

## Southern Illinois University

F9387 Tankmixtures in Corn.

Trial ID: 13-DSO-F9387tankmix Location: De Soto, IL Trial Year: 2013  
Investigator: Bryan Young

|                                                                                                              |                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Trial Status:</b> F one-year/final<br><b>Initiation Date:</b> 5-20-13<br><b>Completion Date:</b> 10-21-13 | <b>Trial Location</b><br><br><b>City:</b> De Soto <b>Country:</b> USA<br><b>State/Prov.:</b> Illinois IL<br><b>Postal Code:</b> 62924 |
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|                                                                                                       |
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| <b>Objectives:</b><br>Evaluate crop tolerance and weed control from F9387 tank mixed with glyphosate. |
|-------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                               |                                                                                                                                                   |
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| <b>Study Director:</b> Bryan Young<br><b>Organization:</b> Southern Illinois University<br><b>Address:</b> 1205 Lincoln Drive - AG 176 - MC 4415<br><b>City+State/Prov:</b> Carbondale IL<br><b>Postal Code:</b> 62901<br><b>Country:</b> USA | <b>Contacts</b><br><b>Title:</b> Professor<br><b>Phone No.:</b> 618-453-7679<br><b>Mobile No.:</b> 618-713-6471<br><b>E-mail:</b> bgyoung@siu.edu |
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|                                                                                                                                                                                                                                                  |                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>Crop 1:</b> ZEAMD Zea mays indentata Dent corn<br><b>Variety:</b> DKC 63-33 <b>BBCH Scale:</b> BCOR<br><b>Description:</b> SS RIB<br><br><b>Planting Rate, Unit:</b> 28000 S/A<br><b>Depth, Unit:</b> 2 IN<br><b>Row Spacing, Unit:</b> 30 IN | <b>Crop Description</b><br><br><b>Planting Date:</b> 5-20-13<br><b>Planting Method:</b> SEEDED |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|

|                                                                                                                                                                       |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Pest 1 Type:</b> W <b>Code:</b> AMATA <b>Amaranthus rudis</b> Sauer<br><b>Common Name:</b> waterhemp, common<br><b>Description:</b> glyphosate-resistant waterhemp | <b>Pest Description</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|

|                                                                                                                                                                                                                                                    |                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Treated Plot Width:</b> 6.67 FT <b>Total Plot Width:</b> 10 FT<br><b>Treated Plot Length:</b> 30 FT <b>Total Plot Length:</b> 30 FT<br><b>Replications:</b> 4<br><b>Untreated Arrangement:</b> INCLUDED single control randomized in each block | <b>Site and Design</b><br><b>Site Type:</b> FIELD<br><b>Experimental Unit:</b> 1 PLOT<br><b>Tillage Type:</b> REDTIL reduced-till<br><b>Study Design:</b> RACOB L Randomized Complete Block (RCB) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| No. | Previous Crop | Year |
|-----|---------------|------|
| 1.  | GLXMA         | 2012 |

| <table border="1"> <thead> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>N 180 LB/A, P2O5 0 LB/A, K2O 0 LB/A</td> </tr> </tbody> </table> | No.                                 | Maintenance Product Name | 1. | N 180 LB/A, P2O5 0 LB/A, K2O 0 LB/A | <b>Maintenance</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|----|-------------------------------------|--------------------|
| No.                                                                                                                                                                                         | Maintenance Product Name            |                          |    |                                     |                    |
| 1.                                                                                                                                                                                          | N 180 LB/A, P2O5 0 LB/A, K2O 0 LB/A |                          |    |                                     |                    |

|                                                                                                                                                                    |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>% Sand:</b> 14 <b>% OM:</b> 2.12 <b>Texture:</b> SIL silt loam<br><b>% Silt:</b> 67 <b>pH:</b> 6.9 <b>Soil Name:</b> Okaw<br><b>% Clay:</b> 19 <b>CEC:</b> 12.7 | <b>Soil Description</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|

| Element | Quantity | Unit |
|---------|----------|------|
| P1      | 112      | lb/A |
| K       | 386      | lb/A |

|                                                                                                           |                                                                         |
|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Overall Moisture Conditions:</b> NORMAL<br><b>Closest Weather Station:</b> SOUTHERN IL AIRPORT (93810) | <b>Moisture and Weather Conditions</b><br><b>Distance, Unit:</b> 1.5 MI |
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F9387 Tankmixtures in Corn.

