

# The Ohio State University

## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID: HN21USADHBTRS1 TD Number: LOCALCREATED Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

### General Trial Information

**Trial Initiation Date:** May-14-2021 **Protocol Edition No.:** 1.05  
**Trial Status:** I **Trial Status Date:** Apr-2-2021  
**Last change done by:** Dr. Mark M. Loux **Date of last export:** Mar-31-2021 11:20 AM  
**External Trial:** X

**Please verify that the crop/harvest have been destroyed.**

| Destroyed? | Explanation Method | Destruction Date  |
|------------|--------------------|-------------------|
| YES        | Mowed off          | MOWED Jul-22-2021 |

1

**TD Number(s):** LOCALCREATED

**License User:** Michael, Janis  
**Department:** Bayer CropScience LP

**Protocol Developer:** Hammer, Devin  
**Department:** Bayer CropScience LP

**Trial Officer:** Stevenson, Rod

**Cooperator (Outside service):** Mark Loux  
**Affiliation:** Ohio State University  
**Street:** Western Ag Research Station  
**City:** South Charleston  
**Postal Code:** 45368  
**Telephone:** (614) 292-9081  
**E-Mail:** loux.1@osu.edu

### Site and Design

**Field Name:** F-9 West  
**City:** South Charleston  
**Postal Code:** 45368  
**County:** Clark  
**State/Province:** OH  
**Country:** USA

### Latitude, Longitude of Trial Corners

**Lower Left**  
**Latitude:** 39.85881  
**Longitude:** -83.67242

|                                     |  |                              |                         |
|-------------------------------------|--|------------------------------|-------------------------|
| <b>Trial slope:</b> EVEN            | <b>No. of Replicates:</b> 3            | <b>No. of Treatments:</b> 14 | <b>No. of Plots:</b> 42 |
|                                     | <b>Plot Width:</b> 2.033 m             | <b>Plot Length:</b> 9.14 m   |                         |
|                                     | <b>Plot Area:</b> 18.59 m <sup>2</sup> |                              |                         |
| <b>Plot Descript. Basis:</b> 1 PLOT |  |                              |                         |
| <b>Site Type:</b> FIELD             |  | <b>Test Type:</b> EXTER      |                         |
| <b>Tillage Type:</b> NOTILL         |  | <b>Trial Design:</b> RACOBL  |                         |

**Most relevant weather station:** Western Agriculture Research Station  
**Distance:** 304.8 M **Official Weather Station:** X

### Previous Crops and Agricultural Chemicals

| Previous Crops | Year        |
|----------------|-------------|
| ZEAMX          | C BCOR 2020 |

### Soil Description

**Soil Name:** Kokomo  
**Texture:** SICL **% Sand:** 33 **% Silt:** 53  
**% Clay:** 15  
**% Organic Matter:** 1.6  
**pH:** 6 **Cation Exchange Capacity:** 8.6  
**Fertility Level:** G  
**Soil Drainage:** G

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|  |                      |                                     |   |
|--|----------------------|-------------------------------------|---|
| <b>Crop 1:</b> GLXMA                     | <b>Discipline:</b> C | <b>Crop Scale:</b> BSOY             | <b>Crop Description</b><br>Use Group: P |
| Glycine max (L.) MERR.<br>Soybean        |                      |                                     |   |
| <b>Variety:</b> AG38XF1                  |                      |                                     |   |
| <b>Variety Characteristic:</b> RR+LL+DIC |                      |                                     |   |
| <b>% Germination:</b> 90                 |                      |                                     |   |
| <b>Seed/Planting Date:</b> May-14-2021   |                      | <b>Seed/Plant Rate:</b> 432400 S/HA |   |
| <b>Depth:</b> 3.81    CM                 |                      | <b>Rows Per Plot:</b> 8             |   |
| <b>Planting Method:</b> PLANTD           |                      | <b>Row Spacing:</b> 38.1    CM      |   |
| <b>Planting Implement:</b> FE            |                      | <b>Seed Bed:</b> MEDIUM             |   |
|  |                      | <b>Soil Temperature:</b> 15.56    C |   |
| <b>Emergence Crop Date:</b> Jun-1-2021   |                      |                                     |   |

|   |                           |
|---|---------------------------|
|   | <b>Target Description</b> |
| <b>Target 1:</b> SETFA <b>Discipline:</b> W <b>Target Scale:</b> BGRM |                           |
| Setaria faberi HERRM.<br>Foxtail, giant                               |                           |
| <b>Target 2:</b> ECHCG <b>Discipline:</b> W <b>Target Scale:</b> BGRM |                           |
| Echinochloa crus-galli (L.) P.<br>Barnyardgrass, common               |                           |
| <b>Target 3:</b> AMBTR <b>Discipline:</b> W <b>Target Scale:</b> BDIC |                           |
| Ambrosia trifida L.<br>Ragweed, giant                                 |                           |
| <b>Target 4:</b> CHEAL <b>Discipline:</b> W <b>Target Scale:</b> BDIC |                           |
| Chenopodium album L.<br>Lambsquarters, common                         |                           |
| <b>Target 5:</b> ABUTH <b>Discipline:</b> W <b>Target Scale:</b> BDIC |                           |
| Abutilon theophrasti MEDIK.<br>Velvetleaf                             |                           |
| <b>Target 6:</b> ERICA <b>Discipline:</b> W <b>Target Scale:</b> BDIC |                           |
| Erigeron canadensis   Conyza canadensis<br>Horseweed                  |                           |
| <b>Resistance Characteristics:</b> HG/9                               |                           |

|                                   |                                |
|-----------------------------------|--------------------------------|
|                                   | <b>Application Description</b> |
| <b>Application Date</b>           | A<br>May-14-2021               |
| <b>Application Timing</b>         | PREPRE                         |
| <b>Appl. Start - Time of Day</b>  | 5:00 PM                        |
| <b>Appl. Stop</b>                 | 5:30 PM                        |
| <b>Appl. Rain 0-6H</b>            | .025 CM                        |
| <b>Time b. Appl./first Rain</b>   | 39 HR                          |
| <b>% Relative Humidity</b>        | 22                             |
| <b>Air Temperature</b>            | 20    C                        |
| <b>% Cloud Cover</b>              | 30                             |
| <b>Appl. Wind Strength</b>        | LIG                            |
| <b>Wind Velocity</b>              | 8.05 KPH                       |
| <b>Wind Direction/Degrees</b>     | NW                             |
| <b>Soil Temperature</b>           | 15.56 C                        |
| <b>Soil Moisture</b>              | DAMP                           |
| <b>Soil Condition (surface)</b>   | MEDIUM                         |
| <b>Problems with Application?</b> | No                             |

|                             |                                  |
|-----------------------------|----------------------------------|
|                             | <b>Crop Stage at Application</b> |
| <b>Crop 1/Disc./Scale</b>   | A<br>GLXMA    C    BSOY          |
| <b>Days after Emergence</b> | -18                              |

|                             |                                    |
|-----------------------------|------------------------------------|
|                             | <b>Target Stage at Application</b> |
| <b>Target 1/Disc./Scale</b> | A<br>SETFA    W    BGRM            |
| <b>Target 2/Disc./Scale</b> | ECHCG    W    BGRM                 |
| <b>Target 3/Disc./Scale</b> | AMBTR    W    BDIC                 |
| <b>Target 4/Disc./Scale</b> | CHEAL    W    BDIC                 |
| <b>Target 5/Disc./Scale</b> | ABUTH    W    BDIC                 |
| <b>Target 6/Disc./Scale</b> | ERICA    W    BDIC                 |

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### Application Equipment

**A**  
**Application Method** SPRAY  
**Application Placement** BROFOL  
**Application Equipment** BACCAI  
**Ground Speed** 4.82999992 KPH  
**Propellant Type** COMCO2  
**Carrier** WATER  
**Water Hardness** 240  
**Carrier pH** 7.8  
**Appl./Slurry Volume** 140.3  
**Appl./Slurry Volume Unit** L/HA  
**Minimum Mix/Treatment** 0.7825 L  
**Mix Size** 1 L  
**Operating Pressure** 3.31 BAR  
**Flow Rate (per boom)** 8.66 ML/SEC  
**Spray Swath Width** 2.03299999 M  
**Nozzle Type** TEEJTA  
**Nozzle Size** 110015  
**Nozzle Spacing** 45.7 CM  
**Boom Height** 50.7999992 CM  
**Plot Size** 27.871 M2

### Maintenance

| Date           | Dosage | Dosage Unit | Maintenance Product Name |
|----------------|--------|-------------|--------------------------|
| Apr-16-2021 32 |        | OZ/A        | ROUNDUP POWERMAX         |
| Apr-16-2021 16 |        | OZ/A        | 2,4-D                    |

