

# University of Georgia

Second crop cucumber and squash response to Goal, V-10204, and Dual Magnum.

Trial ID: Veg40-07  
Location: Ponder Farm

Protocol ID:  
Study Director: Stanley Culpepper  
Investigator: Stanley Culpepper

Reps: 3                      Plots: 6 by 30 feet  
Spray vol: 14.8 gal/ac              Mix size: 2 liters (min .69451)

| Trt No. | Treatment Name                   | Form Conc | Form Unit | Form Type | Rate Rate Unit | Growth Stage | Appl Code | Amt to Measure | Product | Plot No. 1 | Plot No. 2 | Plot No. 3 |
|---------|----------------------------------|-----------|-----------|-----------|----------------|--------------|-----------|----------------|---------|------------|------------|------------|
| 1       | 14 d before planting Goal        | 4         |           | L         | 8 OZ/A         | PREPLANT A   | A         | 8.446 ml/mx    |         | 101        | 202        | 321        |
| 2       | 14 d before planting Goal        | 4         |           | L         | 16 OZ/A        | PREPLANT A   | A         | 16.89 ml/mx    |         | 102        | 221        | 320        |
| 3       | 14 d before planting V-10204     | 85        |           | DG        | 0.16 LB A/A    | PREPLANT A   | A         | 3.048 g/mx     |         | 103        | 218        | 313        |
| 4       | 14 d before planting V-10204     | 85        |           | DG        | 0.32 LB A/A    | PREPLANT A   | A         | 6.096 g/mx     |         | 104        | 209        | 310        |
| 5       | 14 d before planting Dual Magnum | 7.64      |           | L         | 1 PT/A         | PREPLANT A   | A         | 16.89 ml/mx    |         | 105        | 217        | 323        |
| 6       | 14 d before planting Dual Magnum | 7.64      |           | L         | 2 PT/A         | PREPLANT A   | A         | 33.78 ml/mx    |         | 106        | 207        | 311        |
| 7       | 7 d before planting Goal         | 4         |           | L         | 8 OZ/A         | PREPLANT B   | B         | 8.446 ml/mx    |         | 107        | 219        | 308        |
| 8       | 7 d before planting Goal         | 4         |           | L         | 16 OZ/A        | PREPLANT B   | B         | 16.89 ml/mx    |         | 108        | 206        | 303        |
| 9       | 7 d before planting V-10204      | 85        |           | DG        | 0.16 LB A/A    | PREPLANT B   | B         | 3.048 g/mx     |         | 109        | 204        | 322        |
| 10      | 7 d before planting V-10204      | 85        |           | DG        | 0.32 LB A/A    | PREPLANT B   | B         | 6.096 g/mx     |         | 110        | 224        | 325        |
| 11      | 7 d before planting Dual Magnum  | 7.64      |           | L         | 1 PT/A         | PREPLANT B   | B         | 16.89 ml/mx    |         | 111        | 213        | 314        |
| 12      | 7 d before planting Dual Magnum  | 7.64      |           | L         | 2 PT/A         | PREPLANT B   | B         | 33.78 ml/mx    |         | 112        | 216        | 302        |
| 13      | 1 d before planting Goal         | 4         |           | L         | 8 OZ/A         | PREPLANT C   | C         | 8.446 ml/mx    |         | 113        | 212        | 315        |
| 14      | 1 d before planting Goal         | 4         |           | L         | 16 OZ/A        | PREPLANT C   | C         | 16.89 ml/mx    |         | 114        | 210        | 305        |
| 15      | 1 d before planting V-10204      | 85        |           | DG        | 0.16 LB A/A    | PREPLANT C   | C         | 3.048 g/mx     |         | 115        | 225        | 324        |
| 16      | 1 d before planting V-10204      | 85        |           | DG        | 0.32 LB A/A    | PREPLANT C   | C         | 6.096 g/mx     |         | 116        | 208        | 318        |
| 17      | 1 d before planting Dual Magnum  | 7.64      |           | L         | 1 PT/A         | PREPLANT C   | C         | 16.89 ml/mx    |         | 117        | 214        | 307        |
| 18      | 1 d before planting Dual Magnum  | 7.64      |           | L         | 2 PT/A         | PREPLANT C   | C         | 33.78 ml/mx    |         | 118        | 220        | 316        |
| 19      | 1 d after planting Goal          | 4         |           | L         | 8 OZ/A         | PREPLANT D   | D         | 8.446 ml/mx    |         | 119        | 211        | 304        |
| 20      | 1 d after planting Goal          | 4         |           | L         | 16 OZ/A        | PREPLANT D   | D         | 16.89 ml/mx    |         | 120        | 205        | 319        |
| 21      | 1 d after planting V-10204       | 85        |           | DG        | 0.16 LB A/A    | PREPLANT D   | D         | 3.048 g/mx     |         | 121        | 222        | 301        |
| 22      | 1 d after planting V-10204       | 85        |           | DG        | 0.32 LB A/A    | PREPLANT D   | D         | 6.096 g/mx     |         | 122        | 223        | 312        |
| 23      | 1 d after planting Dual Magnum   | 7.64      |           | L         | 1 PT/A         | PREPLANT D   | D         | 16.89 ml/mx    |         | 123        | 203        | 306        |

# University of Georgia

Reps: 3                      Plots: 6 by 30 feet  
 Spray vol: 14.8 gal/ac              Mix size: 2 liters (min .69451)

| Trt No. | Treatment Name                    | Form Conc | Form Unit | Form Type | Rate | Form Rate Unit | Growth Stage             | Appl Code | Amt to Measure | Product     | Plot No. By Rep |     |     |
|---------|-----------------------------------|-----------|-----------|-----------|------|----------------|--------------------------|-----------|----------------|-------------|-----------------|-----|-----|
|         |                                   |           |           |           |      |                |                          |           |                |             | 1               | 2   | 3   |
| 24      | 1 d after planting<br>Dual Magnum | 7.64      |           | L         | 2    | PT/A           | PREPLANT D<br>PREPLANT D |           |                | 33.78 ml/mx | 124             | 201 | 309 |
| 25      | Non-treated control               |           |           |           |      |                |                          |           |                |             | 125             | 215 | 317 |

Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

| Amount* | Unit | Treatment Name | Form Conc | Form Type | Lot Code |
|---------|------|----------------|-----------|-----------|----------|
| 126.689 | ml   | Goal           | 4         | L         |          |
| 45.721  | g    | V-10204        | 85        | DG        |          |
| 253.352 | ml   | Dual Magnum    | 7.64      | L         |          |

\* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 2 liters (mix size basis).  
 \* Product amount calculations increased 25 % for overage adjustment.

### Trial Comments

OBJECTIVE: Determine the potential for using Goal, V-10204, or Dual Magnum over mulch prior to planting a second crop of cucumber and squash.

Cucumber and squash were both seeded and transplanted.

White flies devastated this trial making it extremely variable; however, this would be a challenging test because of stress for the entire season.

1. Goal applied 14, 7, or 1 d before planting caused very little injury, no impact on growth or yields when compared to the non-treated.
2. V-10204 applied 14, 7, or 1 d before planting and after planting caused significant injury and growth reduction as well as yield loss.
3. Dual Magnum applied 14 d before planting caused little injury, no impact on growth or yields when compared to the non-treated.
4. Dual Magnum applied 7 d before planting caused minimal stunting early in the season but also tended to reduce plant biomass of cucumber during mid-season. No obvious impact on yield was noted.
5. Dual at 1 pt applied 1 d after planting caused only minimal injury symptoms.
6. Goal applied after planting caused severe injury.

# University of Georgia

Second crop cucumber and squash response to Goal, V-10204, and Dual Magnum.

Trial ID: Veg40-07  
Location: Ponder Farm

Protocol ID:  
Study Director: Stanley Culpepper  
Investigator: Stanley Culpepper

| Pest Code                     | CUMSA                            | CUUPE     | plant 1   | plant 2   | plant 3   | plant 4   | AVG4PLAN  |        |        |        |
|-------------------------------|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|--------|--------|
| Crop Code                     | CUMSA                            | CUUPE     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     |        |        |        |
| BBCH Scale                    | BVVT                             | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      |        |        |        |
| Crop Variety                  |                                  |           | transpla  | transpla  | transpla  | transpla  |           |        |        |        |
| Rating Date                   | Oct-08-07                        | Oct-08-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 |        |        |        |
| Rating Data Type              | injury                           | injury    | ht        | ht        | ht        | ht        | ht        |        |        |        |
| Rating Unit                   | %                                | %         | cm        | cm        | cm        | cm        | cm        |        |        |        |
| Assessed By                   | SC                               | SC        |           |           |           |           |           |        |        |        |
| Days After First/Last Applic. | 52                               | 52        | 18        | 18        | 18        | 18        | 18        |        |        |        |
| ARM Action Codes              |                                  |           |           |           |           |           | T13       |        |        |        |
| Trt No.                       | Treatment Name                   | Rate      | Unit      | 1         | 2         | 4         | 5         | 6      | 7      | 8      |
| 1                             | 14 d before planting Goal        | 8         | OZ/A      | 5 ef      | 5 f       | 13 a-e    | 16 a-d    | 19 ab  | 16 abc | 16 a-d |
| 2                             | 14 d before planting Goal        | 16        | OZ/A      | 0 f       | 0 f       | 15 a-d    | 23 a      | 21 a   | 17 ab  | 19 a   |
| 3                             | 14 d before planting V-10204     | 0.16      | LB A/A    | 23 cde    | 7 f       | 13 a-e    | 13 bcd    | 10 gh  | 15 abc | 13 c-h |
| 4                             | 14 d before planting V-10204     | 0.32      | LB A/A    | 38 c      | 25 def    | 12 b-e    | 13 bcd    | 13 c-h | 10 bc  | 12 d-h |
| 5                             | 14 d before planting Dual Magnum | 1         | PT/A      | 0 f       | 3 f       | 17 abc    | 16 a-d    | 16 a-e | 18 a   | 17 abc |
| 6                             | 14 d before planting Dual Magnum | 2         | PT/A      | 17 def    | 0 f       | 17 abc    | 16 a-d    | 16 a-e | 17 ab  | 17 abc |
| 7                             | 7 d before planting Goal         | 8         | OZ/A      | 0 f       | 0 f       | 18 a      | 12 bcd    | 15 b-f | 16 abc | 15 a-e |
| 8                             | 7 d before planting Goal         | 16        | OZ/A      | 5 ef      | 0 f       | 18 a      | 17 a-d    | 18 abc | 17 ab  | 18 ab  |
| 9                             | 7 d before planting V-10204      | 0.16      | LB A/A    | 67 b      | 57 bc     | 14 a-e    | 10 d      | 12 d-h | 12 abc | 12 d-h |
| 10                            | 7 d before planting V-10204      | 0.32      | LB A/A    | 82 ab     | 73 ab     | 11 cde    | 10 d      | 10 gh  | 13 abc | 11 gh  |
| 11                            | 7 d before planting Dual Magnum  | 1         | PT/A      | 10 ef     | 3 f       | 14 a-e    | 17 abc    | 14 b-g | 15 abc | 15 a-f |
| 12                            | 7 d before planting Dual Magnum  | 2         | PT/A      | 7 ef      | 0 f       | 14 a-e    | 15 bcd    | 12 d-h | 13 abc | 14 b-h |
| 13                            | 1 d before planting Goal         | 8         | OZ/A      | 8 ef      | 0 f       | 13 a-e    | 13 bcd    | 13 c-h | 16 abc | 14 b-h |
| 14                            | 1 d before planting Goal         | 16        | OZ/A      | 0 f       | 0 f       | 18 a      | 14 bcd    | 17 a-d | 17 ab  | 17 abc |
| 15                            | 1 d before planting V-10204      | 0.16      | LB A/A    | 67 b      | 50 bcd    | 11 de     | 11 bcd    | 10 fgh | 11 abc | 11 fgh |
| 16                            | 1 d before planting V-10204      | 0.32      | LB A/A    | 85 ab     | 85 a      | 11 cde    | 11 cd     | 12 d-h | 13 abc | 12 e-h |
| 17                            | 1 d before planting Dual Magnum  | 1         | PT/A      | 23 cde    | 12 f      | 14 a-e    | 13 bcd    | 12 d-h | 14 abc | 13 c-h |
| 18                            | 1 d before planting Dual Magnum  | 2         | PT/A      | 37 cd     | 18 ef     | 12 b-e    | 12 bcd    | 14 b-g | 13 abc | 13 c-h |
| 19                            | 1 d after planting Goal          | 8         | OZ/A      | 40 c      | 53 bc     | 12 a-e    | 12 bcd    | 11 e-h | 8 c    | 11 fgh |
| 20                            | 1 d after planting Goal          | 16        | OZ/A      | 77 ab     | 85 a      | 5 f       | 12 bcd    | 9 h    | 0 d    | 7 i    |

# University of Georgia

|                               |             |           |           |           |           |           |           |
|-------------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     |             |           | plant 1   | plant 2   | plant 3   | plant 4   | AVG4PLAN  |
| Crop Code                     | CUMSA       | CUUPE     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     |
| BBCH Scale                    | BVWT        | BVWT      | BVWT      | BVWT      | BVWT      | BVWT      | BVWT      |
| Crop Variety                  |             |           | transpla  | transpla  | transpla  | transpla  |           |
| Rating Date                   | Oct-08-07   | Oct-08-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 |
| Rating Data Type              | injury      | injury    | ht        | ht        | ht        | ht        | ht        |
| Rating Unit                   | %           | %         | cm        | cm        | cm        | cm        | cm        |
| Assessed By                   | SC          | SC        |           |           |           |           |           |
| Days After First/Last Applic. | 52          | 52        | 18        | 18        | 18        | 18        | 18        |
| ARM Action Codes              |             |           |           |           |           |           | T13       |
| Trt Treatment                 | Rate        |           |           |           |           |           |           |
| No. Name                      | Rate Unit   | 1         | 2         | 4         | 5         | 6         | 7         |
| 21 1 d after planting         |             | 93 a      | 43 cde    | 9 ef      | 10 cd     | 10 fgh    | 11 abc    |
| V-10204                       | 0.16 LB A/A |           |           |           |           |           | 10 hi     |
| 22 1 d after planting         |             | 93 a      | 88 a      | 10 def    | 11 cd     | 10 fgh    | 10 bc     |
| V-10204                       | 0.32 LB A/A |           |           |           |           |           | 10 hi     |
| 23 1 d after planting         |             | 7 ef      | 0 f       | 13 a-e    | 16 bcd    | 16 a-e    | 14 abc    |
| Dual Magnum                   | 1 PT/A      |           |           |           |           |           | 15 b-g    |
| 24 1 d after planting         |             | 32 cd     | 0 f       | 13 a-e    | 12 bcd    | 14 b-g    | 13 abc    |
| Dual Magnum                   | 2 PT/A      |           |           |           |           |           | 13 c-h    |
| 25 Non-treated control        |             | 0 f       | 0 f       | 18 ab     | 18 ab     | 13 c-h    | 14 abc    |
|                               |             |           |           |           |           |           | 16 a-e    |
| LSD (P=.05)                   |             | 18.5      | 26.1      | 4.9       | 6.2       | 4.4       | 6.3       |
| Standard Deviation            |             | 11.2      | 15.8      | 3.0       | 3.7       | 2.6       | 3.8       |
| CV                            |             | 34.49     | 64.98     | 22.33     | 27.13     | 19.53     | 28.88     |
| Bartlett's X2                 |             | 16.935    | 22.721    | 27.751    | 36.358    | 30.074    | 25.581    |
| P(Bartlett's X2)              |             | 0.528     | 0.065     | 0.225     | 0.051     | 0.147     | 0.321     |
|                               |             |           |           |           |           |           | 0.447     |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 7: T13 = @AVG([C4],[C7])

