                 |
| Appl Code                     |                   |                 |                 |             |                 |                 |
| 20                            |                   |                 |                 |             |                 |                 |
| 21                            |                   |                 |                 |             |                 |                 |
| 22                            |                   |                 |                 |             |                 |                 |
| 23                            |                   |                 |                 |             |                 |                 |
| 24                            |                   |                 |                 |             |                 |                 |
| 25                            |                   |                 |                 |             |                 |                 |
| 1 UNTREATED                   | 0.0 b             | 0.0 b           | 0.0 c           | 0.0 c       | 0.0 b           | 0.0 b           |
| 2 HARROW                      | 0.0117 lb ai/a    | A               | 99.0 a          | 99.0 a      | 98.3 a          | 89.5 a          |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 |             |                 |                 |
| NIS                           | 0.25 % v/v        | A               |                 |             |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 |             |                 |                 |
| 3 HARROW                      | 0.0234 lb ai/a    | A               | 99.0 a          | 99.0 a      | 96.5 a          | 99.0 a          |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 |             |                 |                 |
| NIS                           | 0.25 % v/v        | A               |                 |             |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 |             |                 |                 |
| 4 HARROW                      | 0.047 lb ai/a     | A               | 99.0 a          | 99.0 a      | 99.0 a          | 99.0 a          |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 |             |                 |                 |
| NIS                           | 0.25 % v/v        | A               |                 |             |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 |             |                 |                 |
| 5 BASIS                       | 0.0234 lb ai/a    | A               | 98.0 a          | 99.0 a      | 97.5 a          | 89.3 a          |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |                 |             |                 |                 |
| NIS                           | 0.25 % v/v        | A               |                 |             |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 |             |                 |                 |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A               | 97.8 a          | 99.0 a      | 93.0 b          | 61.3 b          |
| NIS                           | 0.25 % v/v        | A               |                 |             |                 |                 |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |                 |             |                 |                 |
| 7 Untreated Check             | 0.0 b             | 0.0 b           | 0.0 c           | 0.0 c       | 0.0 b           | 0.0 b           |
| LSD (P=.05)                   | 1.31              | 0.00            | 3.17            | 19.93       | 9.42            | 0.00            |
| Standard Deviation            | 0.88              | 0.00            | 2.13            | 13.42       | 6.34            | 0.00            |
| CV                            | 1.26              | 0.0             | 3.08            | 21.44       | 9.45            | 0.0             |
| Bartlett's X2                 | 0.239             | 0.0             | 8.245           | 1.464       | 11.493          | 0.0             |
| P(Bartlett's X2)              | 0.625             | .               | 0.041*          | 0.481       | 0.022*          | .               |
| Replicate F                   | 1.995             | 0.000           | 0.364           | 0.242       | 1.117           | 0.000           |
| Replicate Prob(F)             | 0.1509            | 1.0000          | 0.7796          | 0.8660      | 0.3684          | 1.0000          |
| Treatment F                   | 11833.326         | 0.000           | 1969.318        | 44.161      | 209.513         | 0.000           |
| Treatment Prob(F)             | 0.0001            | 1.0000          | 0.0001          | 0.0001      | 0.0001          | 1.0000          |