### Assessment Table

|                         | 1  | 2   |
|-------------------------|--|---|
| <b>SE ID</b>            | PE12AD1  | EE22AD3                                     |
| <b>SE Label</b>         | Estimation %<br>phytotoxicity<br>(PHYGEN)<br>(symptoms<br>describe in co | 1 weed, %<br>efficacy, in<br>untreated<br>% |
| <b>Part Rated</b>       | PLANT  | coverage<br>PLANT                           |
| <b>Assessment Type</b>  | PHYGEN   | CONTRO                                      |
| <b>Assessment Unit</b>  | %  | %   |
| <b>Sample Size</b>      | 1 PLOT   | 1 PLOT                                      |
| <b># Subsamples</b>     | 1  | 1   |
| <b>ARM Action Codes</b> | P  | P EC  |
| <b>Untreated</b>        | CANOPY   | CANOPY                                      |

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|                             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Unique Col. ID              | 3           | 4           | 5           | 6           | 7           | 8           |
| Orig./Calc. Flag            | O           | O           | O           | O           | O           | O           |
| SE Group                    | 1           | 2           | 3           | 4           | 5           | 6           |
| SE ID                       | PE12AD1     | PE12AD1     | EE22AD3     | EE22AD3     | EE22AD3     | EE22AD3     |
| SE Label                    | Estimat     | Estimat     | 1 weed,     | 1 weed,     | 1 weed,     | 1 weed,     |
| Target                      |             |             | 1 SETFA     | 2 ECHCG     | 3 AMBTR     | 4 CHEAL     |
| -Disc./Scale                |             |             | W BGRM      | W BGRM      | W BDIC      | W BDIC      |
| -Resistance Characteristics |             |             |             |             |             |             |
| Crop                        | 1 GLXMA     | 1 GLXMA     |             |             |             |             |
| -Disc./Scale                | C BSOY      | C BSOY      |             |             |             |             |
| Variety                     | AG38XF1     | AG38XF1     |             |             |             |             |
| -Characteristic             | RR+LL+DIC   | RR+LL+DIC   |             |             |             |             |
| Part Rated                  | PLANT       | PLANT       | PLANT       | PLANT       | PLANT       | PLANT       |
| Assessment Type             | PHYSTU      | PHYNEC      | CONTRO      | CONTRO      | CONTRO      | CONTRO      |
| Assessment Unit             | %           | %           | %           | %           | %           | %           |
| Sample Size                 | 1           | 1           | 1           | 1           | 1           | 1           |
| Sample Size Unit            | PLOT        | PLOT        | PLOT        | PLOT        | PLOT        | PLOT        |
| Sample Size (total)         | 1           | 1           | 1           | 1           | 1           | 1           |
| # Subsamples                | 1           | 1           | 1           | 1           | 1           | 1           |
| Assessment Date             | May-28-2021 | May-28-2021 | May-28-2021 | May-28-2021 | May-28-2021 | May-28-2021 |
| Appl.-Ass.Interval          | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      |
| Days after first Appl.      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      |
| Days after last Appl.       | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      |
| Plant.-Ass.Interval         | 14 DP1      | 14 DP1      | 14 DP1      | 14 DP1      | 14 DP1      | 14 DP1      |
| Days after Emergence        | -4 DE-1     | -4 DE-1     | -4 DE-1     | -4 DE-1     | -4 DE-1     | -4 DE-1     |
| Decimals Printed            | 0           | 0           | 0           | 0           | 0           | 0           |
| ARM Action Codes            | P           | P           | P EC        | P EC        | ET1 P EC    | P EC        |
| Untreated                   | CANOPY      | CANOPY      | CANOPY      | CANOPY      | CANOPY      | CANOPY      |

| Entry No. | Entry/Trt. Description  | Dose Unit     | Appl. Code | 1*  | 2*  | 3*     | 4*     | 5*     | 6*    |
|-----------|-------------------------|---------------|------------|-----|-----|--------|--------|--------|-------|
| 1         | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          | 0 - | 0 - | 0 g    | 0 f    | 0      | 0 -   |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
| 2         | MON 301668              | 1212 g ai/ha  | A          | 0 - | 0 - | 67 bcd | 67 abc | 53 abc | 100 - |
|           | MAULER                  | 280.6 g ai/ha | A          |     |     |        |        |        |       |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
| 3         | MON 301668              | 1212 g ai/ha  | A          | 0 - | 0 - | 50 de  | 40 de  | 33 c   | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
| 4         | WARRANT ULTRA HERBICIDE | 1509 g ai/ha  | A          | 0 - | 0 - | 79 abc | 79 abc | 53 abc | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 l/ha     | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
| 5         | FIERCE EZ               | 159.7 g ai/ha | A          | 0 - | 0 - | 80 abc | 80 abc | 80 a   | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
| 6         | VALOR EZ                | 70.15 g ai/ha | A          | 0 - | 0 - | 55 cde | 55 cd  | 67 abc | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
| 7         | AUTHORITY MTZ           | 315.2 g ai/ha | A          | 0 - | 0 - | 27 f   | 27 e   | 40 bc  | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
| 8         | MON 301668              | 1212 g ai/ha  | A          | 0 - | 0 - | 68 a-d | 68 abc | 53 abc | 100 - |
|           | MAULER                  | 280.6 g ai/ha | A          |     |     |        |        |        |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A          |     |     |        |        |        |       |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
|           | INTACT                  | 0.5 % v/v     | A          |     |     |        |        |        |       |
|           | MON 51817               | 1.461 l/ha    | A          |     |     |        |        |        |       |
| 9         | MON 301668              | 1212 g ai/ha  | A          | 0 - | 0 - | 72 a-d | 72 abc | 50 abc | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A          |     |     |        |        |        |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A          |     |     |        |        |        |       |
|           | INTACT                  | 0.5 % v/v     | A          |     |     |        |        |        |       |
|           | MON 51817               | 1.461 l/ha    | A          |     |     |        |        |        |       |

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|                             |             |             |             |             |            |            |
|-----------------------------|-------------|-------------|-------------|-------------|------------|------------|
| Unique Col. ID              | 3           | 4           | 5           | 6           | 7          | 8          |
| Orig./Calc. Flag            | O           | O           | O           | O           | O          | O          |
| SE Group                    | 1           | 2           | 3           | 4           | 5          | 6          |
| SE ID                       | PE12AD1     | PE12AD1     | EE22AD3     | EE22AD3     | EE22AD3    | EE22AD3    |
| SE Label                    | Estimat     | Estimat     | 1 weed,     | 1 weed,     | 1 weed,    | 1 weed,    |
| Target                      |             |             | 1 SETFA     | 2 ECHCG     | 3 AMBTR    | 4 CHEAL    |
| -Disc./Scale                |             |             | W BGRM      | W BGRM      | W BDIC     | W BDIC     |
| -Resistance Characteristics |             |             |             |             |            |            |
| Crop                        | 1 GLXMA     | 1 GLXMA     |             |             |            |            |
| -Disc./Scale                | C BSOY      | C BSOY      |             |             |            |            |
| Variety                     | AG38XF1     | AG38XF1     |             |             |            |            |
| -Characteristic             | RR+LL+DIC   | RR+LL+DIC   |             |             |            |            |
| Part Rated                  | PLANT       | PLANT       | PLANT       | PLANT       | PLANT      | PLANT      |
| Assessment Type             | PHYSTU      | PHYNEC      | CONTRO      | CONTRO      | CONTRO     | CONTRO     |
| Assessment Unit             | %           | %           | %           | %           | %          | %          |
| Sample Size                 | 1           | 1           | 1           | 1           | 1          | 1          |
| Sample Size Unit            | PLOT        | PLOT        | PLOT        | PLOT        | PLOT       | PLOT       |
| Sample Size (total)         | 1           | 1           | 1           | 1           | 1          | 1          |
| # Subsamples                | 1           | 1           | 1           | 1           | 1          | 1          |
| Assessment Date             | May-28-2021 | May-28-2021 | May-28-2021 | May-28-2021 | May-28-202 | May-28-202 |
| Appl.-Ass.Interval          | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA     | 14 DAA     |
| Days after first Appl.      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA     | 14 DAA     |
| Days after last Appl.       | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA      | 14 DAA     | 14 DAA     |
| Plant.-Ass.Interval         | 14 DP1      | 14 DP1      | 14 DP1      | 14 DP1      | 14 DP1     | 14 DP1     |
| Days after Emergence        | -4 DE-1     | -4 DE-1     | -4 DE-1     | -4 DE-1     | -4 DE-1    | -4 DE-1    |
| Decimals Printed            | 0           | 0           | 0           | 0           | 0          | 0          |
| ARM Action Codes            | P           | P           | P EC        | P EC        | ET1 P EC   | P EC       |
| Untreated                   | CANOPY      | CANOPY      | CANOPY      | CANOPY      | CANOPY     | CANOPY     |