# University of Georgia

| Pest Code                     | plant 1<br>CUMSA                 | plant 2<br>CUMSA | plant 3<br>CUMSA | plant 4<br>CUMSA | AVG4PLAN<br>CUMSA | plant 1<br>CUUPE | plant 2<br>CUUPE |        |        |       |
|-------------------------------|----------------------------------|------------------|------------------|------------------|-------------------|------------------|------------------|--------|--------|-------|
| Crop Code                     | BVVT                             | BVVT             | BVVT             | BVVT             | BVVT              | BVVT             | BVVT             |        |        |       |
| BBCH Scale                    | seeded                           | seeded           | seeded           | seeded           | seeded            | transpla         | transpla         |        |        |       |
| Crop Variety                  | Sep-04-07                        | Sep-04-07        | Sep-04-07        | Sep-04-07        | Sep-04-07         | Sep-04-07        | Sep-04-07        |        |        |       |
| Rating Date                   | ht                               | ht               | ht               | ht               | ht                | ht               | ht               |        |        |       |
| Rating Data Type              | cm                               | cm               | cm               | cm               | cm                | cm               | cm               |        |        |       |
| Rating Unit                   | 18                               | 18               | 18               | 18               | 18                | 18               | 18               |        |        |       |
| Assessed By                   |                                  |                  |                  |                  |                   |                  |                  |        |        |       |
| Days After First/Last Applic. |                                  |                  |                  |                  |                   |                  |                  |        |        |       |
| ARM Action Codes              |                                  |                  |                  |                  | T14               |                  |                  |        |        |       |
| Trt No.                       | Treatment Name                   | Rate             | Unit             | 10               | 11                | 12               | 13               | 14     | 16     | 17    |
| 1                             | 14 d before planting Goal        | 8                | OZ/A             | 14 abc           | 15 a-d            | 12 abc           | 15 a             | 14 abc | 10 abc | 13 a  |
| 2                             | 14 d before planting Goal        | 16               | OZ/A             | 12 a-d           | 12 a-e            | 12 abc           | 12 abc           | 12 a-d | 11 abc | 11 ab |
| 3                             | 14 d before planting V-10204     | 0.16             | LB A/A           | 12 a-d           | 10 b-g            | 8 b-e            | 7 a-g            | 9 a-g  | 10 abc | 9 ab  |
| 4                             | 14 d before planting V-10204     | 0.32             | LB A/A           | 6 b-e            | 9 c-h             | 5 cde            | 7 b-g            | 7 d-h  | 7 cd   | 8 ab  |
| 5                             | 14 d before planting Dual Magnum | 1                | PT/A             | 14 ab            | 17 abc            | 13 ab            | 13 abc           | 14 ab  | 9 a-d  | 11 ab |
| 6                             | 14 d before planting Dual Magnum | 2                | PT/A             | 13 abc           | 13 a-e            | 14 ab            | 12 abc           | 13 a-d | 10 abc | 11 ab |
| 7                             | 7 d before planting Goal         | 8                | OZ/A             | 15 a             | 17 ab             | 15 a             | 15 ab            | 15 a   | 13 a   | 12 ab |
| 8                             | 7 d before planting Goal         | 16               | OZ/A             | 12 a-d           | 18 a              | 14 ab            | 10 a-e           | 14 a-d | 12 ab  | 10 ab |
| 9                             | 7 d before planting V-10204      | 0.16             | LB A/A           | 4 de             | 2 gh              | 0 e              | 0 g              | 2 h    | 8 bcd  | 9 ab  |
| 10                            | 7 d before planting V-10204      | 0.32             | LB A/A           | 2 e              | 2 gh              | 3 de             | 5 c-g            | 3 fgh  | 9 a-d  | 7 b   |
| 11                            | 7 d before planting Dual Magnum  | 1                | PT/A             | 13 a-d           | 8 d-h             | 10 a-d           | 7 b-g            | 9 a-g  | 11 abc | 8 ab  |
| 12                            | 7 d before planting Dual Magnum  | 2                | PT/A             | 9 a-e            | 6 e-h             | 7 b-e            | 9 a-f            | 8 b-h  | 9 a-d  | 11 ab |
| 13                            | 1 d before planting Goal         | 8                | OZ/A             | 15 a             | 12 a-e            | 13 ab            | 10 a-d           | 13 a-d | 8 bcd  | 11 ab |
| 14                            | 1 d before planting Goal         | 16               | OZ/A             | 10 a-e           | 11 a-f            | 11 abc           | 10 a-d           | 11 a-e | 10 abc | 9 ab  |
| 15                            | 1 d before planting V-10204      | 0.16             | LB A/A           | 2 e              | 2 gh              | 2 e              | 3 d-g            | 2 h    | 8 bcd  | 7 b   |
| 16                            | 1 d before planting V-10204      | 0.32             | LB A/A           | 3 e              | 3 gh              | 0 e              | 0 g              | 1 h    | 8 bcd  | 9 ab  |
| 17                            | 1 d before planting Dual Magnum  | 1                | PT/A             | 9 a-e            | 11 a-f            | 8 b-e            | 10 a-e           | 9 a-f  | 10 abc | 10 ab |
| 18                            | 1 d before planting Dual Magnum  | 2                | PT/A             | 8 a-e            | 6 e-h             | 6 b-e            | 7 b-g            | 7 d-h  | 9 a-d  | 10 ab |
| 19                            | 1 d after planting Goal          | 8                | OZ/A             | 7 a-e            | 7 d-h             | 7 b-e            | 7 a-g            | 7 c-h  | 6 d    | 2 c   |
| 20                            | 1 d after planting Goal          | 16               | OZ/A             | 3 e              | 5 e-h             | 2 e              | 2 efg            | 3 fgh  | 0 e    | 0 c   |
| 21                            | 1 d after planting V-10204       | 0.16             | LB A/A           | 3 e              | 3 fgh             | 3 de             | 1 fg             | 3 gh   | 9 a-d  | 9 ab  |
| 22                            | 1 d after planting V-10204       | 0.32             | LB A/A           | 2 e              | 1 h               | 1 e              | 1 fg             | 2 h    | 8 bcd  | 11 ab |
| 23                            | 1 d after planting Dual Magnum   | 1                | PT/A             | 7 a-e            | 6 e-h             | 7 b-e            | 8 a-f            | 7 c-h  | 8 bcd  | 11 ab |

## University of Georgia

|                               |           |           |           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     | plant 1   | plant 2   | plant 3   | plant 4   | AVG4PLAN  | plant 1   | plant 2   |
| Crop Code                     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUUPE     | CUUPE     |
| BBCH Scale                    | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      |
| Crop Variety                  | seeded    | seeded    | seeded    | seeded    |           | transpla  | transpla  |
| Rating Date                   | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 |
| Rating Data Type              | ht        | ht        | ht        | ht        | ht        | ht        | ht        |
| Rating Unit                   | cm        | cm        | cm        | cm        | cm        | cm        | cm        |
| Assessed By                   |           |           |           |           |           |           |           |
| Days After First/Last Applic. | 18        | 18        | 18        | 18        | 18        | 18        | 18        |
| ARM Action Codes              |           |           |           |           | T14       |           |           |
| Trt Treatment                 | Rate      |           |           |           |           |           |           |
| No. Name                      | Rate Unit | 10        | 11        | 12        | 13        | 14        | 16        |
| 24 1 d after planting         |           | 6 cde     | 4 e-h     | 4 de      | 6 c-g     | 5 e-h     | 11 abc    |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           | 11 ab     |
| 25 Non-treated control        |           | 11 a-d    | 11 a-f    | 14 ab     | 10 a-e    | 12 a-e    | 9 a-d     |
|                               |           |           |           |           |           |           | 9 ab      |
| LSD (P=.05)                   |           | 7.0       | 7.1       | 6.4       | 6.9       | 5.8       | 3.3       |
| Standard Deviation            |           | 4.3       | 4.3       | 3.9       | 4.2       | 3.5       | 2.0       |
| CV                            |           | 49.87     | 50.56     | 51.29     | 55.3      | 44.07     | 22.55     |
| Bartlett's X2                 |           | 34.889    | 23.962    | 21.103    | 41.15     | 35.675    | 22.659    |
| P(Bartlett's X2)              |           | 0.07      | 0.464     | 0.514     | 0.008*    | 0.059     | 0.481     |
|                               |           |           |           |           |           |           | 0.906     |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 12: T14 = @AVG([C10].[C13])

# University of Georgia

| Pest Code                     | plant 3<br>CUUPE                    | plant 4<br>CUUPE | AVG4PLAN<br>CUUPE | plant 1<br>CUUPE | plant 2<br>CUUPE | plant 3<br>CUUPE | plant 4<br>CUUPE |        |        |        |
|-------------------------------|-------------------------------------|------------------|-------------------|------------------|------------------|------------------|------------------|--------|--------|--------|
| Crop Code                     | BVVT                                | BVVT             | BVVT              | BVVT             | BVVT             | BVVT             | BVVT             |        |        |        |
| BBCH Scale                    | transpla                            | transpla         |                   | seeded           | seeded           | seeded           | seeded           |        |        |        |
| Crop Variety                  |                                     |                  |                   |                  |                  |                  |                  |        |        |        |
| Rating Date                   | Sep-04-07                           | Sep-04-07        | Sep-04-07         | Sep-04-07        | Sep-04-07        | Sep-04-07        | Sep-04-07        |        |        |        |
| Rating Data Type              | ht                                  | ht               | ht                | ht               | ht               | ht               | ht               |        |        |        |
| Rating Unit                   | cm                                  | cm               | cm                | cm               | cm               | cm               | cm               |        |        |        |
| Assessed By                   |                                     |                  |                   |                  |                  |                  |                  |        |        |        |
| Days After First/Last Applic. | 18                                  | 18               | 18                | 18               | 18               | 18               | 18               |        |        |        |
| ARM Action Codes              |                                     |                  | T15               |                  |                  |                  |                  |        |        |        |
| Trt No.                       | Treatment Name                      | Rate             | Unit              | 18               | 19               | 20               | 22               | 23     | 24     | 25     |
| 1                             | 14 d before planting<br>Goal        | 8                | OZ/A              | 11 a             | 10 bc            | 11 abc           | 13 a             | 13 ab  | 11 ab  | 11 a-d |
| 2                             | 14 d before planting<br>Goal        | 16               | OZ/A              | 9 ab             | 11 abc           | 10 a-d           | 12 ab            | 13 ab  | 10 abc | 13 abc |
| 3                             | 14 d before planting<br>V-10204     | 0.16             | LB A/A            | 8 ab             | 11 abc           | 10 a-e           | 8 a-f            | 9 bcd  | 5 cde  | 4 d-g  |
| 4                             | 14 d before planting<br>V-10204     | 0.32             | LB A/A            | 9 ab             | 11 bc            | 9 cde            | 5 c-f            | 7 cde  | 2 e    | 0 g    |
| 5                             | 14 d before planting<br>Dual Magnum | 1                | PT/A              | 10 ab            | 11 abc           | 10 a-d           | 10 a-e           | 11 a-d | 12 a   | 10 a-e |
| 6                             | 14 d before planting<br>Dual Magnum | 2                | PT/A              | 12 a             | 16 a             | 13 a             | 12 ab            | 12 abc | 13 a   | 15 a   |
| 7                             | 7 d before planting<br>Goal         | 8                | OZ/A              | 12 a             | 13 ab            | 12 ab            | 10 a-e           | 9 bcd  | 9 abc  | 7 a-g  |
| 8                             | 7 d before planting<br>Goal         | 16               | OZ/A              | 10 ab            | 10 bc            | 10 a-d           | 13 a             | 15 a   | 12 a   | 15 a   |
| 9                             | 7 d before planting<br>V-10204      | 0.16             | LB A/A            | 9 ab             | 8 bc             | 9 cde            | 4 def            | 3 ef   | 10 abc | 1 fg   |
| 10                            | 7 d before planting<br>V-10204      | 0.32             | LB A/A            | 9 ab             | 9 bc             | 9 cde            | 4 ef             | 2 ef   | 3 de   | 4 d-g  |
| 11                            | 7 d before planting<br>Dual Magnum  | 1                | PT/A              | 10 ab            | 8 bc             | 9 b-e            | 10 a-e           | 11 a-d | 12 a   | 9 a-e  |
| 12                            | 7 d before planting<br>Dual Magnum  | 2                | PT/A              | 10 ab            | 13 ab            | 11 a-d           | 11 a-d           | 9 bcd  | 14 a   | 13 abc |
| 13                            | 1 d before planting<br>Goal         | 8                | OZ/A              | 11 ab            | 11 abc           | 10 a-d           | 12 ab            | 13 ab  | 13 a   | 12 abc |
| 14                            | 1 d before planting<br>Goal         | 16               | OZ/A              | 9 ab             | 9 bc             | 9 b-e            | 8 a-f            | 11 a-d | 12 a   | 9 a-e  |
| 15                            | 1 d before planting<br>V-10204      | 0.16             | LB A/A            | 6 b              | 7 c              | 7 e              | 5 c-f            | 0 f    | 0 e    | 1 fg   |
| 16                            | 1 d before planting<br>V-10204      | 0.32             | LB A/A            | 9 ab             | 6 cd             | 8 de             | 5 c-f            | 0 f    | 0 e    | 0 g    |
| 17                            | 1 d before planting<br>Dual Magnum  | 1                | PT/A              | 9 ab             | 11 abc           | 10 a-e           | 12 ab            | 11 a-d | 12 a   | 3 d-g  |
| 18                            | 1 d before planting<br>Dual Magnum  | 2                | PT/A              | 8 ab             | 9 bc             | 9 cde            | 9 a-f            | 9 bcd  | 8 a-d  | 8 a-f  |
| 19                            | 1 d after planting<br>Goal          | 8                | OZ/A              | 1 c              | 2 de             | 3 f              | 7 a-f            | 10 a-d | 8 a-d  | 8 a-g  |
| 20                            | 1 d after planting<br>Goal          | 16               | OZ/A              | 0 c              | 0 e              | 0 g              | 6 b-f            | 8 bcd  | 5 b-e  | 7 b-g  |
| 21                            | 1 d after planting<br>V-10204       | 0.16             | LB A/A            | 8 ab             | 9 bc             | 9 cde            | 5 c-f            | 6 de   | 5 b-e  | 5 c-g  |
| 22                            | 1 d after planting<br>V-10204       | 0.32             | LB A/A            | 8 ab             | 10 bc            | 9 b-e            | 3 f              | 2 ef   | 1 e    | 2 efg  |
| 23                            | 1 d after planting<br>Dual Magnum   | 1                | PT/A              | 10 ab            | 13 ab            | 11 a-d           | 11 abc           | 12 abc | 12 a   | 10 a-e |

## University of Georgia

|                               |           |           |           |           |           |           |           |        |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| Pest Code                     | plant 3   | plant 4   | AVG4PLAN  | plant 1   | plant 2   | plant 3   | plant 4   |        |
| Crop Code                     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     |        |
| BBCH Scale                    | BVT       | BVT       | BVT       | BVT       | BVT       | BVT       | BVT       |        |
| Crop Variety                  | transpla  | transpla  |           | seeded    | seeded    | seeded    | seeded    |        |
| Rating Date                   | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 |        |
| Rating Data Type              | ht        | ht        | ht        | ht        | ht        | ht        | ht        |        |
| Rating Unit                   | cm        | cm        | cm        | cm        | cm        | cm        | cm        |        |
| Assessed By                   |           |           |           |           |           |           |           |        |
| Days After First/Last Applic. | 18        | 18        | 18        | 18        | 18        | 18        | 18        |        |
| ARM Action Codes              |           |           | T15       |           |           |           |           |        |
| Trt Treatment                 | Rate      |           |           |           |           |           |           |        |
| No. Name                      | Rate Unit | 18        | 19        | 20        | 22        | 23        | 24        | 25     |
| 24 1 d after planting         |           | 12 a      | 10 bc     | 11 abc    | 8 a-f     | 12 abc    | 10 abc    | 10 a-e |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           |           |        |
| 25 Non-treated control        |           | 11 ab     | 10 bc     | 10 a-e    | 9 a-e     | 10 a-d    | 12 a      | 13 ab  |
| LSD (P=.05)                   |           | 4.1       | 4.7       | 2.5       | 5.3       | 4.6       | 5.0       | 6.7    |
| Standard Deviation            |           | 2.5       | 2.8       | 1.5       | 3.2       | 2.8       | 3.1       | 4.1    |
| CV                            |           | 28.16     | 29.46     | 16.71     | 37.89     | 31.24     | 36.31     | 53.24  |
| Bartlett's X2                 |           | 32.214    | 26.645    | 29.249    | 22.374    | 14.432    | 22.041    | 28.578 |
| P(Bartlett's X2)              |           | 0.096     | 0.271     | 0.172     | 0.557     | 0.885     | 0.457     | 0.157  |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 17: T15 = @AVG([C16].[C19])