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| Pest Type                     | W Weed            | W Weed          | W Weed      | W Weed          | W Weed          | W Weed      | W Weed          |         |        |        |
|-------------------------------|-------------------|-----------------|-------------|-----------------|-----------------|-------------|-----------------|---------|--------|--------|
| Pest Code                     | SOLAM             | AMBTR           |             | TAROF           | BROTE           | THLSS       | STEME           |         |        |        |
| Pest Scientific Name          | Solanum americ>   | Ambrosia trifi> |             | Taraxacum offi> | Bromus tectorum | Thlaspi sp. | Stellaria media |         |        |        |
| Pest Name                     | American black>   | Giant ragweed   |             | Common dandel>  | Downy brome     | Pennycress  | Common chickwe> |         |        |        |
| Crop Code                     |                   |                 | ZEAMX       |                 |                 |             |                 |         |        |        |
| BBCH Scale                    |                   |                 | BCOR        |                 |                 |             |                 |         |        |        |
| Crop Scientific Name          |                   |                 | Zea mays    |                 |                 |             |                 |         |        |        |
| Crop Name                     |                   |                 | Corn        |                 |                 |             |                 |         |        |        |
| Description                   |                   |                 |             |                 |                 |             |                 |         |        |        |
| Rating Date                   | May-19-2014       | May-19-2014     | May-19-2014 | May-28-2014     | May-28-2014     | May-28-2014 | May-28-2014     |         |        |        |
| Rating Type                   | CONTRO            | CONTRO          | PHYNEC      | CONTRO          | CONTRO          | CONTRO      | CONTRO          |         |        |        |
| Rating Unit                   | %                 | %               | %           | %               | %               | %           | %               |         |        |        |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT          | 1 PLOT      | 1 PLOT          | 1 PLOT          | 1 PLOT      | 1 PLOT          |         |        |        |
| Number of Subsamples          | 1                 | 1               | 1           | 1               | 1               | 1           | 1               |         |        |        |
| Pest Stage Majority           |                   |                 |             | 6"              | 24"             | 12"         | 10"             |         |        |        |
| Pest Density, Unit            |                   |                 |             | 3 YD2           | 10 YD2          | 6 FT2       | 4 FT2           |         |        |        |
| Days After First/Last Applic. | 189 189           | 189 189         | 189 189     | 198 198         | 198 198         | 198 198     | 198 198         |         |        |        |
| Trt-Eval Interval             | 10 DA-A           | 10 DA-A         | 10 DA-A     | 19 DA-A         | 19 DA-A         | 19 DA-A     | 19 DA-A         |         |        |        |
| Plant-Eval Interval           | 19 DP-1           | 19 DP-1         | 19 DP-1     | 28 DP-1         | 28 DP-1         | 28 DP-1     | 28 DP-1         |         |        |        |
| Days After Emergence          | 10 DE-1           | 10 DE-1         | 10 DE-1     | 19 DE-1         | 19 DE-1         | 19 DE-1     | 19 DE-1         |         |        |        |
| Trt Treatment                 | Rate              | Appl            |             |                 |                 |             |                 |         |        |        |
| No. Name                      | Rate              | Unit            | Code        | 26              | 27              | 28          | 29              | 30      | 31     | 32     |
| 1 UNTREATED                   |                   |                 |             |                 | 0.0 b           | 0.0 a       | 0.0 b           | 0.0 b   | 0.0 c  | 0.0 b  |
| 2 HARROW                      | 0.0117 lb ai/a    | A               |             | 87.5 a          | 83.5 a          | 3.3 a       | 84.5 a          | 96.8 a  | 84.8 a | 99.0 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |             |                 |                 |             |                 |         |        |        |
| NIS                           | 0.25 % v/v        | A               |             |                 |                 |             |                 |         |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |             |                 |                 |             |                 |         |        |        |
| 3 HARROW                      | 0.0234 lb ai/a    | A               |             | 87.3 a          | 86.3 a          | 3.8 a       | 99.0 a          | 99.0 a  | 97.5 a | 99.0 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |             |                 |                 |             |                 |         |        |        |
| NIS                           | 0.25 % v/v        | A               |             |                 |                 |             |                 |         |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |             |                 |                 |             |                 |         |        |        |
| 4 HARROW                      | 0.047 lb ai/a     | A               |             | 89.3 a          | 92.5 a          | 0.8 a       | 99.0 a          | 99.0 a  | 99.0 a | 99.0 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |             |                 |                 |             |                 |         |        |        |
| NIS                           | 0.25 % v/v        | A               |             |                 |                 |             |                 |         |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |             |                 |                 |             |                 |         |        |        |
| 5 BASIS                       | 0.0234 lb ai/a    | A               |             | 85.3 a          | 86.0 a          | 2.3 a       | 95.5 a          | 96.8 a  | 81.8 a | 99.0 a |
| GLYFOS X-TRA                  | 0.75 lb ae/a      | A               |             |                 |                 |             |                 |         |        |        |
| NIS                           | 0.25 % v/v        | A               |             |                 |                 |             |                 |         |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |             |                 |                 |             |                 |         |        |        |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | A               |             | 98.0 a          | 0.0 b           | 2.3 a       | 83.3 a          | 96.0 a  | 57.5 b | 99.0 a |
| NIS                           | 0.25 % v/v        | A               |             |                 |                 |             |                 |         |        |        |
| AMS - Liquid                  | 8.5 lb ai/100 gal | A               |             |                 |                 |             |                 |         |        |        |
| 7 Untreated Check             |                   |                 |             |                 | 0.0 b           | 0.0 a       | 0.0 b           | 0.0 b   | 0.0 c  | 0.0 b  |
| LSD (P=.05)                   |                   |                 |             | 18.89           | 11.51           | 2.84        | 18.21           | 4.79    | 19.51  | 0.00   |
| Standard Deviation            |                   |                 |             | 12.26           | 7.75            | 1.91        | 12.26           | 3.22    | 13.13  | 0.00   |
| CV                            |                   |                 |             | 13.71           | 15.57           | 109.36      | 18.61           | 4.63    | 21.86  | 0.0    |
| Bartlett's X2                 |                   |                 |             | 8.341           | 0.93            | 1.875       | 3.492           | 0.334   | 12.501 | 0.0    |
| P(Bartlett's X2)              |                   |                 |             | 0.08            | 0.818           | 0.759       | 0.174           | 0.846   | 0.006* | .      |
| Replicate F                   |                   |                 |             | 1.173           | 2.432           | 0.348       | 0.415           | 1.361   | 1.044  | 0.000  |
| Replicate Prob(F)             |                   |                 |             | 0.3609          | 0.0984          | 0.7912      | 0.7441          | 0.2865  | 0.3972 | 1.0000 |
| Treatment F                   |                   |                 |             | 0.661           | 144.782         | 2.525       | 54.999          | 871.639 | 43.378 | 0.000  |
| Treatment Prob(F)             |                   |                 |             | 0.6306          | 0.0001          | 0.0595      | 0.0001          | 0.0001  | 0.0001 | 1.0000 |

