

## Weed Control in No-Till Pumpkins with Herbicides.

Project Code: 06-HRC-Pump-Exp Location: Horticulture Research Center  
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Carbondale IL 62901 USA  
Trial Status: Final Updated: 1-22-07

| Weed Code | Common Name             | Scientific Name                          |
|-----------|-------------------------|--|
| 1.        | AMATA waterhemp, common | Amaranthus rudis Sauer                   |
| 2.        | AMARE pigweed, redroot  | Amaranthus retroflexus L.                |
| 3.        | CYPES nutsedge, yellow  | Cyperus esculentus L.                    |
| 4.        | DIGSA crabgrass, large  | Digitaria sanguinalis (L.) Scop.         |
| 5.        | DIGIS crabgrass, smooth | Digitaria ischaemum (Schreb. ex Schweig) |

|                  |               |                |               |
|------------------|---------------|----------------|---------------|
| Crop 1:          | CUUPE pumpkin | Variety:       | Magic Lantern |
| Planting Method: | Seeded        | Planting Date: | 6-12-06       |
| Rate:            | 0.25 S/ROW-FT | Depth:         | 2 IN          |
| Row Spacing:     | 6 FT          |                |               |

|                      |             |                    |                           |       |   |
|----------------------|-------------|--------------------|---------------------------|-------|---|
| Plot Width, Unit:    | 6 FT        | Plot Length, Unit: | 20 FT                     | Reps: | 5 |
| Tillage Type:        | No-Till     | Study Design:      | Randomized complete block |       |   |
| Previous Crop, Year: | TRAZW, 2006 |                    |                           |       |   |

|          |           |              |                          |     |     |      |    |
|----------|-----------|--------------|--------------------------|-----|-----|------|----|
| Texture: | Silt loam | % OM:        | 2.4                      | pH: | 6.7 | CEC: | 13 |
|          |           | Fert. Level: | P1: 80 LB/A, K: 211 LB/A |     |     |      |    |

## APPLICATION DESCRIPTION

|                      | A       | B       | C        | D        |
|----------------------|---------|---------|----------|----------|
| Application Date:    | 6-13-06 | 7-16-06 |          |          |
| Time of Day:         | 10:00   | 8:00    | NA       | NA       |
| Application Method:  | Spray   | Spray   | Spray    | Spray    |
| Application Timing:  | PRE     | 4WAP    | ASNEED-1 | ASNEED-2 |
| Applic. Placement:   | BROFOL  | BROFOL  | BROFOL   | BROFOL   |
| Air Temp., Unit:     | 85 F    | 81 F    |          |          |
| % Relative Humidity: | 80      | 75      |          |          |
| Wind Velocity, Unit: | 5 MPH   | 3-5 MPH |          |          |
| Dew Presence (Y/N):  | N       | Y       |          |          |
| Soil Moisture:       | NORMAL  |         |          |          |
| % Cloud Cover:       | 0       |         |          |          |

## CROP STAGE AT EACH APPLICATION

|                     | A        | B            | C        | D        |
|---------------------|----------|--------------|----------|----------|
| Crop 1 Code, Stage: | CUUPE NA | CUUPE 3-15 L | CUUPE NA | CUUPE NA |
| Height, Unit:       | NA NA    | 6-24 IN      | NA NA    | NA NA    |

## APPLICATION EQUIPMENT

|                     | A           | B           | C | D |
|---------------------|-------------|-------------|---|---|
| Appl. Equipment:    | CO2 sprayer | CO2 sprayer |   |   |
| Operating Pressure: | 40 PSI      | 40 PSI      |   |   |
| Nozzle Type:        | Flat fan    | Flat fan    |   |   |
| Nozzle Size:        | 8003        | 8002        |   |   |
| Boom Length, Unit:  | 5 FT        | 5 FT        |   |   |
| Spray Volume, Unit: | 20 GPA      | 20 GPA      |   |   |

## NOTES:

Weed Control in No-Till Pumpkins with Herbicides.