# University of Georgia

| Pest Code                     | AVG4PLAN                         | biomass   | biomass   | biomass   | biomass   | biomass   | biomass   |      |        |        |
|-------------------------------|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|------|--------|--------|
| Crop Code                     | CUUPE                            | CUMSA     | CUMSA     | CUMSA     | CUUPE     | CUUPE     | CUUPE     |      |        |        |
| BBCH Scale                    | BWVT                             | BWVT      | BWVT      | BWVT      | BWVT      | BWVT      | BWVT      |      |        |        |
| Crop Variety                  |                                  |           |           |           |           |           |           |      |        |        |
| Rating Date                   | Sep-04-07                        | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 |      |        |        |
| Rating Data Type              | ht                               | #         | wt/g      | wt/g      | #         | wt/g      | wt/g      |      |        |        |
| Rating Unit                   | cm                               | per plot  | per plot  | per plant | per plot  | per plot  | per plant |      |        |        |
| Assessed By                   |                                  |           |           |           |           |           |           |      |        |        |
| Days After First/Last Applic. | 18                               | 18        | 18        | 18        | 18        | 18        | 18        |      |        |        |
| ARM Action Codes              | T16                              |           |           |           |           |           |           |      |        |        |
| Trt No.                       | Treatment Name                   | Rate      | Unit      | 26        | 28        | 29        | 30        | 32   | 33     | 34     |
| 1                             | 14 d before planting Goal        | 8         | OZ/A      | 12 a-d    | 10 b      | 86 a      | 8 ab      | 4 ab | 103 ab | 26 abc |
| 2                             | 14 d before planting Goal        | 16        | OZ/A      | 12 a-d    | 8 b       | 73 a      | 9 ab      | 4 ab | 110 ab | 27 ab  |
| 3                             | 14 d before planting V-10204     | 0.16      | LB A/A    | 7 e-h     | 8 b       | 28 b-f    | 3 cde     | 4 ab | 24 efg | 6 fgh  |
| 4                             | 14 d before planting V-10204     | 0.32      | LB A/A    | 4 hi      | 8 b       | 14 def    | 2 de      | 4 ab | 5 fg   | 1 h    |
| 5                             | 14 d before planting Dual Magnum | 1         | PT/A      | 11 a-e    | 7 b       | 59 abc    | 8 ab      | 4 ab | 88 a-d | 22 a-e |
| 6                             | 14 d before planting Dual Magnum | 2         | PT/A      | 13 ab     | 8 b       | 58 a-d    | 6 abc     | 4 ab | 98 abc | 25 a-d |
| 7                             | 7 d before planting Goal         | 8         | OZ/A      | 9 c-f     | 9 b       | 88 a      | 9 ab      | 4 a  | 81 a-e | 19 a-f |
| 8                             | 7 d before planting Goal         | 16        | OZ/A      | 14 a      | 8 b       | 77 a      | 10 a      | 4 b  | 91 a-d | 25 a-d |
| 9                             | 7 d before planting V-10204      | 0.16      | LB A/A    | 5 ghi     | 6 b       | 2 f       | 0 e       | 4 ab | 5 fg   | 8 e-h  |
| 10                            | 7 d before planting V-10204      | 0.32      | LB A/A    | 3 hi      | 7 b       | 12 ef     | 1 e       | 4 ab | 3 g    | 1 h    |
| 11                            | 7 d before planting Dual Magnum  | 1         | PT/A      | 11 a-e    | 6 b       | 20 c-f    | 3 cde     | 4 ab | 73 a-e | 18 a-f |
| 12                            | 7 d before planting Dual Magnum  | 2         | PT/A      | 12 a-d    | 7 b       | 18 c-f    | 2 de      | 4 ab | 83 a-e | 23 a-e |
| 13                            | 1 d before planting Goal         | 8         | OZ/A      | 13 abc    | 8 b       | 64 ab     | 8 ab      | 4 ab | 131 a  | 33 a   |
| 14                            | 1 d before planting Goal         | 16        | OZ/A      | 10 a-e    | 8 b       | 48 a-e    | 6 bcd     | 4 ab | 62 b-f | 16 b-h |
| 15                            | 1 d before planting V-10204      | 0.16      | LB A/A    | 2 i       | 30 a      | 2 f       | 0 e       | 4 ab | 1 g    | 0 h    |
| 16                            | 1 d before planting V-10204      | 0.32      | LB A/A    | 1 i       | 6 b       | 1 f       | 0 e       | 4 ab | 3 fg   | 1 h    |
| 17                            | 1 d before planting Dual Magnum  | 1         | PT/A      | 10 b-e    | 9 b       | 28 b-f    | 3 cde     | 4 ab | 67 b-e | 17 b-g |
| 18                            | 1 d before planting Dual Magnum  | 2         | PT/A      | 9 c-g     | 8 b       | 26 b-f    | 1 de      | 4 ab | 43 c-g | 11 c-h |
| 19                            | 1 d after planting Goal          | 8         | OZ/A      | 8 d-g     | 7 b       | 15 c-f    | 2 de      | 4 ab | 37 d-g | 9 d-h  |
| 20                            | 1 d after planting Goal          | 16        | OZ/A      | 7 e-h     | 6 b       | 3 ef      | 1 e       | 4 ab | 25 efg | 6 fgh  |
| 21                            | 1 d after planting V-10204       | 0.16      | LB A/A    | 5 f-i     | 8 b       | 2 f       | 0 e       | 4 ab | 7 fg   | 2 gh   |
| 22                            | 1 d after planting V-10204       | 0.32      | LB A/A    | 2 i       | 8 b       | 1 f       | 0 e       | 4 ab | 1 g    | 0 h    |
| 23                            | 1 d after planting Dual Magnum   | 1         | PT/A      | 11 a-d    | 13 b      | 18 c-f    | 2 de      | 4 ab | 72 a-e | 18 a-f |

## University of Georgia

|                               |           |           |           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     | AVG4PLAN  | biomass   | biomass   | biomass   | biomass   | biomass   | biomass   |
| Crop Code                     | CUUPE     | CUMSA     | CUMSA     | CUMSA     | CUUPE     | CUUPE     | CUUPE     |
| BBCH Scale                    | BWT       | BWT       | BWT       | BWT       | BWT       | BWT       | BWT       |
| Crop Variety                  |           |           |           |           |           |           |           |
| Rating Date                   | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 | Sep-04-07 |
| Rating Data Type              | ht        | #         | wt/g      | wt/g      | #         | wt/g      | wt/g      |
| Rating Unit                   | cm        | per plot  | per plot  | per plant | per plot  | per plot  | per plant |
| Assessed By                   |           |           |           |           |           |           |           |
| Days After First/Last Applic. | 18        | 18        | 18        | 18        | 18        | 18        | 18        |
| ARM Action Codes              | T16       |           |           |           |           |           |           |
| Trt Treatment                 | Rate      |           |           |           |           |           |           |
| No. Name                      | Rate Unit | 26        | 28        | 29        | 30        | 32        | 33        |
| 24 1 d after planting         |           | 10 a-e    | 8 b       | 20 c-f    | 1 e       | 4 ab      | 42 c-g    |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           |           |
| 25 Non-treated control        |           | 11 a-d    | 8 b       | 58 a-d    | 7 ab      | 4 a       | 85 a-d    |
| LSD (P=.05)                   |           | 3.5       | 13.5      | 37.6      | 3.6       | 0.5       | 50.4      |
| Standard Deviation            |           | 2.1       | 8.2       | 22.8      | 2.2       | 0.3       | 30.5      |
| CV                            |           | 25.67     | 93.94     | 69.4      | 59.01     | 7.02      | 57.0      |
| Bartlett's X2                 |           | 19.854    | 142.682   | 79.228    | 70.868    | 1.021     | 77.421    |
| P(Bartlett's X2)              |           | 0.705     | 0.001*    | 0.001*    | 0.001*    | 0.796     | 0.001*    |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 22: T16 = @AVG([C22].[C25])

# University of Georgia

| Pest Code                     | harv 1<br>CUMSA<br>BVVT             | harv 1<br>CUMSA<br>BVVT | harv 2<br>CUMSA<br>BVVT | harv 2<br>CUMSA<br>BVVT | harv 3<br>CUMSA<br>BVVT | harv 3<br>CUMSA<br>BVVT | harv 4<br>CUMSA<br>BVVT |       |       |       |
|-------------------------------|-------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------|-------|-------|
| Crop Code                     |                                     |                         |                         |                         |                         |                         |                         |       |       |       |
| BBCH Scale                    |                                     |                         |                         |                         |                         |                         |                         |       |       |       |
| Crop Variety                  |                                     |                         |                         |                         |                         |                         |                         |       |       |       |
| Rating Date                   | Sep-18-07                           | Sep-18-07               | Sep-21-07               | Sep-21-07               | Sep-24-07               | Sep-24-07               | Sep-26-07               |       |       |       |
| Rating Data Type              | #                                   | wt/lb                   | #                       | wt/lb                   | #                       | wt/lb                   | #                       |       |       |       |
| Rating Unit                   | per plot                            | per plot                | per plot                | per plot                | per plot                | per plot                | per plot                |       |       |       |
| Assessed By                   |                                     |                         |                         |                         |                         |                         |                         |       |       |       |
| Days After First/Last Applic. | 32                                  | 32                      | 35                      | 35                      | 38                      | 38                      | 40                      |       |       |       |
| ARM Action Codes              |                                     |                         |                         |                         |                         |                         |                         |       |       |       |
| Trt No.                       | Treatment Name                      | Rate                    | Unit                    | 36                      | 37                      | 38                      | 39                      | 40    | 41    | 42    |
| 1                             | 14 d before planting<br>Goal        | 8                       | OZ/A                    | 0 b                     | 0 b                     | 1 abc                   | 0 ab                    | 2 a-d | 1 a-d | 1 a-d |
| 2                             | 14 d before planting<br>Goal        | 16                      | OZ/A                    | 1 a                     | 0 a                     | 0 bc                    | 0 b                     | 3 ab  | 1 ab  | 2 a-d |
| 3                             | 14 d before planting<br>V-10204     | 0.16                    | LB A/A                  | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 1 bcd | 0 cd  | 1 bcd |
| 4                             | 14 d before planting<br>V-10204     | 0.32                    | LB A/A                  | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 1 a-d | 0 a-d | 1 a-d |
| 5                             | 14 d before planting<br>Dual Magnum | 1                       | PT/A                    | 0 b                     | 0 b                     | 1 ab                    | 0 ab                    | 1 a-d | 0 bcd | 2 abc |
| 6                             | 14 d before planting<br>Dual Magnum | 2                       | PT/A                    | 0 b                     | 0 b                     | 0 bc                    | 0 b                     | 1 a-d | 1 a-d | 3 a   |
| 7                             | 7 d before planting<br>Goal         | 8                       | OZ/A                    | 0 ab                    | 0 ab                    | 1 abc                   | 0 b                     | 2 a-d | 1 a-d | 2 a-d |
| 8                             | 7 d before planting<br>Goal         | 16                      | OZ/A                    | 0 b                     | 0 b                     | 2 a                     | 1 a                     | 2 a-d | 1 a-d | 1 a-d |
| 9                             | 7 d before planting<br>V-10204      | 0.16                    | LB A/A                  | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 0 d   | 0 d   | 1 a-d |
| 10                            | 7 d before planting<br>V-10204      | 0.32                    | LB A/A                  | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 0 d   | 0 d   | 0 d   |
| 11                            | 7 d before planting<br>Dual Magnum  | 1                       | PT/A                    | 0 b                     | 0 b                     | 0 bc                    | 0 b                     | 0 cd  | 0 d   | 1 a-d |
| 12                            | 7 d before planting<br>Dual Magnum  | 2                       | PT/A                    | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 2 abc | 1 abc | 1 bcd |
| 13                            | 1 d before planting<br>Goal         | 8                       | OZ/A                    | 0 b                     | 0 b                     | 1 abc                   | 0 b                     | 1 a-d | 0 bcd | 1 a-d |
| 14                            | 1 d before planting<br>Goal         | 16                      | OZ/A                    | 0 b                     | 0 b                     | 1 abc                   | 0 ab                    | 3 a   | 1 a   | 3 ab  |
| 15                            | 1 d before planting<br>V-10204      | 0.16                    | LB A/A                  | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 0 d   | 0 d   | 0 d   |
| 16                            | 1 d before planting<br>V-10204      | 0.32                    | LB A/A                  | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 0 d   | 0 d   | 0 cd  |
| 17                            | 1 d before planting<br>Dual Magnum  | 1                       | PT/A                    | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 1 bcd | 0 bcd | 1 a-d |
| 18                            | 1 d before planting<br>Dual Magnum  | 2                       | PT/A                    | 0 b                     | 0 b                     | 0 bc                    | 0 b                     | 0 cd  | 0 d   | 1 bcd |
| 19                            | 1 d after planting<br>Goal          | 8                       | OZ/A                    | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 0 d   | 0 d   | 0 cd  |
| 20                            | 1 d after planting<br>Goal          | 16                      | OZ/A                    | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 0 d   | 0 d   | 0 d   |
| 21                            | 1 d after planting<br>V-10204       | 0.16                    | LB A/A                  | 0 b                     | 0 b                     | 0 bc                    | 0 b                     | 0 d   | 0 d   | 0 d   |
| 22                            | 1 d after planting<br>V-10204       | 0.32                    | LB A/A                  | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 0 d   | 0 d   | 0 d   |
| 23                            | 1 d after planting<br>Dual Magnum   | 1                       | PT/A                    | 0 b                     | 0 b                     | 0 c                     | 0 b                     | 1 bcd | 0 bcd | 3 a   |