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| Pest Type                     | W Weed            | W Weed         | W Weed         | W Weed         | W Weed         |             |            |
|-------------------------------|-------------------|----------------|----------------|----------------|----------------|-------------|------------|
| Pest Code                     | ERICA             | SETFA          | SOLAM          | AMBTR          | CHEAL          |             |            |
| Pest Scientific Name          | Conyza canadens   | Setaria faberi | Solanum americ | Ambrosia trifi | Chenopodium al |             |            |
| Pest Name                     | Canada horsewe    | Giant foxtail  | American black | Giant ragweed  | Common lambsqu |             |            |
| Crop Code                     |                   |                |                |                | ZEAMX          | ZEAMX       | ZEAMX      |
| B BCH Scale                   |                   |                |                |                | BCOR           | BCOR        | BCOR       |
| Crop Scientific Name          |                   |                |                |                | Zea mays       | Zea mays    | Zea mays   |
| Crop Name                     |                   |                |                |                | Corn           | Corn        | Corn       |
| Description                   |                   |                |                |                |                |             |            |
| Rating Date                   | May-28-2014       | May-28-2014    | May-28-2014    | May-28-2014    | May-28-2014    | May-28-2014 | Nov-5-2014 |
| Rating Type                   | CONTRO            | CONTRO         | CONTRO         | CONTRO         | CONTRO         | PHYGEN      | MOICON     |
| Rating Unit                   | %                 | %              | %              | %              | %              |             | %          |
| Sample Size, Unit             | 1 PLOT            | 1 PLOT         | 1 PLOT         | 1 PLOT         | 1 PLOT         |             |            |
| Number of Subsamples          | 1                 | 1              | 1              | 1              | 1              | 1           | 1          |
| Pest Stage Majority           | 12"               |                |                |                |                |             |            |
| Pest Density, Unit            | 3 YD2             |                |                |                |                |             |            |
| Days After First/Last Applic. | 198 198           | 198 198        | 198 198        | 198 198        | 198 198        | 198 198     | 359 359    |
| Trt-Eval Interval             | 19 DA-A           | 19 DA-A        | 19 DA-A        | 19 DA-A        | 19 DA-A        | 19 DA-A     | 359 DA-A   |
| Plant-Eval Interval           | 28 DP-1           | 28 DP-1        | 28 DP-1        | 28 DP-1        | 28 DP-1        | 28 DP-1     | 189 DP-1   |
| Days After Emergence          | 19 DE-1           | 19 DE-1        | 19 DE-1        | 19 DE-1        | 19 DE-1        | 19 DE-1     | 180 DE-1   |
| Trt Treatment                 |                   |                |                |                |                |             |            |
| No. Name                      | 33                | 34             | 35             | 36             | 37             | 38          | 39         |
| Rate                          |                   |                |                |                |                |             |            |
| Unit                          |                   |                |                |                |                |             |            |
| Appl Code                     |                   |                |                |                |                |             |            |
| 1 UNTREATED                   | 0.0 c             |                |                |                |                | 0.0 a       | 19.391 a   |
| 2 HARROW                      | 0.0117 lb ai/a    | 94.8 a         | 63.5 a         | 77.3 a         | 40.0 b         | 0.0 a       | 17.658 a   |
| GLYFOS X-TRA                  | 0.75 lb ae/a      |                |                |                |                |             |            |
| NIS                           | 0.25 % v/v        |                |                |                |                |             |            |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                |                |                |                |             |            |
| 3 HARROW                      | 0.0234 lb ai/a    | 94.0 a         | 70.0 a         | 67.3 a         | 85.8 a         | 0.0 a       | 18.391 a   |
| GLYFOS X-TRA                  | 0.75 lb ae/a      |                |                |                |                |             |            |
| NIS                           | 0.25 % v/v        |                |                |                |                |             |            |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                |                |                |                |             |            |
| 4 HARROW                      | 0.047 lb ai/a     | 96.0 a         | 70.0 a         | 84.5 a         | 98.5 a         | 0.0 a       | 17.765 a   |
| GLYFOS X-TRA                  | 0.75 lb ae/a      |                |                |                |                |             |            |
| NIS                           | 0.25 % v/v        |                |                |                |                |             |            |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                |                |                |                |             |            |
| 5 BASIS                       | 0.0234 lb ai/a    | 82.5 a         | 52.5 a         | 9.9 b          | 92.5 a         | 0.0 a       | 17.755 a   |
| GLYFOS X-TRA                  | 0.75 lb ae/a      |                |                |                |                |             |            |
| NIS                           | 0.25 % v/v        |                |                |                |                |             |            |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                |                |                |                |             |            |
| 6 GLYFOS X-TRA                | 0.75 lb ae/a      | 96.3 a         | 77.0 a         | 19.9 b         | 0.0 c          | 0.0 a       | 18.385 a   |
| NIS                           | 0.25 % v/v        |                |                |                |                |             |            |
| AMS - Liquid                  | 8.5 lb ai/100 gal |                |                |                |                |             |            |
| 7 Untreated Check             | 0.0 c             |                |                |                |                | 0.0 a       | 17.850 a   |
| LSD (P=.05)                   | 11.92             | 15.08          | 40.06          | 32.22          | 23.49          | 0.00        | 2.8855     |
| Standard Deviation            | 8.02              | 9.79           | 26.00          | 20.45          | 15.09          | 0.00        | 1.9249     |
| CV                            | 13.05             | 10.56          | 39.04          | 39.51          | 23.83          | 0.0         | 10.59      |
| Bartlett's X2                 | 6.916             | 23.903         | 2.484          | 4.51           | 16.752         | 0.0         | 3.35       |
| P(Bartlett's X2)              | 0.14              | 0.001*         | 0.648          | 0.341          | 0.001*         | .           | 0.764      |
| Replicate F                   | 3.824             | 1.493          | 0.689          | 2.762          | 1.145          | 0.000       | 1.282      |
| Replicate Prob(F)             | 0.0279            | 0.2664         | 0.5762         | 0.0974         | 0.3739         | 1.0000      | 0.3145     |
| Treatment F                   | 112.287           | 1.393          | 0.503          | 11.312         | 31.362         | 0.000       | 0.412      |
| Treatment Prob(F)             | 0.0001            | 0.2944         | 0.7348         | 0.0010         | 0.0001         | 1.0000      | 0.8605     |

