

## Efficacy of Early Preplant Burndown Herbicides in No-Till Soybean - Cheminova.

Trial ID: 10-ARC-5-E65

Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu  
 City State Zip Country: Carbondale IL 62901 USA  
 Trial Status: FINAL Initiation Date: 04-19-10

Objectives: Evaluate the efficacy and selectivity of Tackle applied as a early preplant burndown or postemergence in no-till soybeans.

Crop 1: GLXMA Soybean Variety: P94Y20 Description: RR  
 Planting Method: SEEDED Planting Date: 05-13-10  
 Rate, Unit: 75 LB/A Depth, Unit: 1.0 IN  
 Row Spacing, Unit: 30 IN

|                |             |                               |                        |
|----------------|-------------|-------------------------------|------------------------|
| Pest 1 Type: W | Code: ALOCA | Alopecurus carolinianus Walt. | foxtail, Carolina      |
| Pest 2 Type: W | Code: RANAB | Ranunculus abortivus L.       | buttercup, smallflower |
| Pest 3 Type: W | Code: SENGL | Senecio glabellus Poir.       | groundsel, cressleaf   |
| Pest 4 Type: W | Code: POAAN | Poa annua L.                  | bluegrass, annual      |
| Pest 5 Type: W | Code: ALLVI | Allium vineale L.             | garlic, wild           |
| Pest 6 Type: W | Code: SETFA | Setaria faberi Herrm.         | foxtail, giant         |
| Pest 7 Type: W | Code: IPOSS |                               | morningglory, species  |
| Pest 8 Type: W | Code: AMBEL | Ambrosia artemisiifolia L.    | ragweed, common        |

Plot Width, Unit: 10 FT Site Type: FIELD  
 Plot Length, Unit: 24 FT Tillage Type: NO-TILL  
 Replications: 4 Study Design: Randomized Complete Block

Prior Crops, Year  
 1. ZEAMD 2009

Field Prep./Maintenance: N 0 LB/A, P205 0 LB/A, K20 0 LB/A

|       |     |              |                          |
|-------|-----|--------------|--------------------------|
| % OM: | 1.8 | Texture:     | SILT LOAM                |
| pH:   | 6.8 | Soil Name:   | STOY                     |
| CEC:  | 7.8 | Fert. Level: | P1: 58 LB/A, K: 287 LB/A |

|                            | Application Description |          |   |  |
|----------------------------|-------------------------|----------|---|--|
|                            | A                       |          | B |  |
| Application Date:          | 04-19-10                | 06-01-10 |   |  |
| Time of Day:               | 17:30                   | 15:20    |   |  |
| Application Method:        | Spray                   | Spray    |   |  |
| Application Timing:        | BRNDWN                  | 2-3WAP   |   |  |
| Application Placement:     | BROFOL                  | BROFOL   |   |  |
| Applied By:                | DKP                     | DKP      |   |  |
| Air Temperature, Unit:     | 69 F                    | 91 F     |   |  |
| % Relative Humidity:       | 44                      | 51       |   |  |
| Wind Velocity, Unit:       | 1 MPH                   | 1 MPH    |   |  |
| Wind Direction:            | SE                      | NW       |   |  |
| Dew Presence (Y/N):        | N                       | N        |   |  |
| Soil Temperature, Unit:    | 60 F                    | 85 F     |   |  |
| Soil Moisture:             | NORMAL                  | ABONOR   |   |  |
| % Cloud Cover:             | 85                      | 40       |   |  |
|                            | 04-19-10                | 06-01-10 |   |  |
| Crop stage at application: | NA                      | V1       |   |  |
| Height Min, Max (inch):    |                         | 2 5      |   |  |