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Weed Code  
 Crop Code  
 Rating Data Type  
 Rating Unit  
 Rating Date  
 Trt-Eval Interval

CUUPE CUUPE CUUPE CUUPE CUUPE CUUPE CUUPE  
 Fruit Fruit Culls Culls Stunt Stunt Stunt  
 lb/fruit No./A lb/fruit No./A Percent Percent Percent  
 7-6-06 7-11-06 8-8-06  
 23 DA-A 28 DA-A 23 DA-B

| Trt No.           | Treatment Name   | Form Conc | Form Type | Rate   | Rate Unit | Prod Rate | Prod Unit | Grow Stg | Appl Code | CUUPE Fruit lb/fruit | CUUPE Fruit No./A | CUUPE Culls lb/fruit | CUUPE Culls No./A | CUUPE Stunt Percent 7-6-06 | CUUPE Stunt Percent 7-11-06 | CUUPE Stunt Percent 8-8-06 |
|-------------------|------------------|-----------|-----------|--------|-----------|-----------|-----------|----------|-----------|----------------------|-------------------|----------------------|-------------------|----------------------------|-----------------------------|----------------------------|
| 1                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 7.7                  | 1307              | 2.5                  | 218               | 38                         | 33                          | 0                          |
| 1                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 1                 | SANDEA           | 75        | WG        | 0.0314 | lb ai/a   | 0.67      | oz/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 1                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 1                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 2                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 8.8                  | 2105              | 2.2                  | 218               | 0                          | 2                           | 0                          |
| 2                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 2                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 2                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 2                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 3                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 12.6                 | 1597              | 0.9                  | 145               | 4                          | 6                           | 0                          |
| 3                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 3                 | RAPTOR           | 1         | AS        | 0.036  | lb ai/a   | 4.6       | fl oz/a   | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 3                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 3                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 4                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 8.5                  | 2178              | 1.0                  | 73                | 9                          | 9                           | 0                          |
| 4                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 4                 | RAPTOR           | 1         | AS        | 0.036  | lb ai/a   | 4.6       | fl oz/a   | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 4                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 4                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 4                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 5                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 10.9                 | 2033              | 2.2                  | 145               | 6                          | 8                           | 0                          |
| 5                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 5                 | OUTLOOK          | 6         | EC        | 1.12   | lb ai/a   | 24        | fl oz/a   | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 5                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 5                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 6                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 11.2                 | 2033              | 1.3                  | 73                | 8                          | 5                           | 1                          |
| 6                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 6                 | OUTLOOK          | 6         | EC        | 1.12   | lb ai/a   | 24        | fl oz/a   | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 6                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 6                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 6                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |                      |                   |                      |                   |                            |                             |                            |
| 7                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 8.5                  | 1597              | 1.7                  | 218               | 0                          | 0                           | 0                          |
| 7                 | NONTREATED       |           |           |        |           |           |           |          |           |                      |                   |                      |                   |                            |                             |                            |
| 8                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 8.8                  | 1597              | 0.4                  | 73                | 3                          | 2                           | 0                          |
| 8                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |                      |                   |                      |                   |                            |                             |                            |
| 8                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | ASNEED-1 | C         |                      |                   |                      |                   |                            |                             |                            |
| 8                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | ASNEED-1 | C         |                      |                   |                      |                   |                            |                             |                            |
| 8                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | ASNEED-2 | D         |                      |                   |                      |                   |                            |                             |                            |
| 8                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | ASNEED-2 | D         |                      |                   |                      |                   |                            |                             |                            |
| 8                 | HANDWEED         |           |           |        |           |           |           |          |           |                      |                   |                      |                   |                            |                             |                            |
| LSD (P=05)        |                  |           |           |        |           |           |           |          |           | 2.08                 | 789.3             | 3.31                 | 292.0             | 9.4                        | 12.2                        | 1.0                        |
| Replicate F       |                  |           |           |        |           |           |           |          |           | 3.094                | 4.534             | 0.513                | 1.037             | 1.728                      | 2.042                       | 1.874                      |
| Replicate Prob(F) |                  |           |           |        |           |           |           |          |           | 0.0315               | 0.0060            | 0.7268               | 0.4057            | 0.1719                     | 0.1156                      | 0.1428                     |
| Treatment F       |                  |           |           |        |           |           |           |          |           | 5.648                | 1.368             | 0.418                | 0.444             | 14.450                     | 6.236                       | 1.000                      |
| Treatment Prob(F) |                  |           |           |        |           |           |           |          |           | 0.0004               | 0.2575            | 0.8826               | 0.8654            | 0.0001                     | 0.0002                      | 0.4520                     |