Trial ID: 13-DSO-F9387tankmix Location: De Soto, IL Trial Year: 2013  
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| No. | Date    | Amount | Unit | Type | Type Description | Interval | Unit | Min Temp | Max Temp | Temp Unit |
|-----|---------|--------|------|------|------------------|----------|------|----------|----------|-----------|
| 1.  | 5-3-13  | 1.33   | IN   | RAIN | rain             | 3        | DAY  |          |          |           |
| 2.  | 5-5-13  | 0.75   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 3.  | 5-6-13  |        |      |      |                  | 7        | DAY  | 41       | 80       | F         |
| 4.  | 5-10-13 | 0.17   | IN   | RAIN | rain             | 3        | DAY  |          |          |           |
| 5.  | 5-13-13 |        |      |      |                  | 7        | DAY  | 37       | 87       | F         |
| 6.  | 5-16-13 | 0.23   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 7.  | 5-20-13 |        |      |      |                  | 7        | DAY  | 43       | 85       | F         |
| 8.  | 5-21-13 | 0.91   | IN   | RAIN | rain             | 1        | DAY  |          |          |           |
| 9.  | 5-27-13 |        |      |      |                  | 7        | DAY  | 59       | 86       | F         |
| 10. | 5-31-13 | 0.7    | IN   | RAIN | rain             | 3        | DAY  |          |          |           |
| 11. | 6-1-13  | 1.67   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 12. | 6-3-13  |        |      |      |                  | 7        | DAY  | 50       | 82       | F         |
| 13. | 6-10-13 | 0.13   | IN   | RAIN | rain             | 5        | DAY  |          |          |           |
| 14. | 6-10-13 |        |      |      |                  | 7        | DAY  | 57       | 93       | F         |
| 15. | 6-17-13 | 0.36   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 16. | 6-17-13 |        |      |      |                  | 7        | DAY  | 61       | 92       | F         |
| 17. | 6-22-13 | 0.34   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 18. | 6-24-13 |        |      |      |                  | 7        | DAY  | 64       | 93       | F         |
| 19. | 6-26-13 | 1.25   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 20. | 6-30-13 | 0.3    | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 21. | 7-1-13  |        |      |      |                  | 7        | DAY  | 57       | 88       | F         |
| 22. | 7-2-13  | 1.16   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 23. | 7-8-13  |        |      |      |                  | 7        | DAY  | 59       | 92       | F         |
| 24. | 7-14-13 | 0.05   | IN   | RAIN | rain             | 5        | DAY  |          |          |           |
| 25. | 7-15-13 |        |      |      |                  | 7        | DAY  | 68       | 93       | F         |
| 26. | 7-20-13 | 1.24   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 27. | 7-22-13 |        |      |      |                  | 7        | DAY  | 51       | 90       | F         |
| 28. | 7-27-13 | 0.13   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 29. | 7-29-13 |        |      |      |                  | 7        | DAY  | 58       | 86       | F         |
| 30. | 7-30-13 | 0.98   | IN   | RAIN | rain             | 1        | DAY  |          |          |           |
| 31. | 8-3-13  | 0.24   | IN   | RAIN | rain             | 3        | DAY  |          |          |           |
| 32. | 8-5-13  | 0.53   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 33. | 8-5-13  |        |      |      |                  | 7        | DAY  | 61       | 98       | F         |
| 34. | 8-8-13  | 1.78   | IN   | RAIN | rain             | 4        | DAY  |          |          |           |
| 35. | 8-12-13 | 0.12   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 36. | 8-12-13 |        |      |      |                  | 7        | DAY  | 51       | 84       | F         |
| 37. | 8-17-13 | 0.21   | IN   | RAIN | rain             | 2        | DAY  |          |          |           |
| 38. | 8-19-13 | 0.01   | IN   | RAIN | rain             | 1        | DAY  |          |          |           |
| 39. | 8-19-13 |        |      |      |                  | 7        | DAY  | 60       | 90       | F         |

F9387 Tankmixtures in Corn.