## University of Georgia

|                               |           |           |           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     | harv 1    | harv 1    | harv 2    | harv 2    | harv 3    | harv 3    | harv 4    |
| Crop Code                     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     |
| BBCH Scale                    | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      |
| Crop Variety                  |           |           |           |           |           |           |           |
| Rating Date                   | Sep-18-07 | Sep-18-07 | Sep-21-07 | Sep-21-07 | Sep-24-07 | Sep-24-07 | Sep-26-07 |
| Rating Data Type              | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         |
| Rating Unit                   | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  |
| Assessed By                   |           |           |           |           |           |           |           |
| Days After First/Last Applic. | 32        | 32        | 35        | 35        | 38        | 38        | 40        |
| ARM Action Codes              |           |           |           |           |           |           |           |
| Trt Treatment                 | Rate      |           |           |           |           |           |           |
| No. Name                      | Rate Unit | 36        | 37        | 38        | 39        | 40        | 41        |
| 24 1 d after planting         |           | 0 b       | 0 b       | 0 c       | 0 b       | 0 d       | 0 d       |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           | 1 bcd     |
| 25 Non-treated control        |           | 0 b       | 0 b       | 1 abc     | 0 b       | 1 a-d     | 0 a-d     |
| LSD (P=.05)                   |           | 0.4       | 0.1       | 1.0       | 0.4       | 1.9       | 0.7       |
| Standard Deviation            |           | 0.3       | 0.1       | 0.6       | 0.2       | 1.1       | 0.4       |
| CV                            |           | 650.85    | 631.04    | 183.85    | 184.98    | 127.58    | 121.2     |
| Bartlett's X2                 |           | 0.884     | 0.332     | 4.741     | 6.399     | 12.253    | 29.595    |
| P(Bartlett's X2)              |           | 0.347     | 0.564     | 0.943     | 0.845     | 0.507     | 0.013*    |
|                               |           |           |           |           |           |           | 0.831     |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# University of Georgia

| Pest Code                     | harv 4<br>CUMSA<br>BVVT             | harv 5<br>CUMSA<br>BVVT | harv 5<br>CUMSA<br>BVVT | harv 6<br>CUMSA<br>BVVT | harv 6<br>CUMSA<br>BVVT | harv 7<br>CUMSA<br>BVVT | harv 7<br>CUMSA<br>BVVT | harv 8<br>CUMSA<br>BVVT |       |       |
|-------------------------------|-------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------|-------|
| Crop Code                     |                                     |                         |                         |                         |                         |                         |                         |                         |       |       |
| BBCH Scale                    |                                     |                         |                         |                         |                         |                         |                         |                         |       |       |
| Crop Variety                  |                                     |                         |                         |                         |                         |                         |                         |                         |       |       |
| Rating Date                   | Sep-26-07                           | Sep-28-07               | Sep-28-07               | Oct-01-07               | Oct-01-07               | Oct-03-07               | Oct-03-07               | Oct-05-07               |       |       |
| Rating Data Type              | wt/lb                               | #                       | wt/lb                   | #                       | wt/lb                   | #                       | wt/lb                   | #                       |       |       |
| Rating Unit                   | per plot                            | per plot                | per plot                | per plot                | per plot                | per plot                | per plot                | per plot                |       |       |
| Assessed By                   |                                     |                         |                         |                         |                         |                         |                         |                         |       |       |
| Days After First/Last Applic. | 40                                  | 42                      | 42                      | 45                      | 45                      | 47                      | 47                      | 49                      |       |       |
| ARM Action Codes              |                                     |                         |                         |                         |                         |                         |                         |                         |       |       |
| Trt No.                       | Treatment Name                      | Rate                    | Rate                    | Rate                    | Rate                    | Rate                    | Rate                    | Rate                    |       |       |
|                               |                                     | Unit                    | Unit                    | Unit                    | Unit                    | Unit                    | Unit                    | Unit                    |       |       |
| 43                            | 44                                  | 45                      | 46                      | 47                      | 48                      | 49                      | 50                      |                         |       |       |
| 1                             | 14 d before planting<br>Goal        | 8 OZ/A                  | 0 b-f                   | 1 ab                    | 0 b-e                   | 3 bc                    | 1 b-f                   | 2 b-e                   | 1 a-d | 3 abc |
| 2                             | 14 d before planting<br>Goal        | 16 OZ/A                 | 1 a-e                   | 1 ab                    | 0 b-e                   | 6 a                     | 2 a                     | 3 a-d                   | 1 ab  | 1 a-d |
| 3                             | 14 d before planting<br>V-10204     | 0.16 LB A/A             | 0 ef                    | 1 ab                    | 0 b-e                   | 1 def                   | 0 efg                   | 1 cde                   | 0 cd  | 1 a-d |
| 4                             | 14 d before planting<br>V-10204     | 0.32 LB A/A             | 0 c-f                   | 1 ab                    | 0 b-e                   | 1 b-f                   | 0 b-g                   | 1 cde                   | 0 bcd | 2 a-d |
| 5                             | 14 d before planting<br>Dual Magnum | 1 PT/A                  | 1 a                     | 2 ab                    | 1 a                     | 3 bcd                   | 1 bcd                   | 3 a-e                   | 1 a-d | 4 a   |
| 6                             | 14 d before planting<br>Dual Magnum | 2 PT/A                  | 1 abc                   | 0 ab                    | 0 cde                   | 3 bc                    | 1 b                     | 2 a-e                   | 1 a-d | 3 a-d |
| 7                             | 7 d before planting<br>Goal         | 8 OZ/A                  | 1 a-f                   | 1 ab                    | 0 a-e                   | 3 bcd                   | 1 b-f                   | 2 a-e                   | 1 a-d | 3 a-d |
| 8                             | 7 d before planting<br>Goal         | 16 OZ/A                 | 1 b-f                   | 2 ab                    | 0 a-e                   | 3 b-e                   | 1 bc                    | 3 a-e                   | 1 a-d | 4 ab  |
| 9                             | 7 d before planting<br>V-10204      | 0.16 LB A/A             | 0 c-f                   | 0 ab                    | 0 cde                   | 0 ef                    | 0 c-g                   | 2 b-e                   | 0 bcd | 2 a-d |
| 10                            | 7 d before planting<br>V-10204      | 0.32 LB A/A             | 0 f                     | 0 ab                    | 0 de                    | 0 f                     | 0 g                     | 1 cde                   | 0 bcd | 1 bcd |
| 11                            | 7 d before planting<br>Dual Magnum  | 1 PT/A                  | 0 b-f                   | 3 a                     | 1 a-d                   | 1 b-f                   | 1 b-g                   | 4 ab                    | 1 abc | 4 ab  |
| 12                            | 7 d before planting<br>Dual Magnum  | 2 PT/A                  | 0 ef                    | 0 b                     | 0 e                     | 4 b                     | 1 bc                    | 3 a-e                   | 1 a-d | 2 a-d |
| 13                            | 1 d before planting<br>Goal         | 8 OZ/A                  | 1 b-f                   | 1 ab                    | 0 b-e                   | 1 c-f                   | 0 b-g                   | 4 abc                   | 1 abc | 4 a   |
| 14                            | 1 d before planting<br>Goal         | 16 OZ/A                 | 1 a-d                   | 2 ab                    | 1 ab                    | 3 bc                    | 1 b-e                   | 5 a                     | 2 a   | 4 a   |
| 15                            | 1 d before planting<br>V-10204      | 0.16 LB A/A             | 0 f                     | 0 ab                    | 0 cde                   | 1 def                   | 0 fg                    | 0 e                     | 0 d   | 0 d   |
| 16                            | 1 d before planting<br>V-10204      | 0.32 LB A/A             | 0 f                     | 1 ab                    | 0 b-e                   | 1 def                   | 0 c-g                   | 2 b-e                   | 0 cd  | 0 cd  |
| 17                            | 1 d before planting<br>Dual Magnum  | 1 PT/A                  | 0 def                   | 2 ab                    | 1 abc                   | 1 c-f                   | 0 b-g                   | 2 a-e                   | 1 a-d | 2 a-d |
| 18                            | 1 d before planting<br>Dual Magnum  | 2 PT/A                  | 0 ef                    | 2 ab                    | 0 a-e                   | 2 b-f                   | 1 b-g                   | 0 de                    | 0 bcd | 2 a-d |
| 19                            | 1 d after planting<br>Goal          | 8 OZ/A                  | 0 ef                    | 1 ab                    | 0 b-e                   | 1 def                   | 0 efg                   | 1 cde                   | 0 bcd | 0 d   |
| 20                            | 1 d after planting<br>Goal          | 16 OZ/A                 | 0 f                     | 0 b                     | 0 e                     | 0 f                     | 0 g                     | 0 e                     | 0 d   | 0 cd  |
| 21                            | 1 d after planting<br>V-10204       | 0.16 LB A/A             | 0 f                     | 0 b                     | 0 e                     | 0 ef                    | 0 fg                    | 0 e                     | 0 d   | 0 d   |
| 22                            | 1 d after planting<br>V-10204       | 0.32 LB A/A             | 0 f                     | 0 b                     | 0 e                     | 0 f                     | 0 g                     | 0 e                     | 0 d   | 0 d   |
| 23                            | 1 d after planting<br>Dual Magnum   | 1 PT/A                  | 1 ab                    | 1 ab                    | 0 b-e                   | 1 def                   | 0 d-g                   | 3 a-d                   | 1 a-d | 3 abc |

## University of Georgia

|                               |           |           |           |           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     | harv 4    | harv 5    | harv 5    | harv 6    | harv 6    | harv 7    | harv 7    | harv 8    |
| Crop Code                     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     |
| BBCH Scale                    | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      |
| Crop Variety                  |           |           |           |           |           |           |           |           |
| Rating Date                   | Sep-26-07 | Sep-28-07 | Sep-28-07 | Oct-01-07 | Oct-01-07 | Oct-03-07 | Oct-03-07 | Oct-05-07 |
| Rating Data Type              | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         |
| Rating Unit                   | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  |
| Assessed By                   |           |           |           |           |           |           |           |           |
| Days After First/Last Applic. | 40        | 42        | 42        | 45        | 45        | 47        | 47        | 49        |
| ARM Action Codes              |           |           |           |           |           |           |           |           |
| Trt Treatment                 |           |           |           |           |           |           |           |           |
| Rate                          |           |           |           |           |           |           |           |           |
| No. Name                      | 43        | 44        | 45        | 46        | 47        | 48        | 49        | 50        |
| 24 1 d after planting         | 0 def     | 1 ab      | 0 b-e     | 1 c-f     | 0 c-g     | 1 b-e     | 0 a-d     | 2 a-d     |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           |           |           |
| 25 Non-treated control        | 0 b-f     | 1 ab      | 0 b-e     | 1 b-f     | 0 b-g     | 2 b-e     | 1 a-d     | 4 a       |
| LSD (P=.05)                   | 0.6       | 2.0       | 0.5       | 2.1       | 0.7       | 2.7       | 1.0       | 2.7       |
| Standard Deviation            | 0.4       | 1.2       | 0.3       | 1.3       | 0.4       | 1.7       | 0.6       | 1.7       |
| CV                            | 92.24     | 115.18    | 101.9     | 78.1      | 77.08     | 86.27     | 93.5      | 81.15     |
| Bartlett's X2                 | 25.204    | 20.233    | 27.713    | 18.624    | 22.938    | 25.067    | 37.425    | 21.376    |
| P(Bartlett's X2)              | 0.154     | 0.381     | 0.116     | 0.546     | 0.347     | 0.123     | 0.01*     | 0.316     |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# University of Georgia

| Pest Code                     | harv 8<br>CUMSA<br>BVVT             | harv 9<br>CUMSA<br>BVVT | harv 9<br>CUMSA<br>BVVT | harv 10<br>CUMSA<br>BVVT | harv 10<br>CUMSA<br>BVVT | harv 11<br>CUMSA<br>BVVT | harv 11<br>CUMSA<br>BVVT | harv 12<br>CUMSA<br>BVVT |       |       |      |
|-------------------------------|-------------------------------------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------|-------|------|
| Crop Code                     |                                     |                         |                         |                          |                          |                          |                          |                          |       |       |      |
| BBCH Scale                    |                                     |                         |                         |                          |                          |                          |                          |                          |       |       |      |
| Crop Variety                  |                                     |                         |                         |                          |                          |                          |                          |                          |       |       |      |
| Rating Date                   | Oct-05-07                           | Oct-08-07               | Oct-08-07               | Oct-11-07                | Oct-11-07                | Oct-16-07                | Oct-16-07                | Oct-19-07                |       |       |      |
| Rating Data Type              | wt/lb                               | #                       | wt/lb                   | #                        | wt/lb                    | #                        | wt/lb                    | #                        |       |       |      |
| Rating Unit                   | per plot                            | per plot                | per plot                | per plot                 | per plot                 | per plot                 | per plot                 | per plot                 |       |       |      |
| Assessed By                   |                                     |                         |                         |                          |                          |                          |                          |                          |       |       |      |
| Days After First/Last Applic. | 49                                  | 52                      | 52                      | 55                       | 55                       | 60                       | 60                       | 63                       |       |       |      |
| ARM Action Codes              |                                     |                         |                         |                          |                          |                          |                          |                          |       |       |      |
| Trt No.                       | Treatment Name                      | Rate                    | Rate Unit               | 51                       | 52                       | 53                       | 54                       | 55                       | 56    | 57    | 58   |
| 1                             | 14 d before planting<br>Goal        | 8                       | OZ/A                    | 1 abc                    | 5 a-d                    | 2 a-f                    | 2 a-g                    | 1 b-f                    | 1 abc | 0 def | 3 ab |
| 2                             | 14 d before planting<br>Goal        | 16                      | OZ/A                    | 0 bc                     | 5 a-d                    | 2 abc                    | 5 a                      | 2 abc                    | 3 abc | 2 a-e | 3 ab |
| 3                             | 14 d before planting<br>V-10204     | 0.16                    | LB A/A                  | 0 c                      | 3 b-f                    | 1 d-h                    | 1 c-g                    | 1 def                    | 2 abc | 1 b-f | 2 ab |
| 4                             | 14 d before planting<br>V-10204     | 0.32                    | LB A/A                  | 0 bc                     | 3 a-f                    | 1 c-h                    | 1 d-g                    | 0 ef                     | 2 abc | 1 b-f | 3 ab |
| 5                             | 14 d before planting<br>Dual Magnum | 1                       | PT/A                    | 2 a                      | 3 a-f                    | 1 b-g                    | 4 a-e                    | 2 a                      | 5 a   | 2 ab  | 2 ab |
| 6                             | 14 d before planting<br>Dual Magnum | 2                       | PT/A                    | 1 abc                    | 3 a-f                    | 1 d-h                    | 5 ab                     | 2 a-d                    | 4 abc | 1 a-f | 3 ab |
| 7                             | 7 d before planting<br>Goal         | 8                       | OZ/A                    | 1 abc                    | 4 a-e                    | 2 a-f                    | 3 a-f                    | 1 b-f                    | 4 ab  | 2 ab  | 2 ab |
| 8                             | 7 d before planting<br>Goal         | 16                      | OZ/A                    | 1 ab                     | 5 abc                    | 2 ab                     | 5 a                      | 2 ab                     | 5 a   | 3 a   | 5 a  |
| 9                             | 7 d before planting<br>V-10204      | 0.16                    | LB A/A                  | 0 abc                    | 1 def                    | 0 fgh                    | 2 b-g                    | 1 def                    | 0 bc  | 0 f   | 2 ab |
| 10                            | 7 d before planting<br>V-10204      | 0.32                    | LB A/A                  | 0 c                      | 1 ef                     | 0 gh                     | 2 b-g                    | 0 ef                     | 1 abc | 0 def | 1 b  |
| 11                            | 7 d before planting<br>Dual Magnum  | 1                       | PT/A                    | 1 abc                    | 5 a-d                    | 2 a-f                    | 3 a-f                    | 1 b-f                    | 4 abc | 1 a-f | 5 a  |
| 12                            | 7 d before planting<br>Dual Magnum  | 2                       | PT/A                    | 1 abc                    | 5 abc                    | 2 abc                    | 4 a-d                    | 1 a-e                    | 5 a   | 2 abc | 3 ab |
| 13                            | 1 d before planting<br>Goal         | 8                       | OZ/A                    | 1 ab                     | 4 a-e                    | 2 a-e                    | 2 a-g                    | 1 c-f                    | 4 abc | 1 a-f | 2 ab |
| 14                            | 1 d before planting<br>Goal         | 16                      | OZ/A                    | 1 abc                    | 5 ab                     | 2 a-d                    | 4 abc                    | 2 ab                     | 2 abc | 2 a-d | 5 a  |
| 15                            | 1 d before planting<br>V-10204      | 0.16                    | LB A/A                  | 0 c                      | 2 c-f                    | 0 e-h                    | 1 efg                    | 0 ef                     | 0 bc  | 0 f   | 1 ab |
| 16                            | 1 d before planting<br>V-10204      | 0.32                    | LB A/A                  | 0 c                      | 2 b-f                    | 0 e-h                    | 1 efg                    | 0 ef                     | 0 bc  | 0 ef  | 0 b  |
| 17                            | 1 d before planting<br>Dual Magnum  | 1                       | PT/A                    | 1 abc                    | 5 a-d                    | 2 a-d                    | 2 b-g                    | 1 def                    | 3 abc | 1 a-f | 2 ab |
| 18                            | 1 d before planting<br>Dual Magnum  | 2                       | PT/A                    | 0 bc                     | 4 a-e                    | 1 b-h                    | 1 c-g                    | 0 ef                     | 2 abc | 1 b-f | 1 b  |
| 19                            | 1 d after planting<br>Goal          | 8                       | OZ/A                    | 0 c                      | 3 a-f                    | 1 c-h                    | 0 fg                     | 0 ef                     | 3 abc | 1 b-f | 1 b  |
| 20                            | 1 d after planting<br>Goal          | 16                      | OZ/A                    | 0 c                      | 1 def                    | 0 e-h                    | 0 g                      | 0 f                      | 1 abc | 0 c-f | 2 ab |
| 21                            | 1 d after planting<br>V-10204       | 0.16                    | LB A/A                  | 0 c                      | 0 f                      | 0 h                      | 0 g                      | 0 f                      | 0 c   | 0 f   | 0 b  |
| 22                            | 1 d after planting<br>V-10204       | 0.32                    | LB A/A                  | 0 c                      | 0 f                      | 0 h                      | 0 g                      | 0 f                      | 0 c   | 0 f   | 0 b  |
| 23                            | 1 d after planting<br>Dual Magnum   | 1                       | PT/A                    | 1 abc                    | 5 a-d                    | 2 a-d                    | 2 b-g                    | 1 c-f                    | 2 abc | 1 b-f | 3 ab |