| Entry No. | Entry/Trt. Description  | Dose          | Dose Unit | Appl. Code | 1*  | 2*  | 3*     | 4*     | 5*     | 6*    |
|-----------|-------------------------|---------------|-----------|------------|-----|-----|--------|--------|--------|-------|
| 10        | WARRANT ULTRA HERBICIDE | 1509 g ai/ha  | A         | A          | 0 - | 0 - | 63 bcd | 63 bc  | 70 abc | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |     |     |        |        |        |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |     |     |        |        |        |       |
|           | INTACT                  | 0.5 % v/v     | A         | A          |     |     |        |        |        |       |
|           | MON 51817               | 1.461 l/ha    | A         | A          |     |     |        |        |        |       |
| 11        | FIERCE EZ               | 159.7 g ai/ha | A         | A          | 0 - | 0 - | 94 a   | 94 a   | 70 abc | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |     |     |        |        |        |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |     |     |        |        |        |       |
|           | INTACT                  | 0.5 % v/v     | A         | A          |     |     |        |        |        |       |
|           | MON 51817               | 1.461 l/ha    | A         | A          |     |     |        |        |        |       |
| 12        | VALOR EZ                | 70.15 g ai/ha | A         | A          | 0 - | 0 - | 87 ab  | 87 ab  | 87 a   | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |     |     |        |        |        |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |     |     |        |        |        |       |
|           | INTACT                  | 0.5 % v/v     | A         | A          |     |     |        |        |        |       |
|           | MON 51817               | 1.461 l/ha    | A         | A          |     |     |        |        |        |       |
| 13        | AUTHORITY MTZ           | 315.2 g ai/ha | A         | A          | 0 - | 0 - | 78 abc | 78 abc | 73 ab  | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |     |     |        |        |        |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |     |     |        |        |        |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |     |     |        |        |        |       |
|           | INTACT                  | 0.5 % v/v     | A         | A          |     |     |        |        |        |       |
|           | MON 51817               | 1.461 l/ha    | A         | A          |     |     |        |        |        |       |

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 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

| Unique Col. ID              | 3                                      | 4               | 5               | 6           | 7           | 8           |         |         |         |        |
|-----------------------------|--|-----------------|-----------------|-------------|-------------|-------------|---------|---------|---------|--------|
| Orig./Calc. Flag            | O                                      | O               | O               | O           | O           | O           |         |         |         |        |
| SE Group                    | 1                                      | 2               | 3               | 4           | 5           | 6           |         |         |         |        |
| SE ID                       | PE12AD1                                | PE12AD1         | EE22AD3         | EE22AD3     | EE22AD3     | EE22AD3     |         |         |         |        |
| SE Label                    | Estimat                                | Estimat         | 1 weed,         | 1 weed,     | 1 weed,     | 1 weed,     |         |         |         |        |
| Target                      |  |                 | 1 SETFA         | 2 ECHCG     | 3 AMBTR     | 4 CHEAL     |         |         |         |        |
| -Disc./Scale                |  |                 | W BGRM          | W BGRM      | W BDIC      | W BDIC      |         |         |         |        |
| -Resistance Characteristics |  |                 |                 |             |             |             |         |         |         |        |
| Crop                        | 1 GLXMA                                | 1 GLXMA         |                 |             |             |             |         |         |         |        |
| -Disc./Scale                | C BSOY                                 | C BSOY          |                 |             |             |             |         |         |         |        |
| Variety                     | AG38XF1                                | AG38XF1         |                 |             |             |             |         |         |         |        |
| -Characteristic             | RR+LL+DIC                              | RR+LL+DIC       |                 |             |             |             |         |         |         |        |
| Part Rated                  | PLANT                                  | PLANT           | PLANT           | PLANT       | PLANT       | PLANT       |         |         |         |        |
| Assessment Type             | PHYSTU                                 | PHYNEC          | CONTRO          | CONTRO      | CONTRO      | CONTRO      |         |         |         |        |
| Assessment Unit             | %                                      | %               | %               | %           | %           | %           |         |         |         |        |
| Sample Size                 | 1                                      | 1               | 1               | 1           | 1           | 1           |         |         |         |        |
| Sample Size Unit            | PLOT                                   | PLOT            | PLOT            | PLOT        | PLOT        | PLOT        |         |         |         |        |
| Sample Size (total)         | 1                                      | 1               | 1               | 1           | 1           | 1           |         |         |         |        |
| # Subsamples                | 1                                      | 1               | 1               | 1           | 1           | 1           |         |         |         |        |
| Assessment Date             | May-28-2021                            | May-28-2021     | May-28-2021     | May-28-2021 | May-28-2022 | May-28-2022 |         |         |         |        |
| Appl.-Ass.Interval          | 14 DAA                                 | 14 DAA          | 14 DAA          | 14 DAA      | 14 DAA      | 14 DAA      |         |         |         |        |
| Days after first Appl.      | 14 DAA                                 | 14 DAA          | 14 DAA          | 14 DAA      | 14 DAA      | 14 DAA      |         |         |         |        |
| Days after last Appl.       | 14 DAA                                 | 14 DAA          | 14 DAA          | 14 DAA      | 14 DAA      | 14 DAA      |         |         |         |        |
| Plant.-Ass.Interval         | 14 DP1                                 | 14 DP1          | 14 DP1          | 14 DP1      | 14 DP1      | 14 DP1      |         |         |         |        |
| Days after Emergence        | -4 DE-1                                | -4 DE-1         | -4 DE-1         | -4 DE-1     | -4 DE-1     | -4 DE-1     |         |         |         |        |
| Decimals Printed            | 0                                      | 0               | 0               | 0           | 0           | 0           |         |         |         |        |
| ARM Action Codes            | P                                      | P               | P EC            | P EC        | ET1 P EC    | P EC        |         |         |         |        |
| Untreated                   | CANOPY                                 | CANOPY          | CANOPY          | CANOPY      | CANOPY      | CANOPY      |         |         |         |        |
| Entry No.                   | Entry/Trt. Description                 | Dose Unit       | Dose Unit       | Appl. Code  | 1*          | 2*          | 3*      | 4*      | 5*      | 6*     |
|                             | 14 ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A  | 1263 g ai/ha A  | A           | 0 -         | 0 -         | 37 ef   | 37 de   | 60 abc  | 100 -  |
|                             | XTENDIMAX VAPORGRIP INTACT             | 562.6 g ai/ha A | 562.6 g ai/ha A | A           |             |             |         |         |         |        |
|                             | MON 51817                              | 1.461 l/ha A    | 1.461 l/ha A    | A           |             |             |         |         |         |        |
| LSD P=.05                   |  |                 |                 |             |             |             | 17.1    | 17.7    | 22.8    | .      |
| Standard Deviation          |  |                 |                 |             | 0.0         | 0.0         | 10.2    | 10.6    | 13.5    | 0.0    |
| CV                          |  |                 |                 |             | 0.0         | 0.0         | 16.61   | 17.44   | 22.26   | 0.0    |
| Levene's F^                 |  |                 |                 |             | .           | .           | 0.466   | 0.491   | 0.343   | .      |
| Levene's Prob(F)            |  |                 |                 |             | .           | .           | 0.926   | 0.911   | 0.972   | .      |
| Skewness^                   |  |                 |                 |             | .           | .           | -0.4126 | -0.3137 | 0.2832  | .      |
| Kurtosis^                   |  |                 |                 |             | .           | .           | -0.0891 | -0.2174 | -0.5212 | .      |
| Replicate F                 |  |                 |                 |             | 0.000       | 0.000       | 12.397  | 13.299  | 1.304   | 0.000  |
| Replicate Prob(F)           |  |                 |                 |             | 1.0000      | 1.0000      | 0.0002  | 0.0001  | 0.2901  | 1.0000 |
| Treatment F                 |  |                 |                 |             | 0.000       | 0.000       | 19.269  | 18.567  | 3.923   | 0.000  |
| Treatment Prob(F)           |  |                 |                 |             | 1.0000      | 1.0000      | 0.0001  | 0.0001  | 0.0021  | 1.0000 |

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## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID: HN21USADHBTRS1    TD Number: LOCALCREATED    Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

|                             |             |             |            |            |            |            |
|-----------------------------|-------------|-------------|------------|------------|------------|------------|
| Unique Col. ID              | 9           | 10          | 11         | 12         | 13         | 14         |
| Orig./Calc. Flag            | O           | O           | O          | O          | O          | O          |
| SE Group                    | 7           | 8           | 9          | 10         | 11         | 12         |
| SE ID                       | EE22AD3     | EE22AD3     | PE12AD1    | PE12AD1    | EE22AD3    | EE22AD3    |
| SE Label                    | 1 weed,     | 1 weed,     | Estimat    | Estimat    | 1 weed,    | 1 weed,    |
| Target                      | 5 ABUTH     | 6 ERICA     |            |            | 1 SETFA    | 2 ECHCG    |
| -Disc./Scale                | W BDIC      | W BDIC      |            |            | W BGRM     | W BGRM     |
| -Resistance Characteristics |             | HG/9        |            |            |            |            |
| Crop                        |             |             | 1 GLXMA    | 1 GLXMA    |            |            |
| -Disc./Scale                |             |             | C BSOY     | C BSOY     |            |            |
| Variety                     |             |             | AG38XF1    | AG38XF1    |            |            |
| -Characteristic             |             |             | RR+LL+DIC  | RR+LL+DIC  |            |            |
| Part Rated                  | PLANT       | PLANT       | PLANT      | PLANT      | PLANT      | PLANT      |
| Assessment Type             | CONTRO      | CONTRO      | PHYSTU     | PHYNEC     | CONTRO     | CONTRO     |
| Assessment Unit             | %           | %           | %          | %          | %          | %          |
| Sample Size                 | 1           | 1           | 1          | 1          | 1          | 1          |
| Sample Size Unit            | PLOT        | PLOT        | PLOT       | PLOT       | PLOT       | PLOT       |
| Sample Size (total)         | 1           | 1           | 1          | 1          | 1          | 1          |
| # Subsamples                | 1           | 1           | 1          | 1          | 1          | 1          |
| Assessment Date             | May-28-2022 | May-28-2021 | Jun-4-2021 | Jun-4-2021 | Jun-4-2021 | Jun-4-2021 |
| Appl.-Ass.Interval          | 14 DAA      | 14 DAA      | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |
| Days after first Appl.      | 14 DAA      | 14 DAA      | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |
| Days after last Appl.       | 14 DAA      | 14 DAA      | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |
| Plant.-Ass.Interval         | 14 DP1      | 14 DP1      | 21 DP1     | 21 DP1     | 21 DP1     | 21 DP1     |
| Days after Emergence        | -4 DE-1     | -4 DE-1     | 3 DE-1     | 3 DE-1     | 3 DE-1     | 3 DE-1     |
| Decimals Printed            | 0           | 0           | 0          | 0          | 0          | 0          |
| ARM Action Codes            | P EC        | P EC        | AL P       | P          | ET1 P EC   | ET1 P EC   |
| Untreated                   | CANOPY      | CANOPY      | CANOPY     | CANOPY     | CANOPY     | CANOPY     |