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**Application Description**

|                              | A       | B       |
|------------------------------|---------|---------|
| Application Date:            | 5-20-13 | 6-14-13 |
| Appl. Start Time:            | 19:15   | 10:15   |
| Appl. Stop Time:             | 19:30   | 11:00   |
| Application Method:          | Spray   | Spray   |
| Application Timing:          | PRE     | 4"W     |
| Application Placement:       | BROSOI  | BROFOL  |
| Applied By:                  | EJM     | LXF     |
| Air Temperature, Unit:       | 84 F    | 88 F    |
| % Relative Humidity:         | 58      | 50      |
| Wind Velocity, Unit:         | 6 MPH   | 3 MPH   |
| Wind Direction:              | SE      | NE      |
| Dew Presence (Y/N):          | N       | N       |
| Soil Temperature, Unit:      | 79 F    | 77 F    |
| Soil Moisture:               | NORMAL  | NORMAL  |
| % Cloud Cover:               | 5       | 0       |
| Next Moisture Occurred On:   | 5-21-13 | 6-17-13 |
| Time to Next Moisture, Unit: | 7 HR    | 3 DAY   |

**Crop Stage At Each Application**

|                          | A     | B     |
|--------------------------|-------|-------|
| Crop 1 Code, BBCH Scale: | ZEAMD | ZEAMD |
| Stage Scale Used:        | DESC  | DESC  |
| Stage Majority, Percent: | NA    | V4    |
| Stage Minimum, Percent:  |       | V3    |
| Stage Maximum, Percent:  |       | V4    |
| Height, Unit:            |       | 30 IN |
| Height Minimum, Maximum: |       | 15 20 |

**Pest Stage At Each Application**

|                           | A       | B       |
|---------------------------|---------|---------|
| Pest 1 Code, Type, Scale: | AMATA W | AMATA W |
| Stage Majority, Percent:  | NA      | 8       |
| Stage Minimum, Percent:   |         | 2       |
| Stage Maximum, Percent:   |         | 20      |
| Height, Unit:             |         | 4 IN    |
| Height Minimum, Maximum:  |         | 1 8     |
| Density, Unit:            |         | 10 FT2  |

**Application Equipment**

|                           | A           | B           |
|---------------------------|-------------|-------------|
| Appl. Equipment:          | CO2 sprayer | CO2 sprayer |
| Equipment Type:           | BACSPR      | BACSPR      |
| Operation Pressure, Unit: | 30 PSI      | 30 PSI      |
| Nozzle Type:              | XR          | XR          |
| Nozzle Size:              | 8002        | 8002        |
| Boom Length, Unit:        | 6.67 FT     | 6.67 FT     |
| Spray Volume, Unit:       | 15 GPA      | 15 GPA      |