## University of Georgia

|                               |           |           |           |           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     | harv 8    | harv 9    | harv 9    | harv 10   | harv 10   | harv 11   | harv 11   | harv 12   |
| Crop Code                     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     | CUMSA     |
| BBCH Scale                    | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      |
| Crop Variety                  |           |           |           |           |           |           |           |           |
| Rating Date                   | Oct-05-07 | Oct-08-07 | Oct-08-07 | Oct-11-07 | Oct-11-07 | Oct-16-07 | Oct-16-07 | Oct-19-07 |
| Rating Data Type              | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         |
| Rating Unit                   | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  |
| Assessed By                   |           |           |           |           |           |           |           |           |
| Days After First/Last Applic. | 49        | 52        | 52        | 55        | 55        | 60        | 60        | 63        |
| ARM Action Codes              |           |           |           |           |           |           |           |           |
| Trt Treatment                 |           |           |           |           |           |           |           |           |
| Rate                          |           |           |           |           |           |           |           |           |
| No. Name                      | 51        | 52        | 53        | 54        | 55        | 56        | 57        | 58        |
| Rate Unit                     |           |           |           |           |           |           |           |           |
| 24 1 d after planting         | 1 abc     | 3 a-f     | 1 d-h     | 1 c-g     | 0 ef      | 3 abc     | 1 a-f     | 1 b       |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           |           |           |
| 25 Non-treated control        | 1 ab      | 6 a       | 3 a       | 2 b-g     | 1 c-f     | 4 ab      | 2 ab      | 5 a       |
| LSD (P=.05)                   | 0.9       | 2.8       | 1.1       | 2.7       | 1.1       | 3.4       | 1.3       | 3.0       |
| Standard Deviation            | 0.6       | 1.7       | 0.6       | 1.6       | 0.6       | 2.0       | 0.8       | 1.8       |
| CV                            | 86.96     | 52.43     | 54.18     | 76.09     | 83.06     | 85.71     | 72.45     | 82.54     |
| Bartlett's X2                 | 23.453    | 19.324    | 34.135    | 29.169    | 44.546    | 31.37     | 28.709    | 29.206    |
| P(Bartlett's X2)              | 0.267     | 0.625     | 0.048*    | 0.11      | 0.002*    | 0.089     | 0.153     | 0.084     |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)



# University of Georgia

| Pest Code                     | harv 12<br>CUMSA<br>BVVT            | harv 1-4<br>CUMSA<br>BVVT | harv 1-4<br>CUMSA<br>BVVT | harv 1-8<br>CUMSA<br>BVVT | harv 1-8<br>CUMSA<br>BVVT | harv1-12<br>CUMSA<br>BVVT | harv1-12<br>CUMSA<br>BVVT | harv 1<br>CUUPE<br>BVVT | harv 1<br>CUUPE<br>BVVT |     |      |
|-------------------------------|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------|-------------------------|-----|------|
| Crop Code                     |                                     |                           |                           |                           |                           |                           |                           |                         |                         |     |      |
| BBCH Scale                    |                                     |                           |                           |                           |                           |                           |                           |                         |                         |     |      |
| Crop Variety                  |                                     |                           |                           |                           |                           |                           |                           |                         |                         |     |      |
| Rating Date                   | Oct-19-07                           |                           |                           |                           |                           |                           |                           | Sep-11-07               | Sep-11-07               |     |      |
| Rating Data Type              | wt/lb                               | #                         | wt/lb                     | #                         | wt/lb                     | #                         | wt/lb                     | #                       | wt/lb                   |     |      |
| Rating Unit                   | per plot                            | per plot                  | per plot                  | per plot                  | per plot                  | per plot                  | per plot                  | per plot                | per plot                |     |      |
| Assessed By                   |                                     |                           |                           |                           |                           |                           |                           |                         |                         |     |      |
| Days After First/Last Applic. | 63                                  |                           |                           |                           |                           |                           |                           | 25                      | 25                      |     |      |
| ARM Action Codes              |                                     | T1                        | T2                        | T3                        | T4                        | T5                        | T6                        |                         |                         |     |      |
| Trt No.                       | Treatment Name                      | Rate                      | Rate                      | Rate                      | Rate                      | Rate                      | Rate                      | Rate                    | Rate                    |     |      |
|                               |                                     | Unit                      | Unit                      | Unit                      | Unit                      | Unit                      | Unit                      | Unit                    | Unit                    |     |      |
|                               |                                     |                           | 59                        | 60                        | 61                        | 62                        | 63                        | 64                      | 65                      |     |      |
|                               |                                     |                           | 67                        | 68                        |                           |                           |                           |                         |                         |     |      |
| 1                             | 14 d before planting<br>Goal        | 8 OZ/A                    | 2 abc                     | 4 abc                     | 2 abc                     | 14 bcd                    | 5 a-d                     | 25 b-e                  | 9 cde                   | 0 a | 0 ab |
| 2                             | 14 d before planting<br>Goal        | 16 OZ/A                   | 2 abc                     | 6 ab                      | 2 ab                      | 18 ab                     | 6 ab                      | 34 ab                   | 14 abc                  | 1 a | 0 a  |
| 3                             | 14 d before planting<br>V-10204     | 0.16 LB A/A               | 1 a-d                     | 1 cde                     | 0 de                      | 5 h-l                     | 1 fg                      | 13 e-h                  | 4 fgh                   | 0 a | 0 b  |
| 4                             | 14 d before planting<br>V-10204     | 0.32 LB A/A               | 1 a-d                     | 2 b-e                     | 1 cde                     | 8 e-i                     | 2 d-g                     | 17 d-g                  | 5 efg                   | 0 a | 0 b  |
| 5                             | 14 d before planting<br>Dual Magnum | 1 PT/A                    | 1 a-d                     | 5 abc                     | 2 ab                      | 16 abc                    | 7 a                       | 30 abc                  | 13 abc                  | 0 a | 0 ab |
| 6                             | 14 d before planting<br>Dual Magnum | 2 PT/A                    | 1 abc                     | 5 abc                     | 2 abc                     | 14 b-e                    | 5 abc                     | 28 a-d                  | 10 bcd                  | 1 a | 0 ab |
| 7                             | 7 d before planting<br>Goal         | 8 OZ/A                    | 1 a-d                     | 4 abc                     | 2 abc                     | 14 b-e                    | 5 abc                     | 27 a-d                  | 11 a-d                  | 0 a | 0 b  |
| 8                             | 7 d before planting<br>Goal         | 16 OZ/A                   | 2 ab                      | 5 abc                     | 2 ab                      | 16 abc                    | 6 ab                      | 36 ab                   | 15 a                    | 1 a | 0 ab |
| 9                             | 7 d before planting<br>V-10204      | 0.16 LB A/A               | 1 a-d                     | 1 cde                     | 0 de                      | 6 g-l                     | 2 efg                     | 11 f-i                  | 3 fgh                   | 0 a | 0 b  |
| 10                            | 7 d before planting<br>V-10204      | 0.32 LB A/A               | 0 cd                      | 0 e                       | 0 e                       | 2 i-l                     | 1 fg                      | 6 ghi                   | 2 gh                    | 0 a | 0 b  |
| 11                            | 7 d before planting<br>Dual Magnum  | 1 PT/A                    | 2 a                       | 2 cde                     | 1 cde                     | 14 bcd                    | 4 b-e                     | 30 abc                  | 10 bcd                  | 0 a | 0 b  |
| 12                            | 7 d before planting<br>Dual Magnum  | 2 PT/A                    | 1 a-d                     | 3 a-e                     | 1 b-e                     | 12 b-f                    | 4 b-e                     | 29 a-d                  | 11 a-d                  | 0 a | 0 b  |
| 13                            | 1 d before planting<br>Goal         | 8 OZ/A                    | 1 a-d                     | 3 a-e                     | 1 b-e                     | 13 b-e                    | 5 a-d                     | 25 b-e                  | 9 cde                   | 0 a | 0 b  |
| 14                            | 1 d before planting<br>Goal         | 16 OZ/A                   | 2 abc                     | 6 a                       | 2 a                       | 21 a                      | 7 a                       | 38 a                    | 14 ab                   | 0 a | 0 b  |
| 15                            | 1 d before planting<br>V-10204      | 0.16 LB A/A               | 1 a-d                     | 0 e                       | 0 e                       | 1 jkl                     | 0 g                       | 5 ghi                   | 2 gh                    | 0 a | 0 b  |
| 16                            | 1 d before planting<br>V-10204      | 0.32 LB A/A               | 0 d                       | 0 de                      | 0 e                       | 4 h-l                     | 1 fg                      | 7 ghi                   | 1 gh                    | 0 a | 0 b  |
| 17                            | 1 d before planting<br>Dual Magnum  | 1 PT/A                    | 1 a-d                     | 2 cde                     | 1 cde                     | 9 d-h                     | 3 c-f                     | 20 c-f                  | 8 def                   | 0 a | 0 b  |
| 18                            | 1 d before planting<br>Dual Magnum  | 2 PT/A                    | 0 bcd                     | 1 cde                     | 0 de                      | 7 f-j                     | 2 d-g                     | 15 e-h                  | 5 e-h                   | 0 a | 0 b  |
| 19                            | 1 d after planting<br>Goal          | 8 OZ/A                    | 0 cd                      | 0 de                      | 0 de                      | 3 h-l                     | 1 fg                      | 10 f-i                  | 3 gh                    | 0 a | 0 b  |
| 20                            | 1 d after planting<br>Goal          | 16 OZ/A                   | 1 a-d                     | 0 e                       | 0 e                       | 0 kl                      | 0 g                       | 4 hi                    | 2 gh                    | 0 a | 0 b  |
| 21                            | 1 d after planting<br>V-10204       | 0.16 LB A/A               | 0 d                       | 0 de                      | 0 de                      | 1 jkl                     | 0 g                       | 1 i                     | 0 gh                    | 0 a | 0 b  |
| 22                            | 1 d after planting<br>V-10204       | 0.32 LB A/A               | 0 d                       | 0 e                       | 0 e                       | 0 l                       | 0 g                       | 0 i                     | 0 h                     | 0 a | 0 b  |
| 23                            | 1 d after planting<br>Dual Magnum   | 1 PT/A                    | 2 abc                     | 4 a-d                     | 1 a-d                     | 12 b-f                    | 4 b-e                     | 24 b-e                  | 9 cde                   | 0 a | 0 ab |

## University of Georgia

|                               |           |          |          |          |          |          |          |           |           |
|-------------------------------|-----------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| Pest Code                     | harv 12   | harv 1-4 | harv 1-4 | harv 1-8 | harv 1-8 | harv1-12 | harv1-12 | harv 1    | harv 1    |
| Crop Code                     | CUMSA     | CUMSA    | CUMSA    | CUMSA    | CUMSA    | CUMSA    | CUMSA    | CUUPE     | CUUPE     |
| BBCH Scale                    | BVWT      | BVWT     | BVWT     | BVWT     | BVWT     | BVWT     | BVWT     | BVWT      | BVWT      |
| Crop Variety                  |           |          |          |          |          |          |          |           |           |
| Rating Date                   | Oct-19-07 |          |          |          |          |          |          | Sep-11-07 | Sep-11-07 |
| Rating Data Type              | wt/lb     | #        | wt/lb    | #        | wt/lb    | #        | wt/lb    | #         | wt/lb     |
| Rating Unit                   | per plot  | per plot | per plot | per plot | per plot | per plot | per plot | per plot  | per plot  |
| Assessed By                   |           |          |          |          |          |          |          |           |           |
| Days After First/Last Applic. | 63        |          |          |          |          |          |          | 25        | 25        |
| ARM Action Codes              |           | T1       | T2       | T3       | T4       | T5       | T6       |           |           |
| Trt Treatment                 | Rate      |          |          |          |          |          |          |           |           |
| No. Name                      | Rate Unit | 59       | 60       | 61       | 62       | 63       | 64       | 65        | 67        |
| 24 1 d after planting         |           | 0 cd     | 1 de     | 0 de     | 6 f-k    | 2 efg    | 15 e-h   | 5 e-h     | 0 a       |
| Dual Magnum                   | 2 PT/A    |          |          |          |          |          |          |           | 0 b       |
| 25 Non-treated control        |           | 2 a      | 3 a-e    | 1 b-e    | 11 c-g   | 4 b-e    | 28 a-d   | 11 a-d    | 0 a       |
|                               |           |          |          |          |          |          |          |           | 0 b       |
| LSD (P=.05)                   |           | 1.2      | 3.0      | 1.0      | 5.3      | 2.3      | 10.5     | 4.1       | 0.7       |
| Standard Deviation            |           | 0.7      | 1.8      | 0.6      | 3.2      | 1.4      | 6.3      | 2.5       | 0.4       |
| CV                            |           | 76.22    | 76.21    | 71.47    | 35.64    | 45.01    | 33.27    | 35.42     | 271.23    |
| Bartlett's X2                 |           | 30.618   | 26.01    | 31.073   | 45.447   | 47.076   | 44.304   | 38.404    | 3.446     |
| P(Bartlett's X2)              |           | 0.08     | 0.165    | 0.054    | 0.004*   | 0.002*   | 0.005*   | 0.023*    | 0.903     |
|                               |           |          |          |          |          |          |          |           | 0.179     |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 53: T1 = ([C36]+[C38]+[C40]+[C42])

Column 54: T2 = ([C37]+[C39]+[C41]+[C43])

Column 55: T3 = ([C60]+[C44]+[C46]+[C48]+[C50])

Column 56: T4 = ([C61]+[C45]+[C47]+[C49]+[C51])

Column 57: T5 = ([C62]+[C52]+[C54]+[C56]+[C58])

Column 58: T6 = ([C63]+[C53]+[C55]+[C57]+[C59])