| Entry No. | Entry/Trt. Description              | Dose Unit                         | Appl. Code | 7*    | 8*    | 9* dAL | 10* | 11*    | 12*    |
|-----------|-------------------------------------|-----------------------------------|------------|-------|-------|--------|-----|--------|--------|
| 1         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 0 -   | 100 - | 0 -    | 0 - | 0      | 0      |
| 2         | MON 301668 MAULER                   | 1212 g ai/ha A<br>280.6 g ai/ha A | A          | 100 - | 100 - | 2 -    | 0 - | 83 ab  | 83 ab  |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |       |       |        |     |        |        |
| 3         | MON 301668                          | 1212 g ai/ha A                    | A          | 100 - | 100 - | 0 -    | 0 - | 67 bcd | 67 b-e |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |       |       |        |     |        |        |
| 4         | WARRANT ULTRA HERBICIDE             | 1509 g ai/ha A                    | A          | 100 - | 100 - | 5 -    | 0 - | 83 ab  | 83 ab  |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 l/ha A<br>1 % v/v A          | A          |       |       |        |     |        |        |
| 5         | FIERCE EZ                           | 159.7 g ai/ha A                   | A          | 100 - | 100 - | 2 -    | 0 - | 80 abc | 80 abc |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |       |       |        |     |        |        |
| 6         | VALOR EZ                            | 70.15 g ai/ha A                   | A          | 100 - | 100 - | 1 -    | 0 - | 67 bcd | 67 b-e |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |       |       |        |     |        |        |
| 7         | AUTHORITY MTZ                       | 315.2 g ai/ha A                   | A          | 100 - | 100 - | 0 -    | 0 - | 57 d   | 57 de  |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |       |       |        |     |        |        |
| 8         | MON 301668 MAULER                   | 1212 g ai/ha A<br>280.6 g ai/ha A | A          | 100 - | 100 - | 2 -    | 0 - | 63 cd  | 63 cde |
|           | XTENDIMAX VAPORGRIP                 | 562.6 g ai/ha A                   | A          |       |       |        |     |        |        |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |       |       |        |     |        |        |
|           | INTACT                              | 0.5 % v/v A                       | A          |       |       |        |     |        |        |
|           | MON 51817                           | 1.461 l/ha A                      | A          |       |       |        |     |        |        |
| 9         | MON 301668                          | 1212 g ai/ha A                    | A          | 100 - | 100 - | 0 -    | 0 - | 75 abc | 73 a-d |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |       |       |        |     |        |        |
|           | XTENDIMAX VAPORGRIP                 | 562.6 g ai/ha A                   | A          |       |       |        |     |        |        |
|           | INTACT                              | 0.5 % v/v A                       | A          |       |       |        |     |        |        |
|           | MON 51817                           | 1.461 l/ha A                      | A          |       |       |        |     |        |        |

# The Ohio State University

## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID: HN21USADHBTRS1 TD Number: LOCALCREATED Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

|                             |            |             |            |            |            |            |
|-----------------------------|------------|-------------|------------|------------|------------|------------|
| Unique Col. ID              | 9          | 10          | 11         | 12         | 13         | 14         |
| Orig./Calc. Flag            | O          | O           | O          | O          | O          | O          |
| SE Group                    | 7          | 8           | 9          | 10         | 11         | 12         |
| SE ID                       | EE22AD3    | EE22AD3     | PE12AD1    | PE12AD1    | EE22AD3    | EE22AD3    |
| SE Label                    | 1 weed,    | 1 weed,     | Estimat    | Estimat    | 1 weed,    | 1 weed,    |
| Target                      | 5 ABUTH    | 6 ERICA     |            |            | 1 SETFA    | 2 ECHCG    |
| -Disc./Scale                | W BDIC     | W BDIC      |            |            | W BGRM     | W BGRM     |
| -Resistance Characteristics |            | HG/9        |            |            |            |            |
| Crop                        |            |             | 1 GLXMA    | 1 GLXMA    |            |            |
| -Disc./Scale                |            |             | C BSOY     | C BSOY     |            |            |
| Variety                     |            |             | AG38XF1    | AG38XF1    |            |            |
| -Characteristic             |            |             | RR+LL+DIC  | RR+LL+DIC  |            |            |
| Part Rated                  | PLANT      | PLANT       | PLANT      | PLANT      | PLANT      | PLANT      |
| Assessment Type             | CONTRO     | CONTRO      | PHYSTU     | PHYNEC     | CONTRO     | CONTRO     |
| Assessment Unit             | %          | %           | %          | %          | %          | %          |
| Sample Size                 | 1          | 1           | 1          | 1          | 1          | 1          |
| Sample Size Unit            | PLOT       | PLOT        | PLOT       | PLOT       | PLOT       | PLOT       |
| Sample Size (total)         | 1          | 1           | 1          | 1          | 1          | 1          |
| # Subsamples                | 1          | 1           | 1          | 1          | 1          | 1          |
| Assessment Date             | May-28-202 | May-28-2021 | Jun-4-2021 | Jun-4-2021 | Jun-4-2021 | Jun-4-2021 |
| Appl.-Ass.Interval          | 14 DAA     | 14 DAA      | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |
| Days after first Appl.      | 14 DAA     | 14 DAA      | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |
| Days after last Appl.       | 14 DAA     | 14 DAA      | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |
| Plant.-Ass.Interval         | 14 DP1     | 14 DP1      | 21 DP1     | 21 DP1     | 21 DP1     | 21 DP1     |
| Days after Emergence        | -4 DE-1    | -4 DE-1     | 3 DE-1     | 3 DE-1     | 3 DE-1     | 3 DE-1     |
| Decimals Printed            | 0          | 0           | 0          | 0          | 0          | 0          |
| ARM Action Codes            | P EC       | P EC        | AL P       | P          | ET1 P EC   | ET1 P EC   |
| Untreated                   | CANOPY     | CANOPY      | CANOPY     | CANOPY     | CANOPY     | CANOPY     |

| Entry No. | Entry/Trt. Description  | Dose          | Dose Unit | Appl. Code | 7*    | 8*    | 9* dAL | 10* | 11*    | 12*    |
|-----------|-------------------------|---------------|-----------|------------|-------|-------|--------|-----|--------|--------|
| 10        | WARRANT ULTRA HERBICIDE | 1509 g ai/ha  | A         | A          | 100 - | 100 - | 2 -    | 0 - | 67 bcd | 67 b-e |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |       |       |        |     |        |        |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |       |       |        |     |        |        |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |       |       |        |     |        |        |
|           | INTACT                  | 0.5 % v/v     | A         | A          |       |       |        |     |        |        |
|           | MON 51817               | 1.461 l/ha    | A         | A          |       |       |        |     |        |        |
| 11        | FIERCE EZ               | 159.7 g ai/ha | A         | A          | 100 - | 100 - | 1 -    | 0 - | 90 a   | 90 a   |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |       |       |        |     |        |        |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |       |       |        |     |        |        |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |       |       |        |     |        |        |
|           | INTACT                  | 0.5 % v/v     | A         | A          |       |       |        |     |        |        |
|           | MON 51817               | 1.461 l/ha    | A         | A          |       |       |        |     |        |        |
| 12        | VALOR EZ                | 70.15 g ai/ha | A         | A          | 100 - | 100 - | 1 -    | 0 - | 90 a   | 90 a   |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |       |       |        |     |        |        |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |       |       |        |     |        |        |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |       |       |        |     |        |        |
|           | INTACT                  | 0.5 % v/v     | A         | A          |       |       |        |     |        |        |
|           | MON 51817               | 1.461 l/ha    | A         | A          |       |       |        |     |        |        |
| 13        | AUTHORITY MTZ           | 315.2 g ai/ha | A         | A          | 100 - | 100 - | 4 -    | 0 - | 83 ab  | 83 ab  |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         | A          |       |       |        |     |        |        |
|           | CLASS ACT RIDION        | 1 % v/v       | A         | A          |       |       |        |     |        |        |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         | A          |       |       |        |     |        |        |
|           | INTACT                  | 0.5 % v/v     | A         | A          |       |       |        |     |        |        |
|           | MON 51817               | 1.461 l/ha    | A         | A          |       |       |        |     |        |        |