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Trial ID: 13-DSO-F9387tankmix Location: De Soto, IL Trial Year: 2013  
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| Pest Code | Crop Code                                                  | Rating Date                       | Rating Type | Rating Unit                                                                 | Rating Timing | Trt-Eval Interval                                                       | ZEAMD<br>10-21-13<br>Moisture | ZEAMD<br>10-21-13<br>Yield | ZEAMD<br>6-19-13<br>Injury | ZEAMD<br>6-28-13<br>Injury | ZEAMD<br>7-14-13<br>Injury |
|-----------|------------------------------------------------------------|-----------------------------------|-------------|-----------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------|-------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|           |                                                            |                                   |             |                                                                             |               |                                                                         | Percent                       | bu/A                       | Percent                    | Percent                    | Percent                    |
|           |                                                            |                                   |             |                                                                             |               |                                                                         |                               |                            | 5 DA-B                     | 14 DA-B                    | 30 DA-B                    |
| Trt No.   | Treatment Name                                             | Form Conc                         | Form Type   | Form Rate                                                                   | Rate Unit     | Other Rate                                                              | Other Unit                    | Growth Stage               | Appl Code                  |                            |                            |
| 1         | ROUNDUP POWERMAX AMS                                       | 4.5 SL                            | 100 SG      | 0.77 lb ae/a<br>1.02 % w/w                                                  |               | 22 fl oz/a<br>8.5 lb/100 gal                                            | 4"W                           | B<br>B                     |                            | 15.1 a                     | 202 bc                     |
| 2         | LIBERTY 280 AMS                                            | 2.34 EC                           | 100 SG      | 0.402 lb ai/a<br>1.02 % w/w                                                 |               | 22 fl oz/a<br>8.5 lb/100 gal                                            | 4"W                           | B<br>B                     |                            | 15.2 a                     | 220 abc                    |
| 3         | F9387-1<br>ROUNDUP POWERMAX AMS                            | 4 SC<br>4.5 SL                    | 100 SG      | 0.078 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |               | 2.5 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                             | 4"W                           | B<br>B<br>B                |                            | 15.8 a                     | 231 a                      |
| 4         | F9387-1<br>ROUNDUP POWERMAX AMS                            | 4 SC<br>4.5 SL                    | 100 SG      | 0.098 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |               | 3.15 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W                           | B<br>B<br>B                |                            | 15.8 a                     | 210 abc                    |
| 5         | CADET<br>ROUNDUP POWERMAX AMS                              | 0.91 EC<br>4.5 SL                 | 100 SG      | 0.00533 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                               |               | 0.75 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W                           | B<br>B<br>B                |                            | 15.6 a                     | 202 bc                     |
| 6         | CALLISTO<br>ROUNDUP POWERMAX AMS                           | 4 SC<br>4.5 SL                    | 100 SG      | 0.094 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |               | 3 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                               | 4"W                           | B<br>B<br>B                |                            | 15.3 a                     | 208 abc                    |
| 7         | F9387-1<br>LIBERTY 280 AMS                                 | 4 SC<br>2.34 EC                   | 100 SG      | 0.078 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                                |               | 2.5 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                             | 4"W                           | B<br>B<br>B                |                            | 15.8 a                     | 202 bc                     |
| 8         | F9387-1<br>LIBERTY 280 AMS                                 | 4 SC<br>2.34 EC                   | 100 SG      | 0.098 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                                |               | 3.15 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W                           | B<br>B<br>B                |                            | 15.2 a                     | 209 abc                    |
| 9         | CADET<br>LIBERTY 280 AMS                                   | 0.91 EC<br>2.34 EC                | 100 SG      | 0.00533 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                              |               | 0.75 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W                           | B<br>B<br>B                |                            | 15.2 a                     | 209 abc                    |
| 10        | F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS               | 4 SC<br>4 SC<br>4.5 SL            | 100 SG      | 0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                  |               | 2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal               | 4"W                           | B<br>B<br>B<br>B           |                            | 15.7 a                     | 205 abc                    |
| 11        | F9387-1<br>AATREX 4L<br>LIBERTY 280 AMS                    | 4 SC<br>4 SC<br>2.34 EC           | 100 SG      | 0.078 lb ai/a<br>0.5 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                 |               | 2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal               | 4"W                           | B<br>B<br>B<br>B           |                            | 15.6 a                     | 231 a                      |
| 12        | ANTHEM ATZ<br>F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS | 4.5 SE<br>4 SC<br>4 SC<br>4.5 SL  | 100 SG      | 0.98 lb ai/a<br>0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w  |               | 28 fl oz/a<br>2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal | PRE                           | A<br>B<br>B<br>B<br>B      |                            | 15.6 a                     | 215 abc                    |
| 13        | ANTHEM<br>F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS     | 2.15 SE<br>4 SC<br>4 SC<br>4.5 SL | 100 SG      | 0.134 lb ai/a<br>0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w |               | 8 fl oz/a<br>2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal  | PRE                           | A<br>B<br>B<br>B<br>B      |                            | 15.6 a                     | 227 ab                     |
| 14        | STATUS<br>ROUNDUP POWERMAX AMS                             | 56 WG<br>4.5 SL                   | 100 SG      | 0.0875 lb ae/a<br>0.77 lb ae/a<br>1.02 % w/w                                |               | 2.5 oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                                | 4"W                           | B<br>B<br>B                |                            | 15.0 a                     | 193 c                      |

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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## Southern Illinois University

F9387 Tankmixtures in Corn.