# University of Georgia

| Pest Code                     | harv 2<br>CUUPE                     | harv 2<br>CUUPE | harv 3<br>CUUPE | harv 3<br>CUUPE | harv 4<br>CUUPE | harv 4<br>CUUPE | harv 5<br>CUUPE |       |       |
|-------------------------------|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|-------|
| Crop Code                     |                                     |                 |                 |                 |                 |                 |                 |       |       |
| BBCH Scale                    |                                     |                 |                 |                 |                 |                 |                 |       |       |
| Crop Variety                  |                                     |                 |                 |                 |                 |                 |                 |       |       |
| Rating Date                   | Sep-14-07                           | Sep-14-07       | Sep-17-07       | Sep-17-07       | Sep-19-07       | Sep-19-07       | Sep-21-07       |       |       |
| Rating Data Type              | #                                   | wt/lb           | #               | wt/lb           | #               | wt/lb           | #               |       |       |
| Rating Unit                   | per plot                            | per plot        | per plot        | per plot        | per plot        | per plot        | per plot        |       |       |
| Assessed By                   |                                     |                 |                 |                 |                 |                 |                 |       |       |
| Days After First/Last Applic. | 28                                  | 28              | 31              | 31              | 33              | 33              | 35              |       |       |
| ARM Action Codes              |                                     |                 |                 |                 |                 |                 |                 |       |       |
| Trt No.                       | Treatment Name                      | Rate            | Rate            | Rate            | Rate            | Rate            | Rate            |       |       |
|                               |                                     | Unit            | Unit            | Unit            | Unit            | Unit            | Unit            |       |       |
|                               |                                     | 69              | 70              | 71              | 72              | 73              | 74              |       |       |
|                               |                                     |                 |                 |                 |                 |                 |                 |       |       |
| 1                             | 14 d before planting<br>Goal        | 8 OZ/A          | 2 a             | 0 a             | 1 bcd           | 0 bc            | 3 a-d           | 0 a-d | 4 abc |
| 2                             | 14 d before planting<br>Goal        | 16 OZ/A         | 1 ab            | 0 a             | 3 abc           | 1 bc            | 3 a-d           | 0 a-d | 4 abc |
| 3                             | 14 d before planting<br>V-10204     | 0.16 LB A/A     | 1 ab            | 0 a             | 2 a-d           | 0 bc            | 2 a-d           | 0 a-d | 3 a-e |
| 4                             | 14 d before planting<br>V-10204     | 0.32 LB A/A     | 0 b             | 0 a             | 1 bcd           | 0 c             | 2 a-d           | 0 a-d | 1 cde |
| 5                             | 14 d before planting<br>Dual Magnum | 1 PT/A          | 0 b             | 0 a             | 1 bcd           | 0 bc            | 3 ab            | 0 a-d | 4 a-d |
| 6                             | 14 d before planting<br>Dual Magnum | 2 PT/A          | 1 ab            | 0 a             | 5 a             | 1 a             | 3 abc           | 1 a   | 4 a-d |
| 7                             | 7 d before planting<br>Goal         | 8 OZ/A          | 1 ab            | 0 a             | 4 ab            | 1 bc            | 3 ab            | 0 abc | 1 b-e |
| 8                             | 7 d before planting<br>Goal         | 16 OZ/A         | 0 b             | 0 a             | 2 a-d           | 1 b             | 4 a             | 0 ab  | 4 ab  |
| 9                             | 7 d before planting<br>V-10204      | 0.16 LB A/A     | 0 b             | 0 a             | 0 d             | 0 c             | 0 d             | 0 d   | 0 e   |
| 10                            | 7 d before planting<br>V-10204      | 0.32 LB A/A     | 0 b             | 0 a             | 0 d             | 0 c             | 1 bcd           | 0 cd  | 1 cde |
| 11                            | 7 d before planting<br>Dual Magnum  | 1 PT/A          | 0 b             | 0 a             | 1 bcd           | 0 bc            | 2 a-d           | 0 a-d | 2 a-e |
| 12                            | 7 d before planting<br>Dual Magnum  | 2 PT/A          | 0 b             | 0 a             | 3 a-d           | 1 bc            | 1 a-d           | 0 bcd | 3 a-e |
| 13                            | 1 d before planting<br>Goal         | 8 OZ/A          | 0 b             | 0 a             | 3 a-d           | 0 bc            | 1 a-d           | 0 a-d | 4 a-d |
| 14                            | 1 d before planting<br>Goal         | 16 OZ/A         | 0 b             | 0 a             | 2 a-d           | 0 bc            | 2 a-d           | 0 a-d | 5 a   |
| 15                            | 1 d before planting<br>V-10204      | 0.16 LB A/A     | 0 b             | 0 a             | 0 d             | 0 c             | 1 bcd           | 0 bcd | 1 cde |
| 16                            | 1 d before planting<br>V-10204      | 0.32 LB A/A     | 0 b             | 0 a             | 0 d             | 0 c             | 0 d             | 0 d   | 0 de  |
| 17                            | 1 d before planting<br>Dual Magnum  | 1 PT/A          | 0 b             | 0 a             | 2 a-d           | 0 bc            | 2 a-d           | 0 a-d | 2 a-e |
| 18                            | 1 d before planting<br>Dual Magnum  | 2 PT/A          | 0 b             | 0 a             | 1 bcd           | 0 c             | 0 cd            | 0 d   | 3 a-e |
| 19                            | 1 d after planting<br>Goal          | 8 OZ/A          | 0 b             | 0 a             | 0 d             | 0 c             | 0 d             | 0 d   | 0 e   |
| 20                            | 1 d after planting<br>Goal          | 16 OZ/A         | 0 b             | 0 a             | 0 d             | 0 c             | 0 d             | 0 d   | 0 e   |
| 21                            | 1 d after planting<br>V-10204       | 0.16 LB A/A     | 0 b             | 0 a             | 0 d             | 0 c             | 0 d             | 0 d   | 0 e   |
| 22                            | 1 d after planting<br>V-10204       | 0.32 LB A/A     | 0 b             | 0 a             | 0 d             | 0 c             | 0 d             | 0 d   | 0 e   |
| 23                            | 1 d after planting<br>Dual Magnum   | 1 PT/A          | 1 ab            | 0 a             | 3 a-d           | 0 bc            | 2 a-d           | 0 a-d | 3 a-e |

## University of Georgia

|                               |           |           |           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     | harv 2    | harv 2    | harv 3    | harv 3    | harv 4    | harv 4    | harv 5    |
| Crop Code                     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     |
| BBCH Scale                    | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      |
| Crop Variety                  |           |           |           |           |           |           |           |
| Rating Date                   | Sep-14-07 | Sep-14-07 | Sep-17-07 | Sep-17-07 | Sep-19-07 | Sep-19-07 | Sep-21-07 |
| Rating Data Type              | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         |
| Rating Unit                   | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  |
| Assessed By                   |           |           |           |           |           |           |           |
| Days After First/Last Applic. | 28        | 28        | 31        | 31        | 33        | 33        | 35        |
| ARM Action Codes              |           |           |           |           |           |           |           |
| Trt Treatment                 | Rate      |           |           |           |           |           |           |
| No. Name                      | Rate Unit | 69        | 70        | 71        | 72        | 73        | 74        |
| 24 1 d after planting         |           | 0 b       | 0 a       | 3 a-d     | 0 bc      | 2 a-d     | 0 a-d     |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           |           |
| 25 Non-treated control        |           | 0 b       | 0 a       | 0 cd      | 0 c       | 2 a-d     | 0 a-d     |
| LSD (P=.05)                   |           | 1.4       | 0.2       | 2.6       | 0.5       | 2.2       | 0.3       |
| Standard Deviation            |           | 0.8       | 0.1       | 1.6       | 0.3       | 1.4       | 0.2       |
| CV                            |           | 211.95    | 245.09    | 107.77    | 120.98    | 84.66     | 102.96    |
| Bartlett's X2                 |           | 14.382    | 27.471    | 17.539    | 30.786    | 12.851    | 27.582    |
| P(Bartlett's X2)              |           | 0.277     | 0.007*    | 0.352     | 0.014*    | 0.80      | 0.069     |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# University of Georgia

| Pest Code                     | harv 5<br>CUUPE                     | harv 6<br>CUUPE | harv 6<br>CUUPE | harv 7<br>CUUPE | harv 7<br>CUUPE | harv 8<br>CUUPE | harv 8<br>CUUPE |       |       |       |
|-------------------------------|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|-------|-------|
| Crop Code                     |                                     |                 |                 |                 |                 |                 |                 |       |       |       |
| BBCH Scale                    |                                     |                 |                 |                 |                 |                 |                 |       |       |       |
| Crop Variety                  |                                     |                 |                 |                 |                 |                 |                 |       |       |       |
| Rating Date                   | Sep-21-07                           | Sep-24-07       | Sep-24-07       | Sep-24-07       | Sep-24-07       | Sep-28-07       | Sep-28-07       |       |       |       |
| Rating Data Type              | wt/lb                               | #               | wt/lb           | #               | wt/lb           | #               | wt/lb           |       |       |       |
| Rating Unit                   | per plot                            | per plot        | per plot        | per plot        | per plot        | per plot        | per plot        |       |       |       |
| Assessed By                   |                                     |                 |                 |                 |                 |                 |                 |       |       |       |
| Days After First/Last Applic. | 35                                  | 38              | 38              | 38              | 38              | 42              | 42              |       |       |       |
| ARM Action Codes              |                                     |                 |                 |                 |                 |                 |                 |       |       |       |
| Trt No.                       | Treatment Name                      | Rate            | Unit            | 76              | 77              | 78              | 79              | 80    | 81    | 82    |
| 1                             | 14 d before planting<br>Goal        | 8               | OZ/A            | 0 abc           | 4 a-d           | 1 b-g           | 6 ab            | 1 a-e | 6 ab  | 0 a-e |
| 2                             | 14 d before planting<br>Goal        | 16              | OZ/A            | 1 ab            | 6 ab            | 1 ab            | 6 ab            | 1 a-d | 6 ab  | 0 abc |
| 3                             | 14 d before planting<br>V-10204     | 0.16            | LB A/A          | 0 abc           | 6 ab            | 1 abc           | 3 a-e           | 0 b-e | 4 a-d | 0 a-e |
| 4                             | 14 d before planting<br>V-10204     | 0.32            | LB A/A          | 0 bc            | 3 b-e           | 0 c-g           | 3 b-e           | 0 cde | 2 a-d | 0 b-e |
| 5                             | 14 d before planting<br>Dual Magnum | 1               | PT/A            | 0 abc           | 4 abc           | 1 b-g           | 6 ab            | 1 a   | 3 a-d | 0 a-e |
| 6                             | 14 d before planting<br>Dual Magnum | 2               | PT/A            | 0 abc           | 7 a             | 2 a             | 5 abc           | 1 ab  | 4 a-d | 0 a-d |
| 7                             | 7 d before planting<br>Goal         | 8               | OZ/A            | 0 bc            | 6 ab            | 1 ab            | 7 ab            | 1 a   | 5 abc | 0 a-e |
| 8                             | 7 d before planting<br>Goal         | 16              | OZ/A            | 0 abc           | 4 a-d           | 1 b-g           | 7 a             | 1 a   | 6 a   | 1 a   |
| 9                             | 7 d before planting<br>V-10204      | 0.16            | LB A/A          | 0 c             | 2 cde           | 0 efg           | 2 cde           | 0 de  | 2 a-d | 0 b-e |
| 10                            | 7 d before planting<br>V-10204      | 0.32            | LB A/A          | 0 bc            | 1 de            | 0 g             | 0 e             | 0 e   | 2 a-d | 0 b-e |
| 11                            | 7 d before planting<br>Dual Magnum  | 1               | PT/A            | 0 bc            | 5 abc           | 1 b-e           | 5 abc           | 1 a-e | 1 bcd | 0 cde |
| 12                            | 7 d before planting<br>Dual Magnum  | 2               | PT/A            | 0 abc           | 5 abc           | 1 ab            | 4 a-e           | 1 a-e | 4 a-d | 0 a-e |
| 13                            | 1 d before planting<br>Goal         | 8               | OZ/A            | 0 abc           | 5 abc           | 1 a-d           | 5 abc           | 1 abc | 4 a-d | 0 abc |
| 14                            | 1 d before planting<br>Goal         | 16              | OZ/A            | 1 a             | 5 abc           | 1 abc           | 6 ab            | 1 abc | 4 a-d | 1 ab  |
| 15                            | 1 d before planting<br>V-10204      | 0.16            | LB A/A          | 0 bc            | 1 de            | 0 g             | 1 cde           | 0 a-e | 2 a-d | 0 a-e |
| 16                            | 1 d before planting<br>V-10204      | 0.32            | LB A/A          | 0 c             | 0 e             | 0 g             | 0 e             | 0 e   | 0 cd  | 0 de  |
| 17                            | 1 d before planting<br>Dual Magnum  | 1               | PT/A            | 0 abc           | 5 abc           | 1 b-f           | 4 a-d           | 1 a-e | 4 a-d | 0 abc |
| 18                            | 1 d before planting<br>Dual Magnum  | 2               | PT/A            | 0 abc           | 3 b-e           | 0 d-g           | 4 a-d           | 0 a-e | 2 a-d | 0 b-e |
| 19                            | 1 d after planting<br>Goal          | 8               | OZ/A            | 0 c             | 1 e             | 0 fg            | 1 de            | 0 e   | 0 cd  | 0 de  |
| 20                            | 1 d after planting<br>Goal          | 16              | OZ/A            | 0 c             | 0 e             | 0 g             | 0 e             | 0 cde | 0 d   | 0 e   |
| 21                            | 1 d after planting<br>V-10204       | 0.16            | LB A/A          | 0 c             | 0 e             | 0 g             | 1 cde           | 0 cde | 2 a-d | 0 b-e |
| 22                            | 1 d after planting<br>V-10204       | 0.32            | LB A/A          | 0 c             | 0 e             | 0 g             | 0 e             | 0 e   | 0 d   | 0 e   |
| 23                            | 1 d after planting<br>Dual Magnum   | 1               | PT/A            | 0 abc           | 6 ab            | 1 b-e           | 6 ab            | 1 abc | 4 a-d | 0 a-e |

## University of Georgia

|                               |           |           |           |           |           |           |           |        |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| Pest Code                     | harv 5    | harv 6    | harv 6    | harv 7    | harv 7    | harv 8    | harv 8    |        |
| Crop Code                     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     |        |
| BBCH Scale                    | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      | BVVT      |        |
| Crop Variety                  |           |           |           |           |           |           |           |        |
| Rating Date                   | Sep-21-07 | Sep-24-07 | Sep-24-07 | Sep-24-07 | Sep-24-07 | Sep-28-07 | Sep-28-07 |        |
| Rating Data Type              | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     |        |
| Rating Unit                   | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  |        |
| Assessed By                   |           |           |           |           |           |           |           |        |
| Days After First/Last Applic. | 35        | 38        | 38        | 38        | 38        | 42        | 42        |        |
| ARM Action Codes              |           |           |           |           |           |           |           |        |
| Trt Treatment                 | Rate      |           |           |           |           |           |           |        |
| No. Name                      | Rate Unit | 76        | 77        | 78        | 79        | 80        | 81        | 82     |
| 24 1 d after planting         |           | 0 bc      | 5 abc     | 1 a-d     | 6 ab      | 1 a       | 3 a-d     | 0 a-e  |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           |           |        |
| 25 Non-treated control        |           | 0 abc     | 5 abc     | 1 b-e     | 6 ab      | 1 abc     | 4 a-d     | 1 ab   |
| LSD (P=.05)                   |           | 0.4       | 2.9       | 0.7       | 3.3       | 0.6       | 3.6       | 0.4    |
| Standard Deviation            |           | 0.2       | 1.7       | 0.4       | 2.0       | 0.3       | 2.2       | 0.2    |
| CV                            |           | 99.06     | 48.39     | 59.37     | 53.02     | 65.18     | 72.44     | 74.61  |
| Bartlett's X2                 |           | 29.516    | 17.848    | 36.559    | 23.497    | 53.172    | 23.6      | 34.047 |
| P(Bartlett's X2)              |           | 0.058     | 0.533     | 0.019*    | 0.318     | 0.001*    | 0.313     | 0.049* |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# University of Georgia