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**Pest Stage At Each Application**

|                          |          |          |
|--------------------------|----------|----------|
| Application Date:        | 04-19-10 | 06-01-10 |
| Weed Code:               | ALOCA    | ALOCA    |
| Stage Majority (leaves): | 20       | NA       |
| Stage Min, Max:          | 14 40    |          |
| Height Majority:         | 4        | IN       |
| Height Min, Max:         | 3 8      |          |
| Density, Unit:           | 1        | FT2      |
| Weed Code:               | RANAB    | RANAB    |
| Stage Majority (leaves): | 20       | NA       |
| Stage Min, Max:          | 4 40     |          |
| Height Majority:         | 11       | IN       |
| Height Min, Max:         | 2 17     |          |
| Density, Unit:           | 0.6      | FT2      |
| Weed Code:               | SENGL    | SENGL    |
| Stage Majority (leaves): | 25       | NA       |
| Stage Min, Max:          | 10 100   |          |
| Height Majority:         | 15       | IN       |
| Height Min, Max:         | 6 26     |          |
| Density, Unit:           | 0.2      | FT2      |
| Weed Code:               | POAAN    | POAAN    |
| Stage Majority (leaves): | 40       | NA       |
| Stage Min, Max:          | 30 100   |          |
| Height Majority:         | 4        | IN       |
| Height Min, Max:         | 3 6      |          |
| Density, Unit:           | 0.5      | FT2      |
| Weed Code:               | ALLVI    | ALLVI    |
| Stage Majority (leaves): | 2        | NA       |
| Stage Min, Max:          | 1 3      |          |
| Height Majority:         | 14       | IN       |
| Height Min, Max:         | 8 17     |          |
| Density, Unit:           | 2        | FT2      |
| Weed Code:               | SETFA    | SETFA    |
| Stage Majority (leaves): | NA       | 3        |
| Stage Min, Max:          |          | 2 6      |
| Height Majority:         |          | 3 IN     |
| Height Min, Max:         |          | 2 6      |
| Density, Unit:           |          | 0.2 FT2  |
| Weed Code:               | IPOSS    | IPOSS    |
| Stage Majority (leaves): | NA       | 2        |
| Stage Min, Max:          |          | C 5      |
| Height Majority:         |          | 2.5 IN   |
| Height Min, Max:         |          | 1 5      |
| Density, Unit:           |          | 0.5 FT2  |
| Weed Code:               | AMBEL    | AMBEL    |
| Stage Majority (leaves): | NA       | 6        |
| Stage Min, Max:          |          | 4 8      |
| Height Majority:         |          | 4 IN     |
| Height Min, Max:         |          | 3 7      |
| Density, Unit:           |          | 0.3 FT2  |

**Application Equipment**

|                     |             |             |
|---------------------|-------------|-------------|
| Appl. Equipment:    | CO2 sprayer | CO2 sprayer |
| Operating Pressure: | 30 PSI      | 30 PSI      |
| Nozzle Type:        | Flat fan    | Flat fan    |
| Nozzle Size:        | XR 8002     | XR 8002     |
| Boom Length, Unit:  | 7.5 FT      | 7.5 FT      |
| Spray Volume, Unit: | 15 GPA      | 15 GPA      |