Weed Control in No-Till Pumpkins with Herbicides.

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 Investigator: Bryan Young

| Weed Code         | CUUPE   | CUUPE   | CUUPE   | AMATA   | AMATA   | AMARE   | CYPES   |
|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Crop Code         | Disco   | Disco   | Disco   | Control | Control | Control | Control |
| Rating Data Type  | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Rating Unit       | 7-6-06  | 7-11-06 | 8-8-06  | 7-11-06 | 8-8-06  | 7-11-06 | 7-11-06 |
| Rating Date       | 23 DA-A | 28 DA-A | 23 DA-B | 28 DA-A | 23 DA-B | 28 DA-A | 28 DA-A |
| Trt-Eval Interval |         |         |         |         |         |         |         |

| Trt No.           | Treatment Name   | Form Conc | Form Type | Rate   | Rate Unit | Prod Rate | Prod Unit | Grow Stg | Appl Code | CUUPE 7-6-06 | CUUPE 7-11-06 | CUUPE 8-8-06 | AMATA 7-11-06 | AMATA 8-8-06 | AMARE 7-11-06 | CYPES 7-11-06 |
|-------------------|------------------|-----------|-----------|--------|-----------|-----------|-----------|----------|-----------|--------------|---------------|--------------|---------------|--------------|---------------|---------------|
| 1                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 72            | 57           | 99            | 99            |
| 1                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |              |               |              |               |              |               |               |
| 1                 | SANDEA           | 75        | WG        | 0.0314 | lb ai/a   | 0.67      | oz/a      | PRE      | A         |              |               |              |               |              |               |               |
| 1                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 1                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |              |               |              |               |              |               |               |
| 2                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 46            | 53           | 73            | 78            |
| 2                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |              |               |              |               |              |               |               |
| 2                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 2                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 2                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |              |               |              |               |              |               |               |
| 3                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 96            | 92           | 99            | 88            |
| 3                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |              |               |              |               |              |               |               |
| 3                 | RAPTOR           | 1         | AS        | 0.036  | lb ai/a   | 4.6       | fl oz/a   | PRE      | A         |              |               |              |               |              |               |               |
| 3                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 3                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |              |               |              |               |              |               |               |
| 4                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 72            | 78           | 98            | 76            |
| 4                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |              |               |              |               |              |               |               |
| 4                 | RAPTOR           | 1         | AS        | 0.036  | lb ai/a   | 4.6       | fl oz/a   | PRE      | A         |              |               |              |               |              |               |               |
| 4                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 4                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 4                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |              |               |              |               |              |               |               |
| 5                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 86            | 58           | 89            | 86            |
| 5                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |              |               |              |               |              |               |               |
| 5                 | OUTLOOK          | 6         | EC        | 1.12   | lb ai/a   | 24        | fl oz/a   | PRE      | A         |              |               |              |               |              |               |               |
| 5                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 5                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |              |               |              |               |              |               |               |
| 6                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 78            | 72           | 81            | 96            |
| 6                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |              |               |              |               |              |               |               |
| 6                 | OUTLOOK          | 6         | EC        | 1.12   | lb ai/a   | 24        | fl oz/a   | PRE      | A         |              |               |              |               |              |               |               |
| 6                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 6                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |              |               |              |               |              |               |               |
| 6                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |              |               |              |               |              |               |               |
| 7                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 0             | 0            | 0             | 0             |
| 7                 | NONTREATED       |           |           |        |           |           |           |          |           |              |               |              |               |              |               |               |
| 8                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0            | 0             | 0            | 62            | 95           | 77            | 62            |
| 8                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |              |               |              |               |              |               |               |
| 8                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | ASNEED-1 | C         |              |               |              |               |              |               |               |
| 8                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | ASNEED-1 | C         |              |               |              |               |              |               |               |
| 8                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | ASNEED-2 | D         |              |               |              |               |              |               |               |
| 8                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | ASNEED-2 | D         |              |               |              |               |              |               |               |
| 8                 | HANDWEED         |           |           |        |           |           |           |          |           |              |               |              |               |              |               |               |
| LSD (P=.05)       |                  |           |           |        |           |           |           |          |           | 0.0          | 0.0           | 0.0          | 33.5          | 38.7         | 31.5          | 32.1          |
| Replicate F       |                  |           |           |        |           |           |           |          |           | 0.000        | 0.000         | 0.000        | 2.202         | 2.705        | 0.564         | 0.737         |
| Replicate Prob(F) |                  |           |           |        |           |           |           |          |           | 1.0000       | 1.0000        | 1.0000       | 0.0945        | 0.0506       | 0.6909        | 0.5749        |
| Treatment F       |                  |           |           |        |           |           |           |          |           | 0.000        | 0.000         | 0.000        | 6.708         | 5.000        | 9.074         | 8.246         |
| Treatment Prob(F) |                  |           |           |        |           |           |           |          |           | 1.0000       | 1.0000        | 1.0000       | 0.0001        | 0.0009       | 0.0001        | 0.0001        |