| Pest Code                     | harv 9<br>CUUPE                     | harv 9<br>CUUPE | harv 10<br>CUUPE | harv 10<br>CUUPE | harv 11<br>CUUPE | harv 11<br>CUUPE | harv 12<br>CUUPE | harv 12<br>CUUPE |        |       |
|-------------------------------|-------------------------------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|--------|-------|
| Crop Code                     | BVWT                                | BVWT            | BVWT             | BVWT             | BVWT             | BVWT             | BVWT             | BVWT             |        |       |
| BBCH Scale                    |                                     |                 |                  |                  |                  |                  |                  |                  |        |       |
| Crop Variety                  |                                     |                 |                  |                  |                  |                  |                  |                  |        |       |
| Rating Date                   | Oct-01-07                           | Oct-01-07       | Oct-03-07        | Oct-03-07        | Oct-05-07        | Oct-05-07        | Oct-08-07        | Oct-08-07        |        |       |
| Rating Data Type              | #                                   | wt/lb           | #                | wt/lb            | #                | wt/lb            | #                | wt/lb            |        |       |
| Rating Unit                   | per plot                            | per plot        | per plot         | per plot         | per plot         | per plot         | per plot         | per plot         |        |       |
| Assessed By                   |                                     |                 |                  |                  |                  |                  |                  |                  |        |       |
| Days After First/Last Applic. | 45                                  | 45              | 47               | 47               | 49               | 49               | 52               | 52               |        |       |
| ARM Action Codes              |                                     |                 |                  |                  |                  |                  |                  |                  |        |       |
| Trt No.                       | Treatment Name                      | Rate            | Rate             | Rate             | Rate             | Rate             | Rate             | Rate             |        |       |
|                               |                                     | Unit            | Unit             | Unit             | Unit             | Unit             | Unit             | Unit             |        |       |
|                               |                                     |                 | 83               | 84               | 85               | 86               | 87               | 88               | 89     | 90    |
| 1                             | 14 d before planting<br>Goal        | 8 OZ/A          | 8 abc            | 1 abc            | 6 a-e            | 1 a-d            | 2 bc             | 0 cde            | 10 abc | 1 abc |
| 2                             | 14 d before planting<br>Goal        | 16 OZ/A         | 12 ab            | 2 a              | 10 abc           | 1 a              | 3 abc            | 0 a-e            | 13 ab  | 2 ab  |
| 3                             | 14 d before planting<br>V-10204     | 0.16 LB A/A     | 10 ab            | 1 a-d            | 8 a-d            | 1 a-d            | 3 abc            | 0 a-e            | 7 b-f  | 1 a-d |
| 4                             | 14 d before planting<br>V-10204     | 0.32 LB A/A     | 4 cde            | 0 cde            | 5 c-f            | 0 b-e            | 4 ab             | 0 a-e            | 6 b-g  | 0 cd  |
| 5                             | 14 d before planting<br>Dual Magnum | 1 PT/A          | 9 ab             | 1 a-d            | 8 a-d            | 1 abc            | 5 ab             | 1 a              | 11 abc | 2 a   |
| 6                             | 14 d before planting<br>Dual Magnum | 2 PT/A          | 12 ab            | 2 ab             | 10 ab            | 1 a-d            | 3 abc            | 0 a-e            | 11 abc | 2 a   |
| 7                             | 7 d before planting<br>Goal         | 8 OZ/A          | 13 ab            | 1 ab             | 7 a-e            | 1 a-d            | 7 a              | 1 a              | 12 ab  | 2 abc |
| 8                             | 7 d before planting<br>Goal         | 16 OZ/A         | 9 ab             | 1 ab             | 8 a-d            | 1 a-d            | 4 ab             | 1 a              | 11 abc | 2 ab  |
| 9                             | 7 d before planting<br>V-10204      | 0.16 LB A/A     | 2 e              | 0 de             | 6 b-e            | 0 cde            | 2 bc             | 0 cde            | 5 c-g  | 0 bcd |
| 10                            | 7 d before planting<br>V-10204      | 0.32 LB A/A     | 2 e              | 0 cde            | 3 efg            | 0 de             | 2 bc             | 0 cde            | 4 d-g  | 0 bcd |
| 11                            | 7 d before planting<br>Dual Magnum  | 1 PT/A          | 8 bcd            | 1 abc            | 9 abc            | 1 a-d            | 4 ab             | 1 a-d            | 11 abc | 1 abc |
| 12                            | 7 d before planting<br>Dual Magnum  | 2 PT/A          | 10 ab            | 2 a              | 9 abc            | 1 ab             | 4 ab             | 1 abc            | 9 a-d  | 1 abc |
| 13                            | 1 d before planting<br>Goal         | 8 OZ/A          | 9 ab             | 2 ab             | 10 ab            | 1 a              | 5 ab             | 1 abc            | 8 b-e  | 1 a-d |
| 14                            | 1 d before planting<br>Goal         | 16 OZ/A         | 13 a             | 2 ab             | 11 a             | 1 a              | 2 bc             | 0 a-e            | 12 ab  | 1 a-d |
| 15                            | 1 d before planting<br>V-10204      | 0.16 LB A/A     | 3 de             | 0 cde            | 3 efg            | 0 cde            | 2 bc             | 0 cde            | 5 c-g  | 1 a-d |
| 16                            | 1 d before planting<br>V-10204      | 0.32 LB A/A     | 1 e              | 0 de             | 1 fg             | 0 e              | 0 c              | 0 e              | 2 efg  | 1 abc |
| 17                            | 1 d before planting<br>Dual Magnum  | 1 PT/A          | 10 ab            | 1 b-e            | 9 abc            | 1 a              | 5 ab             | 0 a-e            | 8 b-f  | 1 a-d |
| 18                            | 1 d before planting<br>Dual Magnum  | 2 PT/A          | 8 bcd            | 1 a-e            | 6 a-e            | 0 b-e            | 2 bc             | 0 de             | 6 b-g  | 1 a-d |
| 19                            | 1 d after planting<br>Goal          | 8 OZ/A          | 4 cde            | 0 cde            | 1 fg             | 0 e              | 1 bc             | 0 cde            | 3 d-g  | 1 a-d |
| 20                            | 1 d after planting<br>Goal          | 16 OZ/A         | 0 e              | 0 e              | 0 g              | 0 e              | 0 c              | 0 e              | 0 g    | 0 d   |
| 21                            | 1 d after planting<br>V-10204       | 0.16 LB A/A     | 4 cde            | 0 cde            | 4 d-g            | 0 de             | 3 abc            | 0 b-e            | 7 b-f  | 1 a-d |
| 22                            | 1 d after planting<br>V-10204       | 0.32 LB A/A     | 2 e              | 0 de             | 1 fg             | 0 e              | 0 c              | 0 e              | 1 fg   | 0 cd  |
| 23                            | 1 d after planting<br>Dual Magnum   | 1 PT/A          | 10 ab            | 2 a              | 10 abc           | 1 a              | 4 ab             | 0 a-e            | 8 b-e  | 1 a-d |

## University of Georgia

|                               |           |           |           |           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pest Code                     | harv 9    | harv 9    | harv 10   | harv 10   | harv 11   | harv 11   | harv 12   | harv 12   |
| Crop Code                     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     |
| BBCH Scale                    | BVWT      | BVWT      | BVWT      | BVWT      | BVWT      | BVWT      | BVWT      | BVWT      |
| Crop Variety                  |           |           |           |           |           |           |           |           |
| Rating Date                   | Oct-01-07 | Oct-01-07 | Oct-03-07 | Oct-03-07 | Oct-05-07 | Oct-05-07 | Oct-08-07 | Oct-08-07 |
| Rating Data Type              | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     |
| Rating Unit                   | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  |
| Assessed By                   |           |           |           |           |           |           |           |           |
| Days After First/Last Applic. | 45        | 45        | 47        | 47        | 49        | 49        | 52        | 52        |
| ARM Action Codes              |           |           |           |           |           |           |           |           |
| Trt Treatment                 | Rate      |           |           |           |           |           |           |           |
| No. Name                      | Rate Unit | 83        | 84        | 85        | 86        | 87        | 88        | 89        |
| 24 1 d after planting         |           | 11 ab     | 1 ab      | 7 a-d     | 1 a-d     | 5 ab      | 1 ab      | 15 a      |
| Dual Magnum                   | 2 PT/A    |           |           |           |           |           |           | 2 a       |
| 25 Non-treated control        |           | 11 ab     | 1 ab      | 7 a-d     | 1 a-d     | 3 abc     | 0 a-e     | 10 abc    |
|                               |           |           |           |           |           |           |           | 2 a       |
| LSD (P=.05)                   |           | 4.3       | 0.8       | 3.9       | 0.5       | 3.1       | 0.4       | 5.5       |
| Standard Deviation            |           | 2.6       | 0.5       | 2.4       | 0.3       | 1.9       | 0.2       | 3.3       |
| CV                            |           | 35.51     | 51.29     | 37.65     | 50.23     | 61.54     | 72.59     | 42.04     |
| Bartlett's X2                 |           | 19.295    | 38.223    | 19.672    | 39.537    | 22.958    | 24.583    | 25.376    |
| P(Bartlett's X2)              |           | 0.684     | 0.024*    | 0.662     | 0.017*    | 0.291     | 0.266     | 0.331     |
|                               |           |           |           |           |           |           |           | 0.005*    |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)



# University of Georgia

| Pest Code                     | harv 13<br>CUUPE                    | harv 13<br>CUUPE | harv 14<br>CUUPE | harv 14<br>CUUPE | harv 15<br>CUUPE | harv 15<br>CUUPE | harv 1-4<br>CUUPE | harv 1-4<br>CUUPE |       |       |
|-------------------------------|-------------------------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------|-------|
| Crop Code                     | BVWT                                | BVWT             | BVWT             | BVWT             | BVWT             | BVWT             | BVWT              | BVWT              |       |       |
| BBCH Scale                    |                                     |                  |                  |                  |                  |                  |                   |                   |       |       |
| Crop Variety                  |                                     |                  |                  |                  |                  |                  |                   |                   |       |       |
| Rating Date                   | Oct-12-07                           | Oct-12-07        | Oct-16-07        | Oct-16-07        | Oct-19-07        | Oct-19-07        |                   |                   |       |       |
| Rating Data Type              | #                                   | wt/lb            | #                | wt/lb            | #                | wt/lb            | #                 | wt/lb             |       |       |
| Rating Unit                   | per plot                            | per plot         | per plot         | per plot         | per plot         | per plot         | per plot          | per plot          |       |       |
| Assessed By                   |                                     |                  |                  |                  |                  |                  |                   |                   |       |       |
| Days After First/Last Applic. | 56                                  | 56               | 60               | 60               | 63               | 63               |                   |                   |       |       |
| ARM Action Codes              |                                     |                  |                  |                  |                  |                  | T7                | T8                |       |       |
| Trt No.                       | Treatment Name                      | Rate             | Rate             | Rate             | Rate             | Rate             | Rate              | Rate              |       |       |
|                               |                                     | Unit             | Unit             | Unit             | Unit             | Unit             | Unit              | Unit              |       |       |
|                               |                                     |                  |                  |                  |                  |                  |                   |                   |       |       |
| 1                             | 14 d before planting<br>Goal        | 8 OZ/A           | 3 b              | 0 bc             | 6 d-h            | 1 d-i            | 6 a-e             | 1 abc             | 6 abc | 1 b-e |
| 2                             | 14 d before planting<br>Goal        | 16 OZ/A          | 3 b              | 0 b              | 17 ab            | 3 ab             | 9 ab              | 1 a               | 8 ab  | 1 b   |
| 3                             | 14 d before planting<br>V-10204     | 0.16 LB A/A      | 0 b              | 0 c              | 17 ab            | 2 a-f            | 4 a-g             | 1 a-e             | 4 a-d | 0 cde |
| 4                             | 14 d before planting<br>V-10204     | 0.32 LB A/A      | 0 b              | 0 c              | 9 c-f            | 1 c-i            | 1 fg              | 0 e               | 3 bcd | 0 de  |
| 5                             | 14 d before planting<br>Dual Magnum | 1 PT/A           | 9 a              | 1 a              | 9 c-f            | 2 b-i            | 5 a-f             | 1 a-e             | 5 a-d | 1 b-e |
| 6                             | 14 d before planting<br>Dual Magnum | 2 PT/A           | 2 b              | 0 bc             | 15 abc           | 3 ab             | 7 abc             | 1 a-e             | 10 a  | 2 a   |
| 7                             | 7 d before planting<br>Goal         | 8 OZ/A           | 0 b              | 0 c              | 15 abc           | 3 abc            | 7 a-d             | 1 a-e             | 8 ab  | 1 bcd |
| 8                             | 7 d before planting<br>Goal         | 16 OZ/A          | 0 b              | 0 c              | 15 abc           | 3 ab             | 9 a               | 1 ab              | 7 ab  | 1 bc  |
| 9                             | 7 d before planting<br>V-10204      | 0.16 LB A/A      | 0 b              | 0 c              | 4 fgh            | 0 ghi            | 3 c-g             | 0 cde             | 0 d   | 0 e   |
| 10                            | 7 d before planting<br>V-10204      | 0.32 LB A/A      | 0 b              | 0 c              | 3 fgh            | 0 hi             | 2 d-g             | 0 de              | 1 cd  | 0 e   |
| 11                            | 7 d before planting<br>Dual Magnum  | 1 PT/A           | 2 b              | 0 bc             | 12 a-d           | 2 b-h            | 5 a-f             | 1 a-e             | 4 bcd | 0 b-e |
| 12                            | 7 d before planting<br>Dual Magnum  | 2 PT/A           | 1 b              | 0 c              | 12 a-e           | 2 a-d            | 7 a-d             | 1 a-e             | 4 a-d | 1 b-e |
| 13                            | 1 d before planting<br>Goal         | 8 OZ/A           | 0 b              | 0 c              | 18 a             | 3 a              | 8 ab              | 1 ab              | 5 a-d | 0 de  |
| 14                            | 1 d before planting<br>Goal         | 16 OZ/A          | 0 b              | 0 c              | 17 ab            | 2 a-e            | 5 a-f             | 1 a-e             | 5 a-d | 1 b-e |
| 15                            | 1 d before planting<br>V-10204      | 0.16 LB A/A      | 0 b              | 0 c              | 5 e-h            | 1 e-i            | 5 a-f             | 1 a-e             | 1 cd  | 0 e   |
| 16                            | 1 d before planting<br>V-10204      | 0.32 LB A/A      | 0 b              | 0 c              | 1 gh             | 0 i              | 1 efg             | 0 e               | 0 d   | 0 e   |
| 17                            | 1 d before planting<br>Dual Magnum  | 1 PT/A           | 0 b              | 0 c              | 10 b-f           | 2 a-g            | 5 a-f             | 1 a-e             | 4 a-d | 0 b-e |
| 18                            | 1 d before planting<br>Dual Magnum  | 2 PT/A           | 0 b              | 0 c              | 12 a-d           | 2 a-f            | 6 a-e             | 1 a-e             | 1 cd  | 0 e   |
| 19                            | 1 d after planting<br>Goal          | 8 OZ/A           | 0 b              | 0 c              | 3 fgh            | 0 f-i            | 2 d-g             | 0 b-e             | 0 d   | 0 e   |
| 20                            | 1 d after planting<br>Goal          | 16 OZ/A          | 0 b              | 0 c              | 0 h              | 0 i              | 0 g               | 0 e               | 0 d   | 0 e   |
| 21                            | 1 d after planting<br>V-10204       | 0.16 LB A/A      | 0 b              | 0 c              | 8 c-g            | 1 c-i            | 4 b-g             | 0 b-e             | 0 d   | 0 e   |
| 22                            | 1 d after planting<br>V-10204       | 0.32 LB A/A      | 0 b              | 0 c              | 1 gh             | 0 i              | 1 fg              | 0 e               | 0 d   | 0 e   |
| 23                            | 1 d after planting<br>Dual Magnum   | 1 PT/A           | 0 b              | 0 c              | 13 a-d           | 2 a-g            | 7 abc             | 1 a-e             | 6 abc | 1 b-e |