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## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID: HN21USADHBTRS1    TD Number: LOCALCREATED    Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

| Unique Col. ID              | 9                                   | 10              | 11         | 12         | 13         | 14         |           |        |         |         |
|-----------------------------|-------------------------------------|-----------------|------------|------------|------------|------------|-----------|--------|---------|---------|
| Orig./Calc. Flag            | O                                   | O               | O          | O          | O          | O          |           |        |         |         |
| SE Group                    | 7                                   | 8               | 9          | 10         | 11         | 12         |           |        |         |         |
| SE ID                       | EE22AD3                             | EE22AD3         | PE12AD1    | PE12AD1    | EE22AD3    | EE22AD3    |           |        |         |         |
| SE Label                    | 1 weed,                             | 1 weed,         | Estimat    | Estimat    | 1 weed,    | 1 weed,    |           |        |         |         |
| Target                      | 5 ABUTH                             | 6 ERICA         |            |            | 1 SETFA    | 2 ECHCG    |           |        |         |         |
| -Disc./Scale                | W BDIC                              | W BDIC          |            |            | W BGRM     | W BGRM     |           |        |         |         |
| -Resistance Characteristics |                                     | HG/9            |            |            |            |            |           |        |         |         |
| Crop                        |                                     |                 | 1 GLXMA    | 1 GLXMA    |            |            |           |        |         |         |
| -Disc./Scale                |                                     |                 | C BSOY     | C BSOY     |            |            |           |        |         |         |
| Variety                     |                                     |                 | AG38XF1    | AG38XF1    |            |            |           |        |         |         |
| -Characteristic             |                                     |                 | RR+LL+DIC  | RR+LL+DIC  |            |            |           |        |         |         |
| Part Rated                  | PLANT                               | PLANT           | PLANT      | PLANT      | PLANT      | PLANT      |           |        |         |         |
| Assessment Type             | CONTRO                              | CONTRO          | PHYSTU     | PHYNEC     | CONTRO     | CONTRO     |           |        |         |         |
| Assessment Unit             | %                                   | %               | %          | %          | %          | %          |           |        |         |         |
| Sample Size                 | 1                                   | 1               | 1          | 1          | 1          | 1          |           |        |         |         |
| Sample Size Unit            | PLOT                                | PLOT            | PLOT       | PLOT       | PLOT       | PLOT       |           |        |         |         |
| Sample Size (total)         | 1                                   | 1               | 1          | 1          | 1          | 1          |           |        |         |         |
| # Subsamples                | 1                                   | 1               | 1          | 1          | 1          | 1          |           |        |         |         |
| Assessment Date             | May-28-2021                         | May-28-2021     | Jun-4-2021 | Jun-4-2021 | Jun-4-2021 | Jun-4-2021 |           |        |         |         |
| Appl.-Ass.Interval          | 14 DAA                              | 14 DAA          | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |           |        |         |         |
| Days after first Appl.      | 14 DAA                              | 14 DAA          | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |           |        |         |         |
| Days after last Appl.       | 14 DAA                              | 14 DAA          | 21 DAA     | 21 DAA     | 21 DAA     | 21 DAA     |           |        |         |         |
| Plant.-Ass.Interval         | 14 DP1                              | 14 DP1          | 21 DP1     | 21 DP1     | 21 DP1     | 21 DP1     |           |        |         |         |
| Days after Emergence        | -4 DE-1                             | -4 DE-1         | 3 DE-1     | 3 DE-1     | 3 DE-1     | 3 DE-1     |           |        |         |         |
| Decimals Printed            | 0                                   | 0               | 0          | 0          | 0          | 0          |           |        |         |         |
| ARM Action Codes            | P EC                                | P EC            | AL P       | P          | ET1 P EC   | ET1 P EC   |           |        |         |         |
| Untreated                   | CANOPY                              | CANOPY          | CANOPY     | CANOPY     | CANOPY     | CANOPY     |           |        |         |         |
| Entry No.                   | Entry/Trt. Description              | Dose Unit       | Dose Unit  | Appl. Code | 7*         | 8*         | 9* dAL    | 10*    | 11*     | 12*     |
| 14                          | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A  |            | A          | 100 -      | 100 -      | 3 -       | 0 -    | 53 d    | 53 e    |
|                             | XTENDIMAX VAPORGRIP INTACT          | 562.6 g ai/ha A |            | A          |            |            |           |        |         |         |
|                             | MON 51817                           | 1.461 l/ha A    |            | A          |            |            |           |        |         |         |
| LSD P=.05                   |                                     |                 |            |            |            |            | 3.9 - 4.0 |        | 11.4    | 11.4    |
| Standard Deviation          |                                     |                 |            |            | 0.0        | 0.0        | 0.3t      | 0.0    | 6.8     | 6.8     |
| CV                          |                                     |                 |            |            | 0.0        | 0.0        | 96.62t    | 0.0    | 9.19    | 9.2     |
| Levene's F^                 |                                     |                 |            |            | .          | .          | 0.438     | .      | 0.437   | 0.465   |
| Levene's Prob(F)            |                                     |                 |            |            | .          | .          | 0.941     | .      | 0.933   | 0.917   |
| Skewness^                   |                                     |                 |            |            | .          | .          | -0.6359   | .      | -0.3229 | -0.3148 |
| Kurtosis^                   |                                     |                 |            |            | .          | .          | -0.2777   | .      | -0.2554 | -0.191  |
| Replicate F                 |                                     |                 |            |            | 0.000      | 0.000      | 0.455     | 0.000  | 14.665  | 13.818  |
| Replicate Prob(F)           |                                     |                 |            |            | 1.0000     | 1.0000     | 0.6396    | 1.0000 | 0.0001  | 0.0001  |
| Treatment F                 |                                     |                 |            |            | 0.000      | 0.000      | 2.058     | 0.000  | 9.860   | 9.874   |
| Treatment Prob(F)           |                                     |                 |            |            | 1.0000     | 1.0000     | 0.0569    | 1.0000 | 0.0001  | 0.0001  |

# The Ohio State University

## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID: HN21USADHBTRS1    TD Number: LOCALCREATED    Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

|                             |           |           |           |            |             |             |             |
|-----------------------------|-----------|-----------|-----------|------------|-------------|-------------|-------------|
| Unique Col. ID              | 15        | 16        | 17        | 18         | 19          | 20          | 21          |
| Orig./Calc. Flag            | O         | O         | O         | O          | O           | O           | O           |
| SE Group                    | 13        | 14        | 15        | 16         | 17          | 18          | 19          |
| SE ID                       | EE22AD3   | EE22AD3   | EE22AD3   | EE22AD3    | PE12AD1     | PE12AD1     | EE22AD3     |
| SE Label                    | 1 weed,   | 1 weed,   | 1 weed,   | 1 weed,    | Estimat     | Estimat     | 1 weed,     |
| Target                      | 3 AMBTR   | 4 CHEAL   | 5 ABUTH   | 6 ERICA    |             |             | 1 SETFA     |
| -Disc./Scale                | W BDIC    | W BDIC    | W BDIC    | W BDIC     |             |             | W BGRM      |
| -Resistance Characteristics |           |           |           | HG/9       |             |             |             |
| Crop                        |           |           |           |            | 1 GLXMA     | 1 GLXMA     |             |
| -Disc./Scale                |           |           |           |            | C BSOY      | C BSOY      |             |
| Variety                     |           |           |           |            | AG38XF1     | AG38XF1     |             |
| -Characteristic             |           |           |           |            | RR+LL+DIC   | RR+LL+DIC   |             |
| Part Rated                  | PLANT     | PLANT     | PLANT     | PLANT      | PLANT       | PLANT       | PLANT       |
| Assessment Type             | CONTRO    | CONTRO    | CONTRO    | CONTRO     | PHYSTU      | PHYNEC      | CONTRO      |
| Assessment Unit             | %         | %         | %         | %          | %           | %           | %           |
| Sample Size                 | 1         | 1         | 1         | 1          | 1           | 1           | 1           |
| Sample Size Unit            | PLOT      | PLOT      | PLOT      | PLOT       | PLOT        | PLOT        | PLOT        |
| Sample Size (total)         | 1         | 1         | 1         | 1          | 1           | 1           | 1           |
| # Subsamples                | 1         | 1         | 1         | 1          | 1           | 1           | 1           |
| Assessment Date             | Jun-4-202 | Jun-4-202 | Jun-4-202 | Jun-4-2021 | Jun-17-2021 | Jun-17-2021 | Jun-17-2021 |
| Appl.-Ass.Interval          | 21 DAA    | 21 DAA    | 21 DAA    | 21 DAA     | 34 DAA      | 34 DAA      | 34 DAA      |
| Days after first Appl.      | 21 DAA    | 21 DAA    | 21 DAA    | 21 DAA     | 34 DAA      | 34 DAA      | 34 DAA      |
| Days after last Appl.       | 21 DAA    | 21 DAA    | 21 DAA    | 21 DAA     | 34 DAA      | 34 DAA      | 34 DAA      |
| Plant.-Ass.Interval         | 21 DP1    | 21 DP1    | 21 DP1    | 21 DP1     | 34 DP1      | 34 DP1      | 34 DP1      |
| Days after Emergence        | 3 DE-1    | 3 DE-1    | 3 DE-1    | 3 DE-1     | 16 DE-1     | 16 DE-1     | 16 DE-1     |
| Decimals Printed            | 0         | 0         | 0         | 0          | 0           | 0           | 0           |
| ARM Action Codes            | P EC      | AA P EC   | P EC      | ET3 P EC   | P           | P           | P EC        |
| Untreated                   | CANOPY    | CANOPY    | CANOPY    | CANOPY     | CANOPY      | CANOPY      | CANOPY      |