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Investigator: Bryan Young

| Pest Code<br>Crop Code<br>Rating Date<br>Rating Type<br><br>Rating Unit<br>Rating Timing<br>Trt-Eval Interval |                                                            |                                             |           |                                                                             |           |                                                                         |                                 |                       |           | ZEAMD<br>6-19-13<br>Necrosis | ZEAMD<br>6-28-13<br>Necrosis | ZEAMD<br>7-14-13<br>Stunt |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------|-----------|-----------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------|---------------------------------|-----------------------|-----------|------------------------------|------------------------------|---------------------------|
|                                                                                                               |                                                            |                                             |           |                                                                             |           |                                                                         |                                 |                       |           | Percent                      | Percent                      | Percent                   |
|                                                                                                               |                                                            |                                             |           |                                                                             |           |                                                                         |                                 |                       |           | 5 DA-B                       | 14 DA-B                      | 30 DA-B                   |
| Trt No.                                                                                                       | Treatment Name                                             | Form Conc                                   | Form Type | Rate                                                                        | Rate Unit | Other Rate                                                              | Other Rate Unit                 | Growth Stage          | Appl Code |                              |                              |                           |
| 1                                                                                                             | ROUNDUP POWERMAX AMS                                       | 4.5 SL<br>100 SG                            |           | 0.77 lb ae/a<br>1.02 % w/w                                                  |           | 22 fl oz/a<br>8.5 lb/100 gal                                            | 4"W<br>4"W                      | B<br>B                |           | 0 f                          | 0 d                          | 0 a                       |
| 2                                                                                                             | LIBERTY 280 AMS                                            | 2.34 EC<br>100 SG                           |           | 0.402 lb ai/a<br>1.02 % w/w                                                 |           | 22 fl oz/a<br>8.5 lb/100 gal                                            | 4"W<br>4"W                      | B<br>B                |           | 0 f                          | 0 d                          | 0 a                       |
| 3                                                                                                             | F9387-1<br>ROUNDUP POWERMAX AMS                            | 4 SC<br>4.5 SL<br>100 SG                    |           | 0.078 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |           | 2.5 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                             | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 0 f                          | 0 d                          | 0 a                       |
| 4                                                                                                             | F9387-1<br>ROUNDUP POWERMAX AMS                            | 4 SC<br>4.5 SL<br>100 SG                    |           | 0.098 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |           | 3.15 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 1 ef                         | 1 cd                         | 0 a                       |
| 5                                                                                                             | CADET<br>ROUNDUP POWERMAX AMS                              | 0.91 EC<br>4.5 SL<br>100 SG                 |           | 0.00533 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                               |           | 0.75 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 6 ab                         | 3 b                          | 0 a                       |
| 6                                                                                                             | CALLISTO<br>ROUNDUP POWERMAX AMS                           | 4 SC<br>4.5 SL<br>100 SG                    |           | 0.094 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |           | 3 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                               | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 0 f                          | 0 d                          | 0 a                       |
| 7                                                                                                             | F9387-1<br>LIBERTY 280 AMS                                 | 4 SC<br>2.34 EC<br>100 SG                   |           | 0.078 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                                |           | 2.5 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                             | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 2 cde                        | 1 c                          | 0 a                       |
| 8                                                                                                             | F9387-1<br>LIBERTY 280 AMS                                 | 4 SC<br>2.34 EC<br>100 SG                   |           | 0.098 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                                |           | 3.15 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 3 cd                         | 3 b                          | 0 a                       |
| 9                                                                                                             | CADET<br>LIBERTY 280 AMS                                   | 0.91 EC<br>2.34 EC<br>100 SG                |           | 0.00533 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                              |           | 0.75 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 7 a                          | 5 a                          | 0 a                       |
| 10                                                                                                            | F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS               | 4 SC<br>4 SC<br>4.5 SL<br>100 SG            |           | 0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                  |           | 2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal               | 4"W<br>4"W<br>4"W<br>4"W        | B<br>B<br>B<br>B      |           | 2 def                        | 0 d                          | 0 a                       |
| 11                                                                                                            | F9387-1<br>AATREX 4L<br>LIBERTY 280 AMS                    | 4 SC<br>4 SC<br>2.34 EC<br>100 SG           |           | 0.078 lb ai/a<br>0.5 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                 |           | 2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal               | 4"W<br>4"W<br>4"W<br>4"W        | B<br>B<br>B<br>B      |           | 4 bc                         | 3 b                          | 0 a                       |
| 12                                                                                                            | ANTHEM ATZ<br>F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS | 4.5 SE<br>4 SC<br>4 SC<br>4.5 SL<br>100 SG  |           | 0.98 lb ai/a<br>0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w  |           | 28 fl oz/a<br>2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal | PRE<br>4"W<br>4"W<br>4"W<br>4"W | A<br>B<br>B<br>B<br>B |           | 2 cde                        | 0 d                          | 0 a                       |
| 13                                                                                                            | ANTHEM<br>F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS     | 2.15 SE<br>4 SC<br>4 SC<br>4.5 SL<br>100 SG |           | 0.134 lb ai/a<br>0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w |           | 8 fl oz/a<br>2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal  | PRE<br>4"W<br>4"W<br>4"W<br>4"W | A<br>B<br>B<br>B<br>B |           | 3 cd                         | 1 c                          | 0 a                       |
| 14                                                                                                            | STATUS<br>ROUNDUP POWERMAX AMS                             | 56 WG<br>4.5 SL<br>100 SG                   |           | 0.0875 lb ae/a<br>0.77 lb ae/a<br>1.02 % w/w                                |           | 2.5 oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                                | 4"W<br>4"W<br>4"W               | B<br>B<br>B           |           | 0 f                          | 0 d                          | 0 a                       |