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|                   |                    |           |           |      |           |            |                 |              |           | GLXMA    |          | ALOCA    |          | RANAB    |          |
|-------------------|--------------------|-----------|-----------|------|-----------|------------|-----------------|--------------|-----------|----------|----------|----------|----------|----------|----------|
| Pest Code         |                    |           |           |      |           |            |                 |              |           | 06-15-10 | 06-29-10 | 05-03-10 | 05-17-10 | 05-03-10 | 05-17-10 |
| Crop Code         |                    |           |           |      |           |            |                 |              |           | Injury   | Injury   | Control  | Control  | Control  | Control  |
| Rating Date       |                    |           |           |      |           |            |                 |              |           | Percent  | Percent  | Percent  | Percent  | Percent  | Percent  |
| Rating Data Type  |                    |           |           |      |           |            |                 |              |           |          |          |          |          |          |          |
| Rating Unit       |                    |           |           |      |           |            |                 |              |           |          |          |          |          |          |          |
| Rating Timing     |                    |           |           |      |           |            |                 |              |           |          |          |          |          |          |          |
| Trt-Eval Interval |                    |           |           |      |           |            |                 |              |           | 14 DA-B  | 28 DA-B  | 14 DA-A  | 28 DA-A  | 14 DA-A  | 28 DA-A  |
| Trt No.           | Treatment Name     | Form Conc | Form Type | Rate | Rate Unit | Other Rate | Other Rate Unit | Growth Stage | Appl Code |          |          |          |          |          |          |
| 1                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | BRNDWN       | A         | 0 a      | 0 a      | 96 a     | 99 a     | 94 a     | 99 a     |
| 1                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |          |          |          |          |          |          |
| 1                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | BRNDWN       | A         |          |          |          |          |          |          |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | BRNDWN       | A         | 0 a      | 0 a      | 95 a     | 99 a     | 95 a     | 99 a     |
| 2                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |          |          |          |          |          |          |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | BRNDWN       | A         |          |          |          |          |          |          |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | 2-3WAP       | B         |          |          |          |          |          |          |
| 2                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |          |          |          |          |          |          |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |          |          |          |          |          |          |
| 3                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 0 a      | 0 a      | 95 a     | 99 a     | 94 a     | 99 a     |
| 3                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |          |          |          |          |          |          |
| 3                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | 2-3WAP       | B         |          |          |          |          |          |          |
| 3                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |          |          |          |          |          |          |
| 3                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |          |          |          |          |          |          |
| 4                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 0 a      | 0 a      | 96 a     | 99 a     | 95 a     | 99 a     |
| 4                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |          |          |          |          |          |          |
| 4                 | TACKLE             | 4.128     | ME        | 2.06 | lb ai/a   | 64         | fl oz/a         | 2-3WAP       | B         |          |          |          |          |          |          |
| 4                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |          |          |          |          |          |          |
| 4                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |          |          |          |          |          |          |
| 5                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 0 a      | 0 a      | 95 a     | 99 a     | 93 a     | 99 a     |
| 5                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |          |          |          |          |          |          |
| 5                 | EXTREME            | 2.17      | SL        | 0.81 | lb ai/a   | 3          | pt/a            | 2-3WAP       | B         |          |          |          |          |          |          |
| 5                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |          |          |          |          |          |          |
| 5                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |          |          |          |          |          |          |
| 6                 | NONTREATED         |           |           |      |           |            |                 |              |           | 0 a      | 0 a      | 0 b      | 0 b      | 0 b      | 0 b      |
| LSD (P=.05)       |                    |           |           |      |           |            |                 |              |           | 0.0      | 0.0      | 3.9      | 0.0      | 3.5      | 0.0      |
| Replicate F       |                    |           |           |      |           |            |                 |              |           | 0.000    | 0.000    | 0.662    | 0.000    | 2.017    | 0.000    |
| Replicate Prob(F) |                    |           |           |      |           |            |                 |              |           | 1.0000   | 1.0000   | 0.5881   | 1.0000   | 0.1549   | 1.0000   |
| Treatment F       |                    |           |           |      |           |            |                 |              |           | 0.000    | 0.000    | 913.595  | 0.000    | 1107.524 | 0.000    |
| Treatment Prob(F) |                    |           |           |      |           |            |                 |              |           | 1.0000   | 1.0000   | 0.0001   | 1.0000   | 0.0001   | 1.0000   |

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

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Location: Agronomy Res. Center