| Entry No. | Entry/Trt. Description              | Dose Unit                         | Appl. Code | 13*  | 14* dAA | 15*   | 16*   | 17* | 18* | 19*    |
|-----------|-------------------------------------|-----------------------------------|------------|------|---------|-------|-------|-----|-----|--------|
| 1         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 0 b  | 0 c     | -1 b  | 100 - | 0 - | 0 - | 0 d    |
| 2         | MON 301668 MAULER                   | 1212 g ai/ha A<br>280.6 g ai/ha A | A          | 60 a | 100 a   | 100 a | 100 - | 0 - | 0 - | 67 abc |
| 3         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 47 a | 100 a   | 100 a | 93    | 0 - | 0 - | 53 bc  |
| 4         | WARRANT ULTRA HERBICIDE             | 1509 g ai/ha A                    | A          | 43 a | 100 a   | 100 a | 100 - | 0 - | 0 - | 60 abc |
| 5         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 75 a | 98 a    | 100 a | 100 - | 0 - | 0 - | 83 ab  |
| 6         | VALOR EZ                            | 70.15 g ai/ha A                   | A          | 70 a | 72 b    | 99 a  | 100 - | 0 - | 0 - | 50 bc  |
| 7         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 33 a | 100 a   | 87 a  | 100 - | 0 - | 0 - | 37 c   |
| 8         | MON 301668 MAULER                   | 1212 g ai/ha A<br>280.6 g ai/ha A | A          | 57 a | 100 a   | 100 a | 100 - | 0 - | 0 - | 50 bc  |
|           | XTENDIMAX VAPORGRIP                 | 562.6 g ai/ha A                   | A          |      |         |       |       |     |     |        |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |      |         |       |       |     |     |        |
|           | INTACT                              | 0.5 % v/v A                       | A          |      |         |       |       |     |     |        |
|           | MON 51817                           | 1.461 l/ha A                      | A          |      |         |       |       |     |     |        |
| 9         | MON 301668                          | 1212 g ai/ha A                    | A          | 57 a | 98 a    | 93 a  | 100 - | 0 - | 0 - | 65 abc |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          |      |         |       |       |     |     |        |
|           | XTENDIMAX VAPORGRIP                 | 562.6 g ai/ha A                   | A          |      |         |       |       |     |     |        |
|           | INTACT                              | 0.5 % v/v A                       | A          |      |         |       |       |     |     |        |
|           | MON 51817                           | 1.461 l/ha A                      | A          |      |         |       |       |     |     |        |



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## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID: HN21USADHBTRS1 TD Number: LOCALCREATED Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

| Unique Col. ID              | 15              | 16         | 17        | 18         | 19          | 20          | 21          |      |
|-----------------------------|-----------------|------------|-----------|------------|-------------|-------------|-------------|------|
| Orig./Calc. Flag            | O               | O          | O         | O          | O           | O           | O           |      |
| SE Group                    | 13              | 14         | 15        | 16         | 17          | 18          | 19          |      |
| SE ID                       | EE22AD3         | EE22AD3    | EE22AD3   | EE22AD3    | PE12AD1     | PE12AD1     | EE22AD3     |      |
| SE Label                    | 1 weed,         | 1 weed,    | 1 weed,   | 1 weed,    | Estimat     | Estimat     | 1 weed,     |      |
| Target                      | 3 AMBTR         | 4 CHEAL    | 5 ABUTH   | 6 ERICA    |             |             | 1 SETFA     |      |
| -Disc./Scale                | W BDIC          | W BDIC     | W BDIC    | W BDIC     |             |             | W BGRM      |      |
| -Resistance Characteristics |                 |            |           | HG/9       |             |             |             |      |
| Crop                        |                 |            |           |            | 1 GLXMA     | 1 GLXMA     |             |      |
| -Disc./Scale                |                 |            |           |            | C BSOY      | C BSOY      |             |      |
| Variety                     |                 |            |           |            | AG38XF1     | AG38XF1     |             |      |
| -Characteristic             |                 |            |           |            | RR+LL+DIC   | RR+LL+DIC   |             |      |
| Part Rated                  | PLANT           | PLANT      | PLANT     | PLANT      | PLANT       | PLANT       | PLANT       |      |
| Assessment Type             | CONTRO          | CONTRO     | CONTRO    | CONTRO     | PHYSTU      | PHYNEC      | CONTRO      |      |
| Assessment Unit             | %               | %          | %         | %          | %           | %           | %           |      |
| Sample Size                 | 1               | 1          | 1         | 1          | 1           | 1           | 1           |      |
| Sample Size Unit            | PLOT            | PLOT       | PLOT      | PLOT       | PLOT        | PLOT        | PLOT        |      |
| Sample Size (total)         | 1               | 1          | 1         | 1          | 1           | 1           | 1           |      |
| # Subsamples                | 1               | 1          | 1         | 1          | 1           | 1           | 1           |      |
| Assessment Date             | Jun-4-202       | Jun-4-202  | Jun-4-202 | Jun-4-2021 | Jun-17-2021 | Jun-17-2021 | Jun-17-2021 |      |
| Appl.-Ass.Interval          | 21 DAA          | 21 DAA     | 21 DAA    | 21 DAA     | 34 DAA      | 34 DAA      | 34 DAA      |      |
| Days after first Appl.      | 21 DAA          | 21 DAA     | 21 DAA    | 21 DAA     | 34 DAA      | 34 DAA      | 34 DAA      |      |
| Days after last Appl.       | 21 DAA          | 21 DAA     | 21 DAA    | 21 DAA     | 34 DAA      | 34 DAA      | 34 DAA      |      |
| Plant.-Ass.Interval         | 21 DP1          | 21 DP1     | 21 DP1    | 21 DP1     | 34 DP1      | 34 DP1      | 34 DP1      |      |
| Days after Emergence        | 3 DE-1          | 3 DE-1     | 3 DE-1    | 3 DE-1     | 16 DE-1     | 16 DE-1     | 16 DE-1     |      |
| Decimals Printed            | 0               | 0          | 0         | 0          | 0           | 0           | 0           |      |
| ARM Action Codes            | P EC            | AA P EC    | P EC      | ET3 P EC   | P           | P           | P EC        |      |
| Untreated                   | CANOPY          | CANOPY     | CANOPY    | CANOPY     | CANOPY      | CANOPY      | CANOPY      |      |
| Entry No.                   | 13*             | 14*        | 15*       | 16*        | 17*         | 18*         | 19*         |      |
| Entry/Trt. Description      |                 | dAA        |           |            |             |             |             |      |
| 14 ROUNDUP POWERMAX 3       | 1263 g ai/ha A  | 67 a       | 100 a     | 100 a      | 100 -       | 0 -         | 0 -         | 10 d |
| CLASS ACT RIDION            | 1 % v/v A       |            |           |            |             |             |             |      |
| XTENDIMAX VAPORGRIP         | 562.6 g ai/ha A |            |           |            |             |             |             |      |
| INTACT                      | 0.5 % v/v A     |            |           |            |             |             |             |      |
| MON 51817                   | 1.461 l/ha A    |            |           |            |             |             |             |      |
| LSD P=.05                   | 28.4            | 7.7 - 20.6 | 12.3      | .          | .           | .           | 21.8        |      |
| Standard Deviation          | 16.9            | 9.6t       | 7.3       | 0.0        | 0.0         | 0.0         | 13.0        |      |
| CV                          | 30.26           | 11.99t     | 7.78      | 0.0        | 0.0         | 0.0         | 23.67       |      |
| Levene's F^                 | 0.45            | 1.35       | 0.842     | .          | .           | .           | 0.491       |      |
| Levene's Prob(F)            | 0.935           | 0.244      | 0.617     | .          | .           | .           | 0.911       |      |
| Skewness^                   | -0.3789         | 0.5406     | -1.9474*  | .          | .           | .           | -0.1665     |      |
| Kurtosis^                   | -0.1            | 7.5945*    | 10.2792*  | .          | .           | .           | 0.689       |      |
| Replicate F                 | 1.829           | 0.594      | 0.608     | 0.000      | 0.000       | 0.000       | 2.466       |      |
| Replicate Prob(F)           | 0.1807          | 0.5597     | 0.5527    | 1.0000     | 1.0000      | 1.0000      | 0.1045      |      |
| Treatment F                 | 4.400           | 19.745     | 27.606    | 0.000      | 0.000       | 0.000       | 11.835      |      |
| Treatment Prob(F)           | 0.0006          | 0.0001     | 0.0001    | 1.0000     | 1.0000      | 1.0000      | 0.0001      |      |