F9387 Tankmixtures in Corn.

Trial ID: 13-DSO-F9387tankmix      Location: De Soto, IL    Trial Year: 2013  
Investigator: Bryan Young

|                    |      |      |      |       |       |        |            |          |          |         |
|--------------------|------|------|------|-------|-------|--------|------------|----------|----------|---------|
| Pest Code          |      |      |      |       |       |        |            | ZEAMD    | ZEAMD    | ZEAMD   |
| Crop Code          |      |      |      |       |       |        |            | 6-19-13  | 6-28-13  | 7-14-13 |
| Rating Date        |      |      |      |       |       |        |            | Necrosis | Necrosis | Stunt   |
| Rating Type        |      |      |      |       |       |        |            |          |          |         |
| Rating Unit        |      |      |      |       |       |        |            | Percent  | Percent  | Percent |
| Rating Timing      |      |      |      |       |       |        |            |          |          |         |
| Trt-Eval Interval  |      |      |      |       |       |        |            | 5 DA-B   | 14 DA-B  | 30 DA-B |
| Trt Treatment      | Form | Form | Rate | Other | Other | Growth | Appl       |          |          |         |
| No. Name           | Conc | Type | Rate | Unit  | Rate  | Rate   | Unit Stage | Code     |          |         |
| 15 NONTREATED      |      |      |      |       |       |        |            | 0 f      | 0 d      | 0 a     |
| LSD (P=.05)        |      |      |      |       |       |        |            | 1.8      | 0.8      | 0.0     |
| Standard Deviation |      |      |      |       |       |        |            | 1.2      | 0.6      | 0.0     |
| CV                 |      |      |      |       |       |        |            | 63.95    | 49.37    | 0.0     |
| Replicate F        |      |      |      |       |       |        |            | 1.254    | 1.078    | 0.000   |
| Replicate Prob(F)  |      |      |      |       |       |        |            | 0.3026   | 0.3686   | 1.0000  |
| Treatment F        |      |      |      |       |       |        |            | 12.258   | 33.940   | 0.000   |
| Treatment Prob(F)  |      |      |      |       |       |        |            | 0.0001   | 0.0001   | 1.0000  |

Southern Illinois University

F9387 Tankmixtures in Corn.

Trial ID: 13-DSO-F9387tankmix Location: De Soto, IL Trial Year: 2013  
Investigator: Bryan Young