|                   |                    |           |           |      |           |            |                 |              |           | SENGL     | SENGL    | POAAN    | POAAN    | ALLVI    | ALLVI    |
|-------------------|--------------------|-----------|-----------|------|-----------|------------|-----------------|--------------|-----------|-----------|----------|----------|----------|----------|----------|
| Pest Code         |                    |           |           |      |           |            |                 |              |           | 05-03-10  | 05-17-10 | 05-03-10 | 05-17-10 | 05-03-10 | 05-17-10 |
| Crop Code         |                    |           |           |      |           |            |                 |              |           | Control   | Control  | Control  | Control  | Control  | Control  |
| Rating Date       |                    |           |           |      |           |            |                 |              |           | Percent   | Percent  | Percent  | Percent  | Percent  | Percent  |
| Rating Data Type  |                    |           |           |      |           |            |                 |              |           |           |          |          |          |          |          |
| Rating Unit       |                    |           |           |      |           |            |                 |              |           |           |          |          |          |          |          |
| Rating Timing     |                    |           |           |      |           |            |                 |              |           |           |          |          |          |          |          |
| Trt-Eval Interval |                    |           |           |      |           |            |                 |              |           | 14 DA-A   | 28 DA-A  | 14 DA-A  | 28 DA-A  | 14 DA-A  | 28 DA-A  |
| Trt No.           | Treatment Name     | Form Conc | Form Type | Rate | Rate Unit | Other Rate | Other Rate Unit | Growth Stage | Appl Code |           |          |          |          |          |          |
| 1                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | BRNDWN       | A         | 98 a      | 99 a     | 98 a     | 98 a     | 50 a     | 66 a     |
| 1                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |           |          |          |          |          |          |
| 1                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | BRNDWN       | A         |           |          |          |          |          |          |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | BRNDWN       | A         | 98 a      | 99 a     | 95 b     | 97 ab    | 44 b     | 64 ab    |
| 2                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |           |          |          |          |          |          |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | BRNDWN       | A         |           |          |          |          |          |          |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | 2-3WAP       | B         |           |          |          |          |          |          |
| 2                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |           |          |          |          |          |          |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |           |          |          |          |          |          |
| 3                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 97 b      | 99 a     | 97 ab    | 97 ab    | 41 b     | 64 ab    |
| 3                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |           |          |          |          |          |          |
| 3                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | 2-3WAP       | B         |           |          |          |          |          |          |
| 3                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |           |          |          |          |          |          |
| 3                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |           |          |          |          |          |          |
| 4                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 98 ab     | 99 a     | 98 a     | 96 ab    | 41 b     | 59 b     |
| 4                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |           |          |          |          |          |          |
| 4                 | TACKLE             | 4.128     | ME        | 2.06 | lb ai/a   | 64         | fl oz/a         | 2-3WAP       | B         |           |          |          |          |          |          |
| 4                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |           |          |          |          |          |          |
| 4                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |           |          |          |          |          |          |
| 5                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 98 ab     | 99 a     | 96 ab    | 96 b     | 41 b     | 63 ab    |
| 5                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |           |          |          |          |          |          |
| 5                 | EXTREME            | 2.17      | SL        | 0.81 | lb ai/a   | 3          | pt/a            | 2-3WAP       | B         |           |          |          |          |          |          |
| 5                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |           |          |          |          |          |          |
| 5                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |           |          |          |          |          |          |
| 6                 | NONTREATED         |           |           |      |           |            |                 |              |           | 0 c       | 0 b      | 0 c      | 0 c      | 0 c      | 0 c      |
| LSD (P=.05)       |                    |           |           |      |           |            |                 |              |           | 1.0       | 0.0      | 2.6      | 1.7      | 5.4      | 6.5      |
| Replicate F       |                    |           |           |      |           |            |                 |              |           | 6.071     | 0.000    | 0.125    | 1.892    | 2.021    | 0.080    |
| Replicate Prob(F) |                    |           |           |      |           |            |                 |              |           | 0.0065    | 1.0000   | 0.9441   | 0.1743   | 0.1542   | 0.9700   |
| Treatment F       |                    |           |           |      |           |            |                 |              |           | 13693.859 | 0.000    | 2067.172 | 5045.595 | 100.149  | 142.278  |
| Treatment Prob(F) |                    |           |           |      |           |            |                 |              |           | 0.0001    | 1.0000   | 0.0001   | 0.0001   | 0.0001   | 0.0001   |

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

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Location: Agronomy Res. Center

|                   |          |          |          |          |          |          |
|-------------------|----------|----------|----------|----------|----------|----------|
| Pest Code         | SETFA    | SETFA    | SETFA    | IPOSS    | IPOSS    | IPOSS    |
| Crop Code         |          |          |          |          |          |          |
| Rating Date       | 06-15-10 | 06-29-10 | 07-06-10 | 06-15-10 | 06-29-10 | 07-06-10 |
| Rating Data Type  | Control  | Control  | Control  | Control  | Control  | Control  |
| Rating Unit       | Percent  | Percent  | Percent  | Percent  | Percent  | Percent  |
| Rating Timing     |          |          |          |          |          |          |
| Trt-Eval Interval | 14 DA-B  | 28 DA-B  | 35 DA-B  | 14 DA-B  | 28 DA-B  | 35 DA-B  |