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 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

|                             |             |            |            |            |             |
|-----------------------------|-------------|------------|------------|------------|-------------|
| Unique Col. ID              | 22          | 23         | 24         | 25         | 26          |
| Orig./Calc. Flag            | O           | O          | O          | O          | O           |
| SE Group                    | 20          | 21         | 22         | 23         | 24          |
| SE ID                       | EE22AD3     | EE22AD3    | EE22AD3    | EE22AD3    | EE22AD3     |
| SE Label                    | 1 weed,     | 1 weed,    | 1 weed,    | 1 weed,    | 1 weed,     |
| Target                      | 2 ECHCG     | 3 AMBTR    | 4 CHEAL    | 5 ABUTH    | 6 ERICA     |
| -Disc./Scale                | W BGRM      | W BDIC     | W BDIC     | W BDIC     | W BDIC      |
| -Resistance Characteristics |             |            |            |            | HG/9        |
| Crop                        |             |            |            |            |             |
| -Disc./Scale                |             |            |            |            |             |
| Variety                     |             |            |            |            |             |
| -Characteristic             |             |            |            |            |             |
| Part Rated                  | PLANT       | PLANT      | PLANT      | PLANT      | PLANT       |
| Assessment Type             | CONTRO      | CONTRO     | CONTRO     | CONTRO     | CONTRO      |
| Assessment Unit             | %           | %          | %          | %          | %           |
| Sample Size                 | 1           | 1          | 1          | 1          | 1           |
| Sample Size Unit            | PLOT        | PLOT       | PLOT       | PLOT       | PLOT        |
| Sample Size (total)         | 1           | 1          | 1          | 1          | 1           |
| # Subsamples                | 1           | 1          | 1          | 1          | 1           |
| Assessment Date             | Jun-17-2021 | Jun-17-202 | Jun-17-202 | Jun-17-202 | Jun-17-2021 |
| Appl.-Ass.Interval          | 34 DAA      | 34 DAA     | 34 DAA     | 34 DAA     | 34 DAA      |
| Days after first Appl.      | 34 DAA      | 34 DAA     | 34 DAA     | 34 DAA     | 34 DAA      |
| Days after last Appl.       | 34 DAA      | 34 DAA     | 34 DAA     | 34 DAA     | 34 DAA      |
| Plant.-Ass.Interval         | 34 DP1      | 34 DP1     | 34 DP1     | 34 DP1     | 34 DP1      |
| Days after Emergence        | 16 DE-1     | 16 DE-1    | 16 DE-1    | 16 DE-1    | 16 DE-1     |
| Decimals Printed            | 0           | 0          | 0          | 0          | 0           |
| ARM Action Codes            | P EC        | AL P EC    | P EC       | P EC       | P EC        |
| Untreated                   | CANOPY      | CANOPY     | CANOPY     | CANOPY     | CANOPY      |

| Entry No. | Entry/Trt. Description              | Dose Unit                         | Appl. Code | 20*    | 21* dAL | 22*   | 23*   | 24*   |
|-----------|-------------------------------------|-----------------------------------|------------|--------|---------|-------|-------|-------|
| 1         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 0 d    | 0 -     | 0 b   | 0 -   | 100 - |
| 2         | MON 301668 MAULER                   | 1212 g ai/ha A<br>280.6 g ai/ha A | A          | 27 bcd | 0 -     | 100 a | 100 - | 100 - |
| 3         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 13 cd  | 0 -     | 100 a | 100 - | 100 - |
| 4         | WARRANT ULTRA HERBICIDE             | 1509 g ai/ha A                    | A          | 33 bcd | 2 -     | 100 a | 100 - | 100 - |
| 5         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 60 ab  | 13 -    | 100 a | 100 - | 100 - |
| 6         | VALOR EZ                            | 70.15 g ai/ha A                   | A          | 13 cd  | 0 -     | 67 a  | 100 - | 100 - |
| 7         | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 23 bcd | 0 -     | 67 a  | 100 - | 100 - |
| 8         | MON 301668 MAULER                   | 1212 g ai/ha A<br>280.6 g ai/ha A | A          | 17 cd  | 0 -     | 100 a | 100 - | 100 - |
| 9         | XTENDIMAX VAPORGRIP                 | 562.6 g ai/ha A                   | A          |        |         |       |       |       |
|           | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A<br>1 % v/v A       | A          | 30 bcd | 0 -     | 100 a | 100 - | 100 - |
|           | INTACT                              | 0.5 % v/v A                       | A          |        |         |       |       |       |
|           | MON 51817                           | 1.461 l/ha A                      | A          |        |         |       |       |       |
|           | XTENDIMAX VAPORGRIP                 | 562.6 g ai/ha A                   | A          |        |         |       |       |       |
|           | INTACT                              | 0.5 % v/v A                       | A          |        |         |       |       |       |
|           | MON 51817                           | 1.461 l/ha A                      | A          |        |         |       |       |       |

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Trial ID: HN21USADHBTRS1    TD Number: LOCALCREATED    Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

|                             |             |            |            |            |             |
|-----------------------------|-------------|------------|------------|------------|-------------|
| Unique Col. ID              | 22          | 23         | 24         | 25         | 26          |
| Orig./Calc. Flag            | O           | O          | O          | O          | O           |
| SE Group                    | 20          | 21         | 22         | 23         | 24          |
| SE ID                       | EE22AD3     | EE22AD3    | EE22AD3    | EE22AD3    | EE22AD3     |
| SE Label                    | 1 weed,     | 1 weed,    | 1 weed,    | 1 weed,    | 1 weed,     |
| Target                      | 2 ECHCG     | 3 AMBTR    | 4 CHEAL    | 5 ABUTH    | 6 ERICA     |
| -Disc./Scale                | W BGRM      | W BDIC     | W BDIC     | W BDIC     | W BDIC      |
| -Resistance Characteristics |             |            |            |            | HG/9        |
| Crop                        |             |            |            |            |             |
| -Disc./Scale                |             |            |            |            |             |
| Variety                     |             |            |            |            |             |
| -Characteristic             |             |            |            |            |             |
| Part Rated                  | PLANT       | PLANT      | PLANT      | PLANT      | PLANT       |
| Assessment Type             | CONTRO      | CONTRO     | CONTRO     | CONTRO     | CONTRO      |
| Assessment Unit             | %           | %          | %          | %          | %           |
| Sample Size                 | 1           | 1          | 1          | 1          | 1           |
| Sample Size Unit            | PLOT        | PLOT       | PLOT       | PLOT       | PLOT        |
| Sample Size (total)         | 1           | 1          | 1          | 1          | 1           |
| # Subsamples                | 1           | 1          | 1          | 1          | 1           |
| Assessment Date             | Jun-17-2021 | Jun-17-202 | Jun-17-202 | Jun-17-202 | Jun-17-2021 |
| Appl.-Ass.Interval          | 34 DAA      | 34 DAA     | 34 DAA     | 34 DAA     | 34 DAA      |
| Days after first Appl.      | 34 DAA      | 34 DAA     | 34 DAA     | 34 DAA     | 34 DAA      |
| Days after last Appl.       | 34 DAA      | 34 DAA     | 34 DAA     | 34 DAA     | 34 DAA      |
| Plant.-Ass.Interval         | 34 DP1      | 34 DP1     | 34 DP1     | 34 DP1     | 34 DP1      |
| Days after Emergence        | 16 DE-1     | 16 DE-1    | 16 DE-1    | 16 DE-1    | 16 DE-1     |
| Decimals Printed            | 0           | 0          | 0          | 0          | 0           |
| ARM Action Codes            | P EC        | AL P EC    | P EC       | P EC       | P EC        |
| Untreated                   | CANOPY      | CANOPY     | CANOPY     | CANOPY     | CANOPY      |