| Pest Code<br>Crop Code<br>Rating Date<br>Rating Type<br>Rating Unit<br>Rating Timing<br>Trt-Eval Interval |                                                            |                                          |           |                                                                             |           |                                                                         |            |              | AMATA-HR                      | AMATA-HR                      | AMATA-HR                     | AMATA-HR                      |        |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------|-----------|-----------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------|------------|--------------|-------------------------------|-------------------------------|------------------------------|-------------------------------|--------|
|                                                                                                           |                                                            |                                          |           |                                                                             |           |                                                                         |            |              | 6-19-13<br>Control<br>Percent | 6-28-13<br>Control<br>Percent | 7-5-13<br>Control<br>Percent | 7-14-13<br>Control<br>Percent |        |
|                                                                                                           |                                                            |                                          |           |                                                                             |           |                                                                         |            |              | 5 DA-B                        | 14 DA-B                       | 21 DA-B                      | 30 DA-B                       |        |
| Trt No.                                                                                                   | Treatment Name                                             | Form Conc                                | Form Type | Form Rate                                                                   | Rate Unit | Other Rate                                                              | Other Unit | Growth Stage | Appl Code                     |                               |                              |                               |        |
| 1                                                                                                         | ROUNDUP POWERMAX AMS                                       | 4.5 SL<br>100                            | SG        | 0.77 lb ae/a<br>1.02 % w/w                                                  |           | 22 fl oz/a<br>8.5 lb/100 gal                                            | 4"W        | B            | B                             | 16 d                          | 58 g                         | 62 e                          | 61 d   |
| 2                                                                                                         | LIBERTY 280 AMS                                            | 2.34 EC<br>100                           | SG        | 0.402 lb ai/a<br>1.02 % w/w                                                 |           | 22 fl oz/a<br>8.5 lb/100 gal                                            | 4"W        | B            | B                             | 98 a                          | 98 abc                       | 97 abc                        | 96 ab  |
| 3                                                                                                         | F9387-1<br>ROUNDUP POWERMAX AMS                            | 4 SC<br>4.5 SL<br>100                    | SG        | 0.078 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |           | 2.5 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                             | 4"W        | B            | B                             | 85 b                          | 92 cd                        | 93 bc                         | 92 bc  |
| 4                                                                                                         | F9387-1<br>ROUNDUP POWERMAX AMS                            | 4 SC<br>4.5 SL<br>100                    | SG        | 0.098 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |           | 3.15 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W        | B            | B                             | 86 b                          | 93 bcd                       | 95 abc                        | 94 abc |
| 5                                                                                                         | CADET<br>ROUNDUP POWERMAX AMS                              | 0.91 EC<br>4.5 SL<br>100                 | SG        | 0.00533 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                               |           | 0.75 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W        | B            | B                             | 82 b                          | 76 f                         | 72 d                          | 68 d   |
| 6                                                                                                         | CALLISTO<br>ROUNDUP POWERMAX AMS                           | 4 SC<br>4.5 SL<br>100                    | SG        | 0.094 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                                 |           | 3 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                               | 4"W        | B            | B                             | 48 c                          | 83 e                         | 93 c                          | 88 c   |
| 7                                                                                                         | F9387-1<br>LIBERTY 280 AMS                                 | 4 SC<br>2.34 EC<br>100                   | SG        | 0.078 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                                |           | 2.5 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                             | 4"W        | B            | B                             | 98 a                          | 98 abc                       | 99 ab                         | 98 ab  |
| 8                                                                                                         | F9387-1<br>LIBERTY 280 AMS                                 | 4 SC<br>2.34 EC<br>100                   | SG        | 0.098 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                                |           | 3.15 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W        | B            | B                             | 98 a                          | 99 ab                        | 98 ab                         | 98 ab  |
| 9                                                                                                         | CADET<br>LIBERTY 280 AMS                                   | 0.91 EC<br>2.34 EC<br>100                | SG        | 0.00533 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                              |           | 0.75 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                            | 4"W        | B            | B                             | 98 a                          | 98 abc                       | 98 abc                        | 95 ab  |
| 10                                                                                                        | F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS               | 4 SC<br>4 SC<br>4.5 SL<br>100            | SG        | 0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w                  |           | 2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal               | 4"W        | B            | B                             | 98 a                          | 99 ab                        | 99 a                          | 99 a   |
| 11                                                                                                        | F9387-1<br>AATREX 4L<br>LIBERTY 280 AMS                    | 4 SC<br>4 SC<br>2.34 EC<br>100           | SG        | 0.078 lb ai/a<br>0.5 lb ai/a<br>0.402 lb ai/a<br>1.02 % w/w                 |           | 2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal               | 4"W        | B            | B                             | 98 a                          | 99 ab                        | 99 ab                         | 99 ab  |
| 12                                                                                                        | ANTHEM ATZ<br>F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS | 4.5 SE<br>4 SC<br>4 SC<br>4.5 SL<br>100  | SG        | 0.98 lb ai/a<br>0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w  |           | 28 fl oz/a<br>2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal | PRE        | A            | B                             | 99 a                          | 99 a                         | 99 a                          | 99 a   |
| 13                                                                                                        | ANTHEM<br>F9387-1<br>AATREX 4L<br>ROUNDUP POWERMAX AMS     | 2.15 SE<br>4 SC<br>4 SC<br>4.5 SL<br>100 | SG        | 0.134 lb ai/a<br>0.078 lb ai/a<br>0.5 lb ai/a<br>0.77 lb ae/a<br>1.02 % w/w |           | 8 fl oz/a<br>2.5 fl oz/a<br>16 fl oz/a<br>22 fl oz/a<br>8.5 lb/100 gal  | PRE        | A            | B                             | 99 a                          | 99 ab                        | 99 a                          | 99 a   |
| 14                                                                                                        | STATUS<br>ROUNDUP POWERMAX AMS                             | 56 WG<br>4.5 SL<br>100                   | SG        | 0.0875 lb ae/a<br>0.77 lb ae/a<br>1.02 % w/w                                |           | 2.5 oz/a<br>22 fl oz/a<br>8.5 lb/100 gal                                | 4"W        | B            | B                             | 83 b                          | 87 de                        | 93 c                          | 93 abc |