| Trt No.           | Treatment Name     | Form Conc | Form Type | Rate | Rate Unit | Other Rate | Other Rate Unit | Growth Stage | Appl Code |         |   |         |   |         |    |
|-------------------|--------------------|-----------|-----------|------|-----------|------------|-----------------|--------------|-----------|---------|---|---------|---|---------|----|
| 1                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | BRNDWN       | A         | 55      | b | 48      | b | 46      | b  |
| 1                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |         |   |         |   | 0       | b  |
| 1                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | BRNDWN       | A         |         |   |         |   | 0       | c  |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | BRNDWN       | A         | 98      | a | 97      | a | 96      | a  |
| 2                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |         |   |         |   | 95      | a  |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | BRNDWN       | A         |         |   |         |   | 93      | a  |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | 2-3WAP       | B         |         |   |         |   |         |    |
| 2                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |         |   |         |   |         |    |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |         |   |         |   |         |    |
| 3                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 98      | a | 96      | a | 95      | a  |
| 3                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |         |   |         |   | 93      | a  |
| 3                 | TACKLE             | 4.128     | ME        | 1.03 | lb ai/a   | 32         | fl oz/a         | 2-3WAP       | B         |         |   |         |   | 91      | ab |
| 3                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |         |   |         |   | 89      | ab |
| 3                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |         |   |         |   |         |    |
| 4                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 99      | a | 97      | a | 97      | a  |
| 4                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |         |   |         |   | 96      | a  |
| 4                 | TACKLE             | 4.128     | ME        | 2.06 | lb ai/a   | 64         | fl oz/a         | 2-3WAP       | B         |         |   |         |   | 93      | a  |
| 4                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |         |   |         |   |         |    |
| 4                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |         |   |         |   |         |    |
| 5                 | GLYFOS X-TRA       | 3         | SL        | 0.75 | lb ae/a   | 32         | fl oz/a         | BRNDWN       | A         | 98      | a | 94      | a | 94      | a  |
| 5                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | BRNDWN       | A         |         |   |         |   | 92      | a  |
| 5                 | EXTREME            | 2.17      | SL        | 0.81 | lb ai/a   | 3          | pt/a            | 2-3WAP       | B         |         |   |         |   | 86      | b  |
| 5                 | AMS                | 100       | SG        | 2    | % w/w     | 17         | lb/100 gal      | 2-3WAP       | B         |         |   |         |   |         |    |
| 5                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 | % v/v     | 0.25       | % v/v           | 2-3WAP       | B         |         |   |         |   |         |    |
| 6                 | NONTREATED         |           |           |      |           |            |                 |              |           | 0       | c | 0       | c | 0       | c  |
| LSD (P=.05)       |                    |           |           |      |           |            |                 |              |           | 4.1     |   | 9.3     |   | 10.5    |    |
| Replicate F       |                    |           |           |      |           |            |                 |              |           | 1.090   |   | 1.392   |   | 1.295   |    |
| Replicate Prob(F) |                    |           |           |      |           |            |                 |              |           | 0.3835  |   | 0.2838  |   | 0.3124  |    |
| Treatment F       |                    |           |           |      |           |            |                 |              |           | 883.944 |   | 169.341 |   | 132.414 |    |
| Treatment Prob(F) |                    |           |           |      |           |            |                 |              |           | 0.0001  |   | 0.0001  |   | 0.0001  |    |

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

## Efficacy of Early Preplant Burndown Herbicides in No-Till Soybean - Cheminova.

Trial ID: 10-ARC-5-E65

Location: Agronomy Res. Center

|                   |          |          |          |
|-------------------|----------|----------|----------|
| Pest Code         | AMBEL    | AMBEL    | AMBEL    |
| Crop Code         |          |          |          |
| Rating Date       | 06-15-10 | 06-29-10 | 07-06-10 |
| Rating Data Type  | Control  | Control  | Control  |
| Rating Unit       | Percent  | Percent  | Percent  |
| Rating Timing     |          |          |          |
| Trt-Eval Interval | 14 DA-B  | 28 DA-B  | 35 DA-B  |