## Weed Control in No-Till Pumpkins with Herbicides.

Project Code: 06-HRC-Pump-Exp Location: Horticulture Research Center  
Investigator: Bryan Young

| Weed Code         | DIGSA   | DIGSA   | DIGIS   |
|-------------------|---------|---------|---------|
| Crop Code         |         |         |         |
| Rating Data Type  | Control | Control | Control |
| Rating Unit       | Percent | Percent | Percent |
| Rating Date       | 7-11-06 | 8-8-06  | 8-8-06  |
| Trt-Eval Interval | 28 DA-A | 23 DA-B | 23 DA-B |

| Trt No.           | Treatment Name   | Form Conc | Form Type | Rate   | Rate Unit | Prod Rate | Prod Unit | Grow Stg | Appl Code |        |        |        |
|-------------------|------------------|-----------|-----------|--------|-----------|-----------|-----------|----------|-----------|--------|--------|--------|
| 1                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 94     | 98     | 99     |
| 1                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |        |        |        |
| 1                 | SANDEA           | 75        | WG        | 0.0314 | lb ai/a   | 0.67      | oz/a      | PRE      | A         |        |        |        |
| 1                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |        |        |        |
| 1                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |        |        |        |
| 2                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 89     | 94     | 97     |
| 2                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |        |        |        |
| 2                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |        |        |        |
| 2                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |        |        |        |
| 2                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |        |        |        |
| 3                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 88     | 92     | 94     |
| 3                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |        |        |        |
| 3                 | RAPTOR           | 1         | AS        | 0.036  | lb ai/a   | 4.6       | fl oz/a   | PRE      | A         |        |        |        |
| 3                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |        |        |        |
| 3                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |        |        |        |
| 4                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 78     | 89     | 93     |
| 4                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |        |        |        |
| 4                 | RAPTOR           | 1         | AS        | 0.036  | lb ai/a   | 4.6       | fl oz/a   | PRE      | A         |        |        |        |
| 4                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |        |        |        |
| 4                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |        |        |        |
| 4                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |        |        |        |
| 5                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 92     | 95     | 98     |
| 5                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |        |        |        |
| 5                 | OUTLOOK          | 6         | EC        | 1.12   | lb ai/a   | 24        | fl oz/a   | PRE      | A         |        |        |        |
| 5                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |        |        |        |
| 5                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | 4WAP     | B         |        |        |        |
| 6                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 90     | 96     | 98     |