F9387 Tankmixtures in Corn.

Trial ID: 13-DSO-F9387tankmix      Location: De Soto, IL      Trial Year: 2013  
Investigator: Bryan Young

|                    |                |         |                |             |
|--------------------|----------------|---------|----------------|-------------|
| Pest Code          | AMATA-HR       |         |                |             |
| Crop Code          |                |         |                |             |
| Rating Date        | 6-19-13        | 6-28-13 | 7-5-13         | 7-14-13     |
| Rating Type        | Control        | Control | Control        | Control     |
| Rating Unit        | Percent        | Percent | Percent        | Percent     |
| Rating Timing      |                |         |                |             |
| Trt-Eval Interval  | 5 DA-B         | 14 DA-B | 21 DA-B        | 30 DA-B     |
| Trt Treatment      | Form Form      | Rate    | Other Other    | Growth Appl |
| No. Name           | Conc Type Rate | Unit    | Rate Rate Unit | Stage Code  |
| 15 NONTREATED      | 0 e            | 0 h     | 0 f            | 0 e         |
| LSD (P=.05)        | 4.6            | 6.3     | 5.4            | 7.1         |
| Standard Deviation | 3.2            | 4.4     | 3.8            | 5.0         |
| CV                 | 4.07           | 5.22    | 4.4            | 5.86        |
| Replicate F        | 0.782          | 2.950   | 1.660          | 0.957       |
| Replicate Prob(F)  | 0.5108         | 0.0435  | 0.1901         | 0.4217      |
| Treatment F        | 393.248        | 139.525 | 191.153        | 110.352     |
| Treatment Prob(F)  | 0.0001         | 0.0001  | 0.0001         | 0.0001      |

F9387 Tankmixtures in Corn.

Trial ID: 13-DSO-F9387tankmix      Location: De Soto, IL      Trial Year: 2013  
Investigator: Bryan Young

Trial Comments

1. Protocol: FMC (NA13-1115B).
2. Ratings: CI/Necrosis 5 and 14 DA-B; CI/Stunt 30 DA-B. WC 5, 14, and 30 DA-B.
3. Photos to show weed size/height at application. Photos/describe CI symptoms. Photos 21 DA-B for WC.
4. Apply POST when 75% of weeds reach 4 inch height.
5. Blanket burndown of glyphosate (1.5 lbae/A) plus Salvo (12 floz/A) was applied to all plots on 4-2-13.  
Blanket prior to planting of Gramoxone (3 pt/A) + Warrior (1.92 oz/A) was applied to all plots on 5-20-13.
6. Yield.
7. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
8. Following the PRE application the first rainfall event, the next day, was 0.91 inch, then 2.36 inch, over 3 days, beginning 10 days after the PRE application.  
Following the 4"W application the first rainfall event, beginning 3 days later, was 0.36 inch over 2 days.
9. Harvest 10-21-13, (2) 30 inch rows by 26.5 ft.