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|                               |                 |                   |            |           |
|-------------------------------|-----------------|-------------------|------------|-----------|
| Pest Type                     |                 |                   |            |           |
| Pest Code                     |                 |                   |            |           |
| Pest Scientific Name          |                 |                   |            |           |
| Pest Name                     |                 |                   |            |           |
| Crop Code                     |                 |                   | ZEAMX      |           |
| BBCH Scale                    |                 |                   | BCOR       |           |
| Crop Scientific Name          |                 |                   | Zea mays   |           |
| Crop Name                     |                 |                   | Corn       |           |
| Description                   |                 |                   |            |           |
| Rating Date                   |                 |                   | Nov-5-2014 |           |
| Rating Type                   |                 |                   | YIELD      |           |
| Rating Unit                   |                 |                   | bu/ac      |           |
| Sample Size, Unit             |                 |                   |            |           |
| Number of Subsamples          |                 |                   | 1          |           |
| Pest Stage Majority           |                 |                   |            |           |
| Pest Density, Unit            |                 |                   |            |           |
| Days After First/Last Applic. |                 |                   | 359 359    |           |
| Trt-Eval Interval             |                 |                   | 359 DA-A   |           |
| Plant-Eval Interval           |                 |                   | 189 DP-1   |           |
| Days After Emergence          |                 |                   | 180 DE-1   |           |
| Trt No.                       | Treatment Name  | Rate              | Unit       | Appl Code |
| 1                             | UNTREATED       |                   |            | 40        |
|                               |                 |                   |            | 72.51 b   |
| 2                             | HARROW          | 0.0117 lb ai/a    | A          | 242.55 a  |
|                               | GLYFOS X-TRA    | 0.75 lb ae/a      | A          |           |
|                               | NIS             | 0.25 % v/v        | A          |           |
|                               | AMS - Liquid    | 8.5 lb ai/100 gal | A          |           |
| 3                             | HARROW          | 0.0234 lb ai/a    | A          | 275.96 a  |
|                               | GLYFOS X-TRA    | 0.75 lb ae/a      | A          |           |
|                               | NIS             | 0.25 % v/v        | A          |           |
|                               | AMS - Liquid    | 8.5 lb ai/100 gal | A          |           |
| 4                             | HARROW          | 0.047 lb ai/a     | A          | 258.65 a  |
|                               | GLYFOS X-TRA    | 0.75 lb ae/a      | A          |           |
|                               | NIS             | 0.25 % v/v        | A          |           |
|                               | AMS - Liquid    | 8.5 lb ai/100 gal | A          |           |
| 5                             | BASIS           | 0.0234 lb ai/a    | A          | 272.05 a  |
|                               | GLYFOS X-TRA    | 0.75 lb ae/a      | A          |           |
|                               | NIS             | 0.25 % v/v        | A          |           |
|                               | AMS - Liquid    | 8.5 lb ai/100 gal | A          |           |
| 6                             | GLYFOS X-TRA    | 0.75 lb ae/a      | A          | 210.88 a  |
|                               | NIS             | 0.25 % v/v        | A          |           |
|                               | AMS - Liquid    | 8.5 lb ai/100 gal | A          |           |
| 7                             | Untreated Check |                   |            | 27.78 b   |
| LSD (P=.05)                   |                 |                   |            | 65.336    |
| Standard Deviation            |                 |                   |            | 43.585    |
| CV                            |                 |                   |            | 22.43     |
| Bartlett's X2                 |                 |                   |            | 20.423    |
| P(Bartlett's X2)              |                 |                   |            | 0.002*    |
| Replicate F                   |                 |                   |            | 1.101     |
| Replicate Prob(F)             |                 |                   |            | 0.3774    |
| Treatment F                   |                 |                   |            | 21.766    |
| Treatment Prob(F)             |                 |                   |            | 0.0001    |