| Entry No. | Entry/Trt. Description  | Dose          | Dose Unit | Appl. Code | 20*    | 21* dAL | 22*   | 23*   | 24*   |
|-----------|-------------------------|---------------|-----------|------------|--------|---------|-------|-------|-------|
| 10        | WARRANT ULTRA HERBICIDE | 1509 g ai/ha  | A         |            | 33 bcd | 2 -     | 100 a | 100 - | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         |            |        |         |       |       |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         |            |        |         |       |       |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         |            |        |         |       |       |       |
|           | INTACT                  | 0.5 % v/v     | A         |            |        |         |       |       |       |
|           | MON 51817               | 1.461 l/ha    | A         |            |        |         |       |       |       |
| 11        | FIERCE EZ               | 159.7 g ai/ha | A         |            | 86 a   | 2 -     | 100 a | 100 - | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         |            |        |         |       |       |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         |            |        |         |       |       |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         |            |        |         |       |       |       |
|           | INTACT                  | 0.5 % v/v     | A         |            |        |         |       |       |       |
|           | MON 51817               | 1.461 l/ha    | A         |            |        |         |       |       |       |
| 12        | VALOR EZ                | 70.15 g ai/ha | A         |            | 63 ab  | 42 -    | 93 a  | 100 - | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         |            |        |         |       |       |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         |            |        |         |       |       |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         |            |        |         |       |       |       |
|           | INTACT                  | 0.5 % v/v     | A         |            |        |         |       |       |       |
|           | MON 51817               | 1.461 l/ha    | A         |            |        |         |       |       |       |
| 13        | AUTHORITY MTZ           | 315.2 g ai/ha | A         |            | 47 bc  | 2 -     | 100 a | 100 - | 100 - |
|           | ROUNDUP POWERMAX 3      | 1263 g ai/ha  | A         |            |        |         |       |       |       |
|           | CLASS ACT RIDION        | 1 % v/v       | A         |            |        |         |       |       |       |
|           | XTENDIMAX VAPORGRIP     | 562.6 g ai/ha | A         |            |        |         |       |       |       |
|           | INTACT                  | 0.5 % v/v     | A         |            |        |         |       |       |       |
|           | MON 51817               | 1.461 l/ha    | A         |            |        |         |       |       |       |

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 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

|                             |                                     |                 |             |            |             |             |         |        |        |
|-----------------------------|-------------------------------------|-----------------|-------------|------------|-------------|-------------|---------|--------|--------|
| Unique Col. ID              | 22                                  | 23              | 24          | 25         | 26          |             |         |        |        |
| Orig./Calc. Flag            | O                                   | O               | O           | O          | O           |             |         |        |        |
| SE Group                    | 20                                  | 21              | 22          | 23         | 24          |             |         |        |        |
| SE ID                       | EE22AD3                             | EE22AD3         | EE22AD3     | EE22AD3    | EE22AD3     |             |         |        |        |
| SE Label                    | 1 weed,                             | 1 weed,         | 1 weed,     | 1 weed,    | 1 weed,     |             |         |        |        |
| Target                      | 2 ECHCG                             | 3 AMBTR         | 4 CHEAL     | 5 ABUTH    | 6 ERICA     |             |         |        |        |
| -Disc./Scale                | W BGRM                              | W BDIC          | W BDIC      | W BDIC     | W BDIC      |             |         |        |        |
| -Resistance Characteristics |                                     |                 |             |            | HG/9        |             |         |        |        |
| Crop                        |                                     |                 |             |            |             |             |         |        |        |
| -Disc./Scale                |                                     |                 |             |            |             |             |         |        |        |
| Variety                     |                                     |                 |             |            |             |             |         |        |        |
| -Characteristic             |                                     |                 |             |            |             |             |         |        |        |
| Part Rated                  | PLANT                               | PLANT           | PLANT       | PLANT      | PLANT       |             |         |        |        |
| Assessment Type             | CONTRO                              | CONTRO          | CONTRO      | CONTRO     | CONTRO      |             |         |        |        |
| Assessment Unit             | %                                   | %               | %           | %          | %           |             |         |        |        |
| Sample Size                 | 1                                   | 1               | 1           | 1          | 1           |             |         |        |        |
| Sample Size Unit            | PLOT                                | PLOT            | PLOT        | PLOT       | PLOT        |             |         |        |        |
| Sample Size (total)         | 1                                   | 1               | 1           | 1          | 1           |             |         |        |        |
| # Subsamples                | 1                                   | 1               | 1           | 1          | 1           |             |         |        |        |
| Assessment Date             | Jun-17-2021                         | Jun-17-202      | Jun-17-202  | Jun-17-202 | Jun-17-2021 |             |         |        |        |
| Appl.-Ass.Interval          | 34 DAA                              | 34 DAA          | 34 DAA      | 34 DAA     | 34 DAA      |             |         |        |        |
| Days after first Appl.      | 34 DAA                              | 34 DAA          | 34 DAA      | 34 DAA     | 34 DAA      |             |         |        |        |
| Days after last Appl.       | 34 DAA                              | 34 DAA          | 34 DAA      | 34 DAA     | 34 DAA      |             |         |        |        |
| Plant.-Ass.Interval         | 34 DP1                              | 34 DP1          | 34 DP1      | 34 DP1     | 34 DP1      |             |         |        |        |
| Days after Emergence        | 16 DE-1                             | 16 DE-1         | 16 DE-1     | 16 DE-1    | 16 DE-1     |             |         |        |        |
| Decimals Printed            | 0                                   | 0               | 0           | 0          | 0           |             |         |        |        |
| ARM Action Codes            | P EC                                | AL P EC         | P EC        | P EC       | P EC        |             |         |        |        |
| Untreated                   | CANOPY                              | CANOPY          | CANOPY      | CANOPY     | CANOPY      |             |         |        |        |
| Entry No.                   | Entry/Trt. Description              | Dose Unit       | Dose Unit   | Appl. Code | 20*         | 21* dAL     | 22*     | 23*    | 24*    |
| 14                          | ROUNDUP POWERMAX 3 CLASS ACT RIDION | 1263 g ai/ha A  | 1 % v/v A   | A          | 0 d         | 2 -         | 100 a   | 100 -  | 100 -  |
|                             | XTENDIMAX VAPORGRIP INTACT          | 562.6 g ai/ha A | 0.5 % v/v A | A          |             |             |         |        |        |
|                             | MON 51817                           | 1.461 l/ha A    |             | A          |             |             |         |        |        |
| LSD P=.05                   |                                     |                 |             |            | 25.0        | 22.1 - 38.4 | 19.1    | .      | .      |
| Standard Deviation          |                                     |                 |             |            | 14.9        | 0.6t        | 11.4    | 0.0    | 0.0    |
| CV                          |                                     |                 |             |            | 46.74       | 156.69t     | 12.99   | 0.0    | 0.0    |
| Levene's F^                 |                                     |                 |             |            | 0.39        | 0.692       | 0.892   | .      | .      |
| Levene's Prob(F)            |                                     |                 |             |            | 0.962       | 0.755       | 0.571   | .      | .      |
| Skewness^                   |                                     |                 |             |            | 0.0517      | 0.4582      | 1.5832* | .      | .      |
| Kurtosis^                   |                                     |                 |             |            | -0.2522     | 0.9732      | 6.4537* | .      | .      |
| Replicate F                 |                                     |                 |             |            | 3.758       | 0.131       | 0.901   | 0.000  | 0.000  |
| Replicate Prob(F)           |                                     |                 |             |            | 0.0368      | 0.8782      | 0.4185  | 1.0000 | 1.0000 |
| Treatment F                 |                                     |                 |             |            | 8.341       | 2.272       | 18.037  | 0.000  | 0.000  |
| Treatment Prob(F)           |                                     |                 |             |            | 0.0001      | 0.0363      | 0.0001  | 1.0000 | 1.0000 |

# The Ohio State University

## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID: HN21USADHBTRS1    TD Number: LOCALCREATED    Protocol Edition No.: 1.05  
 Project ID: MD-NATIONAL  
 Project Number(s): 0 % PM\_BROAD\_ACRE % 100 % PM\_BROAD\_ACRE  
 Protocol Developer: Hammer, Devin  
 License User: Michael, Janis

SE ID

PE12AD1 = Estimation % phytotoxicity (PHYGEN) (symptoms describe in co

EE22AD3 = 1 weed, % efficacy, in untreated % coverage

Target

1, SETFA, W, BGRM, , , = Setaria faberi HERRM.

2, ECHCG, W, BGRM, , , = Echinochloa crus-galli (L.) P.

3, AMBTR, W, BDIC, , , = Ambrosia trifida L.

4, CHEAL, W, BDIC, , , = Chenopodium album L.

5, ABUTH, W, BDIC, , , = Abutilon theophrasti MEDIK.

6, ERICA, W, BDIC, , HG/9, = Erigeron canadensis | Conyza canadensis

Crop

1, GLXMA, C, BSOY, AG38XF1, RR+LL+DIC = Glycine max (L.) MERR.

Part Rated

PLANT = Plant

Assessment Type

PHYSTU = Phytotoxicity - Stunting

PHYNEC = Phytotoxicity - Necrosis, Burn

CONTRO = Control

Assessment Unit

% = Percent

Sample Size Unit

PLOT = Plot

Plant-Ass.Interval

14 DP1 = 1 GLXMA May-14-2021

21 DP1 = 1 GLXMA May-14-2021

34 DP1 = 1 GLXMA May-14-2021

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. control or injury)

EC = Do not analyze untreated check, and report check treatment mean on AOV Means Tab

ET1 = Excluded treatment 1

AL = Automatic log transformation of x+1

AA = Automatic arcsin square root % transformation

ET3 = Excluded treatment 3

Untreated

CANOPY = Canopy