| Trt No.           | Treatment Name     | Form Conc | Form Type | Rate Rate Unit | Other Rate    | Other Rate Unit | Growth Stage | Appl Code |         |         |         |
|-------------------|--------------------|-----------|-----------|----------------|---------------|-----------------|--------------|-----------|---------|---------|---------|
| 1                 | TACKLE             | 4.128     | ME        | 1.03 lb ai/a   | 32 fl oz/a    |                 | BRNDWN A     |           | 38 b    | 35 b    | 38 b    |
| 1                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | BRNDWN A     |           |         |         |         |
| 1                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 % v/v     | 0.25 % v/v    |                 | BRNDWN A     |           |         |         |         |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 lb ai/a   | 32 fl oz/a    |                 | BRNDWN A     |           | 98 a    | 97 a    | 97 a    |
| 2                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | BRNDWN A     |           |         |         |         |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 % v/v     | 0.25 % v/v    |                 | BRNDWN A     |           |         |         |         |
| 2                 | TACKLE             | 4.128     | ME        | 1.03 lb ai/a   | 32 fl oz/a    |                 | 2-3WAP B     |           |         |         |         |
| 2                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | 2-3WAP B     |           |         |         |         |
| 2                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 % v/v     | 0.25 % v/v    |                 | 2-3WAP B     |           |         |         |         |
| 3                 | GLYFOS X-TRA       | 3         | SL        | 0.75 lb ae/a   | 32 fl oz/a    |                 | BRNDWN A     |           | 99 a    | 98 a    | 98 a    |
| 3                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | BRNDWN A     |           |         |         |         |
| 3                 | TACKLE             | 4.128     | ME        | 1.03 lb ai/a   | 32 fl oz/a    |                 | 2-3WAP B     |           |         |         |         |
| 3                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | 2-3WAP B     |           |         |         |         |
| 3                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 % v/v     | 0.25 % v/v    |                 | 2-3WAP B     |           |         |         |         |
| 4                 | GLYFOS X-TRA       | 3         | SL        | 0.75 lb ae/a   | 32 fl oz/a    |                 | BRNDWN A     |           | 99 a    | 98 a    | 97 a    |
| 4                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | BRNDWN A     |           |         |         |         |
| 4                 | TACKLE             | 4.128     | ME        | 2.06 lb ai/a   | 64 fl oz/a    |                 | 2-3WAP B     |           |         |         |         |
| 4                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | 2-3WAP B     |           |         |         |         |
| 4                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 % v/v     | 0.25 % v/v    |                 | 2-3WAP B     |           |         |         |         |
| 5                 | GLYFOS X-TRA       | 3         | SL        | 0.75 lb ae/a   | 32 fl oz/a    |                 | BRNDWN A     |           | 97 a    | 97 a    | 97 a    |
| 5                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | BRNDWN A     |           |         |         |         |
| 5                 | EXTREME            | 2.17      | SL        | 0.81 lb ai/a   | 3 pt/a        |                 | 2-3WAP B     |           |         |         |         |
| 5                 | AMS                | 100       | SG        | 2 % w/w        | 17 lb/100 gal |                 | 2-3WAP B     |           |         |         |         |
| 5                 | NIS (ACTIVATOR 90) | 100       | SL        | 0.25 % v/v     | 0.25 % v/v    |                 | 2-3WAP B     |           |         |         |         |
| 6                 | NONTREATED         |           |           |                |               |                 |              |           | 0 c     | 0 c     | 0 c     |
| LSD (P=.05)       |                    |           |           |                |               |                 |              |           | 7.7     | 5.9     | 7.5     |
| Replicate F       |                    |           |           |                |               |                 |              |           | 1.314   | 1.878   | 1.954   |
| Replicate Prob(F) |                    |           |           |                |               |                 |              |           | 0.3067  | 0.1766  | 0.1644  |
| Treatment F       |                    |           |           |                |               |                 |              |           | 280.214 | 470.838 | 285.428 |
| Treatment Prob(F) |                    |           |           |                |               |                 |              |           | 0.0001  | 0.0001  | 0.0001  |

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

## Trial Comments

1. Protocol: Cheminova (HGLXMATAC100).
2. Ratings: CI 28 DA-A and 7, 14 + 28 DA-B as chlorosis, stunting, necrosis, or other symptoms.  
WC 14 + 28 DA-A and 14, 28 + 35 DA-B.
3. Blanket application of glyphosate or other products as needed after the final rating.
4. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
5. By 6-15-09, ALOCA, RANAB, SENGL, POAAN, and ALLVI in the nontreated plots were senescing naturally and could no longer be evaluated.
6. Not harvested.