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## TO DETERMINE THE HERBICIDAL EFFICACY AND SELECTIVITY WHEN HARROW IS FALL APPLIED PREPLANT TO CORN IN 2013

Trial ID: HZEAMXRIM2THI1302      Protocol ID: HZEAMXRIM2THI1302  
 Location: USA      Study Director:  
 Project ID: HZEAMXRIM2THI1302      Investigator: Dr. Bill Johnson  
 Sponsor Contact: Cheminova - Jim Barrentine

### Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

### Pest Code

TAROF, Taraxacum officinale, = US  
 STEME, Stellaria media, = US  
 THLSS, Thlaspi sp., = US  
 BROTE, Bromus tectorum, = US  
 ERICA, Conyza canadensis, = US  
 LAMAM, Lamium amplexicaule, = US  
 SOLAM, Solanum americanum, = US  
 AMBTR, Ambrosia trifida, = US  
 SETFA, Setaria faberi, = US  
 CHEAL, Chenopodium album, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

CONTRO = control / burndown or knockdown  
 PHYNEC = phytotoxicity - necrosis /burn  
 PHYGEN = phytotoxicity - general / injury  
 MOICON = moisture content  
 YIELD = yield

### Rating Unit

% = percent  
 bu/ac = bushels per acre

PLOT = total plot

YD2 = per square yard

FT2 = per square foot

### Plant-Eval Interval

-158 DP-1 = 1 ZEAMX Apr-30-2014  
 -145 DP-1 = 1 ZEAMX Apr-30-2014  
 -21 DP-1 = 1 ZEAMX Apr-30-2014  
 0 DP-1 = 1 ZEAMX Apr-30-2014  
 19 DP-1 = 1 ZEAMX Apr-30-2014  
 28 DP-1 = 1 ZEAMX Apr-30-2014  
 189 DP-1 = 1 ZEAMX Apr-30-2014