| 6                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |        |        |        |
| 6                 | OUTLOOK          | 6         | EC        | 1.12   | lb ai/a   | 24        | fl oz/a   | PRE      | A         |        |        |        |
| 6                 | SANDEA           | 75        | WG        | 0.0234 | lb ai/a   | 0.5       | oz/a      | 4WAP     | B         |        |        |        |
| 6                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | 4WAP     | B         |        |        |        |
| 6                 | ACTIVATOR 90     | 100       | LIQ       | 0.25   | % v/v     | 0.25      | % v/v     | 4WAP     | B         |        |        |        |
| 7                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 0      | 0      | 0      |
| 7                 | NONTREATED       |           |           |        |           |           |           |          |           |        |        |        |
| 8                 | WHEAT COVER CROP |           |           |        |           |           |           |          |           | 70     | 39     | 49     |
| 8                 | STRATEGY         | 2.1       | EC        | 1.57   | lb ai/a   | 3         | qt/a      | PRE      | A         |        |        |        |
| 8                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | ASNEED-1 | C         |        |        |        |
| 8                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | ASNEED-1 | C         |        |        |        |
| 8                 | SELECT           | 2         | EC        | 0.125  | lb ai/a   | 8         | oz/a      | ASNEED-2 | D         |        |        |        |
| 8                 | PRIME OIL COC    | 100       | LIQ       | 1.0    | % v/v     | 1         | % v/v     | ASNEED-2 | D         |        |        |        |
| 8                 | HANDWEED         |           |           |        |           |           |           |          |           |        |        |        |
| LSD (P=.05)       |                  |           |           |        |           |           |           |          |           | 16.9   | 18.7   | 18.8   |
| Replicate F       |                  |           |           |        |           |           |           |          |           | 1.876  | 0.783  | 1.206  |
| Replicate Prob(F) |                  |           |           |        |           |           |           |          |           | 0.1425 | 0.5458 | 0.3305 |
| Treatment F       |                  |           |           |        |           |           |           |          |           | 28.846 | 31.486 | 30.493 |
| Treatment Prob(F) |                  |           |           |        |           |           |           |          |           | 0.0001 | 0.0001 | 0.0001 |

## Trial Comments

1. Protocol: SIU - SAW - CFAR-B.
2. Ratings: CIWC 28 + 56 days after transplant, and at first harvest.  
Weed biomass as (2) 0.25 square meter sample per plot at first harvest.  
Yield as marketable and culls for each of 2 to 3 harvests.
3. Fruit = Marketable pumpkins. Culls = Non-marketable pumpkins. No./A = Pumpkins per acre.  
DA-A = Days after PRE application. DA-B = Days after 4WAP application.  
Stunt = Growth reduction. Disco = Discoloration and/or necrosis.  
Ratings at 28 DA-A were prior to the 4WAP application.
4. All treatments included a wheat covercrop which provided some weed suppression at the 28 DA-A rating.  
Weed control ratings at 23 DA-B were influenced by crop canopy.
5. Handweeded plots were handweeded after the 28 DA-A rating.  
For treatment 8, the ASNEED-1 and ASNEED-2 were not applied.
6. At pumpkin ripening, plant vigor was reduced by hot weather and diseases.
7. Harvested 9-1-06 and 9-15-06, 6 by 20 ft.