# University of Georgia

|                               |           |           |           |           |           |           |          |          |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|
| Pest Code                     | harv 13   | harv 13   | harv 14   | harv 14   | harv 15   | harv 15   | harv 1-4 | harv 1-4 |
| Crop Code                     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE     | CUUPE    | CUUPE    |
| BBCH Scale                    | BWVT      | BWVT      | BWVT      | BWVT      | BWVT      | BWVT      | BWVT     | BWVT     |
| Crop Variety                  |           |           |           |           |           |           |          |          |
| Rating Date                   | Oct-12-07 | Oct-12-07 | Oct-16-07 | Oct-16-07 | Oct-19-07 | Oct-19-07 |          |          |
| Rating Data Type              | #         | wt/lb     | #         | wt/lb     | #         | wt/lb     | #        | wt/lb    |
| Rating Unit                   | per plot  | per plot  | per plot  | per plot  | per plot  | per plot  | per plot | per plot |
| Assessed By                   |           |           |           |           |           |           |          |          |
| Days After First/Last Applic. | 56        | 56        | 60        | 60        | 63        | 63        |          |          |
| ARM Action Codes              |           |           |           |           |           |           | T7       | T8       |
| Trt Treatment                 |           |           |           |           |           |           |          |          |
| No. Name                      | 91        | 92        | 93        | 94        | 95        | 96        | 97       | 98       |
| Rate Unit                     |           |           |           |           |           |           |          |          |
| 24 1 d after planting         | 0 b       | 0 c       | 10 b-f    | 2 a-e     | 7 a-d     | 1 a-d     | 5 a-d    | 1 b-e    |
| Dual Magnum 2 PT/A            |           |           |           |           |           |           |          |          |
| 25 Non-treated control        | 1 b       | 0 bc      | 12 a-d    | 2 a-h     | 6 a-f     | 1 a-e     | 3 bcd    | 0 de     |
| LSD (P=.05)                   | 3.1       | 0.3       | 6.4       | 1.4       | 4.2       | 0.7       | 4.5      | 0.7      |
| Standard Deviation            | 1.9       | 0.2       | 3.9       | 0.8       | 2.6       | 0.5       | 2.8      | 0.5      |
| CV                            | 210.24    | 164.13    | 40.0      | 53.7      | 53.07     | 78.09     | 75.83    | 89.67    |
| Bartlett's X2                 | 8.742     | 12.069    | 18.348    | 39.013    | 24.395    | 39.775    | 23.641   | 28.979   |
| P(Bartlett's X2)              | 0.272     | 0.098     | 0.738     | 0.02*     | 0.382     | 0.016*    | 0.167    | 0.049*   |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 89: T7 = ([C67]+[C69]+[C71]+[C73])

Column 90: T8 = ([C68]+[C70]+[C72]+[C74])

# University of Georgia

| Pest Code                     | harv 1-8                         | harv 1-8    | harv1-12 | harv1-12 |        |        |
|-------------------------------|----------------------------------|-------------|----------|----------|--------|--------|
| Crop Code                     | CUUPE                            | CUUPE       | CUUPE    | CUUPE    |        |        |
| BBCH Scale                    | BVVT                             | BVVT        | BVVT     | BVVT     |        |        |
| Crop Variety                  |                                  |             |          |          |        |        |
| Rating Date                   |                                  |             |          |          |        |        |
| Rating Data Type              | #                                | wt/lb       | #        | wt/lb    |        |        |
| Rating Unit                   | per plot                         | per plot    | per plot | per plot |        |        |
| Assessed By                   |                                  |             |          |          |        |        |
| Days After First/Last Applic. |                                  |             |          |          |        |        |
| ARM Action Codes              | T9                               | T10         | T11      | T12      |        |        |
| Trt No.                       | Treatment Name                   | Rate        | Rate     | Rate     |        |        |
|                               |                                  | Unit        | Unit     | Unit     |        |        |
|                               |                                  |             |          |          |        |        |
| 1                             | 14 d before planting Goal        | 8 OZ/A      | 25 ab    | 3 bc     | 68 abc | 9 b-e  |
| 2                             | 14 d before planting Goal        | 16 OZ/A     | 30 a     | 4 ab     | 95 a   | 14 ab  |
| 3                             | 14 d before planting V-10204     | 0.16 LB A/A | 20 ab    | 2 b-e    | 69 abc | 8 c-f  |
| 4                             | 14 d before planting V-10204     | 0.32 LB A/A | 12 b-e   | 1 c-f    | 41 cde | 4 e-h  |
| 5                             | 14 d before planting Dual Magnum | 1 PT/A      | 22 ab    | 3 bc     | 79 ab  | 11 a-d |
| 6                             | 14 d before planting Dual Magnum | 2 PT/A      | 29 a     | 6 a      | 90 a   | 14 a   |
| 7                             | 7 d before planting Goal         | 8 OZ/A      | 27 a     | 4 ab     | 87 a   | 12 a-d |
| 8                             | 7 d before planting Goal         | 16 OZ/A     | 29 a     | 4 ab     | 85 ab  | 12 abc |
| 9                             | 7 d before planting V-10204      | 0.16 LB A/A | 6 cde    | 0 def    | 27 d-g | 2 gh   |
| 10                            | 7 d before planting V-10204      | 0.32 LB A/A | 5 cde    | 0 def    | 19 efg | 2 gh   |
| 11                            | 7 d before planting Dual Magnum  | 1 PT/A      | 17 abc   | 2 b-f    | 69 abc | 9 b-e  |
| 12                            | 7 d before planting Dual Magnum  | 2 PT/A      | 21 ab    | 3 bc     | 73 ab  | 11 a-d |
| 13                            | 1 d before planting Goal         | 8 OZ/A      | 22 ab    | 3 bc     | 81 ab  | 12 abc |
| 14                            | 1 d before planting Goal         | 16 OZ/A     | 25 ab    | 4 ab     | 86 ab  | 11 a-d |
| 15                            | 1 d before planting V-10204      | 0.16 LB A/A | 6 cde    | 1 c-f    | 29 d-g | 4 e-h  |
| 16                            | 1 d before planting V-10204      | 0.32 LB A/A | 1 de     | 0 ef     | 7 fg   | 2 gh   |
| 17                            | 1 d before planting Dual Magnum  | 1 PT/A      | 20 ab    | 3 bcd    | 66 abc | 8 b-e  |
| 18                            | 1 d before planting Dual Magnum  | 2 PT/A      | 14 bcd   | 1 c-f    | 54 bcd | 6 d-g  |
| 19                            | 1 d after planting Goal          | 8 OZ/A      | 2 de     | 0 ef     | 16 efg | 2 gh   |
| 20                            | 1 d after planting Goal          | 16 OZ/A     | 0 e      | 0 ef     | 0 g    | 0 h    |
| 21                            | 1 d after planting V-10204       | 0.16 LB A/A | 4 de     | 0 def    | 32 def | 3 fgh  |
| 22                            | 1 d after planting V-10204       | 0.32 LB A/A | 0 e      | 0 f      | 5 fg   | 1 h    |
| 23                            | 1 d after planting Dual Magnum   | 1 PT/A      | 25 ab    | 3 bc     | 78 ab  | 10 a-d |

## University of Georgia

| Pest Code                     | harv 1-8 | harv 1-8 | harv1-12 | harv1-12 |
|-------------------------------|----------|----------|----------|----------|
| Crop Code                     | CUUPE    | CUUPE    | CUUPE    | CUUPE    |
| BBCH Scale                    | BVWT     | BVWT     | BVWT     | BVWT     |
| Crop Variety                  |          |          |          |          |
| Rating Date                   |          |          |          |          |
| Rating Data Type              | #        | wt/lb    | #        | wt/lb    |
| Rating Unit                   | per plot | per plot | per plot | per plot |
| Assessed By                   |          |          |          |          |
| Days After First/Last Applic. |          |          |          |          |
| ARM Action Codes              | T9       | T10      | T11      | T12      |
| Trt Treatment                 |          |          |          |          |
| No. Name                      | 99       | 100      | 101      | 102      |
| Rate Unit                     |          |          |          |          |
| 24 1 d after planting         | 22 ab    | 3 bc     | 77 ab    | 11 a-d   |
| Dual Magnum                   |          |          |          |          |
| Rate Unit                     | 2 PT/A   |          |          |          |
| 25 Non-treated control        | 21 ab    | 3 bc     | 72 ab    | 10 a-d   |
| LSD (P=.05)                   | 11.4     | 2.0      | 27.8     | 4.7      |
| Standard Deviation            | 6.9      | 1.2      | 16.8     | 2.8      |
| CV                            | 42.6     | 53.97    | 29.95    | 37.88    |
| Bartlett's X2                 | 33.804   | 43.788   | 33.937   | 34.715   |
| P(Bartlett's X2)              | 0.051    | 0.006*   | 0.066    | 0.073    |

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Column 91: T9 = ([C97]+[C75]+[C77]+[C79]+[C81])

Column 92: T10 = ([C98]+[C76]+[C78]+[C80]+[C82])

Column 93: T11 = ([C99]+[C83]+[C85]+[C87]+[C89]+[C91]+[C93]+[C95])

Column 94: T12 = ([C100]+[C84]+[C86]+[C88]+[C90]+[C92]+[C94]+[C96])

# University of Georgia

Second crop cucumber and squash response to Goal, V-10204, and Dual Magnum.

Trial ID: Veg40-07  
Location: Ponder Farm

Protocol ID:  
Study Director: Stanley Culpepper  
Investigator: Stanley Culpepper

### General Trial Information

**Study Director:** Stanley Culpepper **Title:** Ext. Weed Science  
**Affiliation:** University of Georgia  
**Postal Code:** 31794 **E-mail:** \_\_\_\_\_

**Investigator:** Stanley Culpepper **Title:** Ext. Weed Science  
**Affiliation:** University of Georgia  
**Postal Code:** 31794 **E-mail:** \_\_\_\_\_

**Keywords:**

### Trial Location

**City:** TyTy **Trial Status:** completed  
**State/Prov.:** GA **Trial Reliability:** fair  
**Postal Code:** 31794 **Initiation Date:** Aug-04-07  
**Country:** USA **Planned Completion Date:** \_\_\_\_\_  
\_ -Latitude of LL Corner °: \_\_\_\_\_ \_ -Longitude of LL Corner °: \_\_\_\_\_  
**Altitude of LL Corner:** \_\_\_\_\_ **Unit:** \_\_\_\_\_ **Angle y-axis to North °:** \_\_\_\_\_  
**Map Reference:** \_\_\_\_\_  
**Directions:**

**Conducted Under GLP:** \_ **Official Trial Code:** \_\_\_\_\_  
**Conducted Under GEP:** \_ **Other Trial Code:** \_\_\_\_\_

| Guideline | Description |
|-----------|-------------|
| 1.        |             |

Objectives:

Conclusions:

**Cooperator/Landowner**

**Cooperator:** \_\_\_\_\_ **Country:** \_\_\_\_\_  
**Organization:** \_\_\_\_\_ **Phone No:** \_\_\_\_\_  
**Address 1:** \_\_\_\_\_ **Fax No:** \_\_\_\_\_  
**Address 2:** \_\_\_\_\_  
**City:** \_\_\_\_\_  
**State/Prov:** \_\_\_\_\_  
**Postal Code:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

# University of Georgia

| Crop Description   |                                   |
|--|-----------------------------------|
| Crop 1: CUMSA Cucumis sativus <span style="float: right;">Cucumber</span>    |                                   |
| Variety: Thunder   | Description: _____                |
| BBCH Scale: BVVT   | Planting Date: Aug-15-07          |
| Planting Method: Transplant  | Rate, Unit: 1 12 inch             |
| Depth, Unit: 1.5 in  | Perennial Age, Unit: _____        |
| Row Spacing, Unit: 6 ft  | Spacing Within Row, Unit: 12 inch |
| Seed Bed: mulched  | Soil Temperature, Unit: 105 F     |
| Soil Moisture: drip  | Emergence Date: _____             |
| Harvest Date: _____  | Harvest Equipment: _____          |
| Harvested Width, Unit: _____   | Harvested Length, Unit: _____     |
| % Standard Moisture: _____   | Moisture Meter: _____             |
| Weighing Equipment: _____  |                                   |
| Crop 2: CUMSA Cucumis sativus <span style="float: right;">Cucumber</span>    |                                   |
| Variety: Thunder   | Description: _____                |
| BBCH Scale: BVVT   | Planting Date: Aug-15-07          |
| Planting Method: seeded  | Rate, Unit: 2 12 inch             |
| Depth, Unit: 1.5 in  | Perennial Age, Unit: _____        |
| Row Spacing, Unit: 6 ft  | Spacing Within Row, Unit: 12 inch |
| Seed Bed: mulched  | Soil Temperature, Unit: 105 F     |
| Soil Moisture: drip  | Emergence Date: _____             |
| Harvest Date: _____  | Harvest Equipment: _____          |
| Harvested Width, Unit: _____   | Harvested Length, Unit: _____     |
| % Standard Moisture: _____   | Moisture Meter: _____             |
| Weighing Equipment: _____  |                                   |
| Crop 3: CUUPE Cucurbita pepo <span style="float: right;">Edible gourd</span> |                                   |
| Variety: Prelude II  | Description: _____                |
| BBCH Scale: BVVT   | Planting Date: Aug-15-07          |
| Planting Method: transplant  | Rate, Unit: 1 12 inch             |
| Depth, Unit: 1.5 in  | Perennial Age, Unit: _____        |
| Row Spacing, Unit: 6 ft  | Spacing Within Row, Unit: 12 inch |
| Seed Bed: mulched  | Soil Temperature, Unit: 105 F     |
| Soil Moisture: drip  | Emergence Date: _____             |
| Harvest Date: _____  | Harvest Equipment: _____          |
| Harvested Width, Unit: _____   | Harvested Length, Unit: _____     |
| % Standard Moisture: _____   | Moisture Meter: _____             |
| Weighing Equipment: _____  |                                   |
| Crop 4: CUUPE Cucurbita pepo <span style="float: right;">Edible gourd</span> |                                   |
| Variety: Prelude II  | Description: _____                |
| BBCH Scale: BVVT   | Planting Date: Aug-15-07          |
| Planting Method: seeded  | Rate, Unit: 2 12 inch             |
| Depth, Unit: 1.5 in  | Perennial Age, Unit: _____        |
| Row Spacing, Unit: 6 ft  | Spacing Within Row, Unit: 12 inch |
| Seed Bed: mulched  | Soil Temperature, Unit: 105 F     |
| Soil Moisture: drip  | Emergence Date: _____             |
| Harvest Date: _____  | Harvest Equipment: _____          |
| Harvested Width, Unit: _____   | Harvested Length, Unit: _____     |
| % Standard Moisture: _____   | Moisture Meter: _____             |
| Weighing Equipment: _____  |                                   |

| Pest Description   |             |
|--------------------|-------------|
| Pest 1 Type: _     | Code: _____ |
| Common Name: _____ |             |
| Description: _____ |             |

# University of Georgia

### Site and Design

Plot Width, Unit: 6 FT      Site Type: Ponder farm  
 Plot Length, Unit: 30 FT      Tillage Type: Conventional  
 Replications: 3      Study Design: Factorial  
 % Slope: \_\_\_\_\_      Soil Drainage: \_ \_\_\_\_\_

Trial Initiation Comments:

|    | Previous Crops | Previous Pesticides | Year |
|----|----------------|---------------------|------|
| 1. |                |                     |      |

### Maintenance

| No. | Date | Maintenance Treatment Name | Form Conc | Form Unit | Form Type | Rate | Rate Unit | Tank Mix |
|-----|------|----------------------------|-----------|-----------|-----------|------|-----------|----------|
| 1.  |      |                            |           |           |           |      |           |          |

Comment:

Field Prep./Maintenance:

### Soil Description

Description Name: \_\_\_\_\_  
 % Sand: 94      % OM: 6.4      Texture: loamy sand  
 % Silt: 2      pH: 1.3      Soil Name: \_\_\_\_\_  
 % Clay: 4      CEC: \_\_\_\_\_      Fert. Level: \_\_\_\_\_  
 Analyzed By: \_\_\_\_\_

### Additional Measured Elements

| Element | Quantity | Unit |
|---------|----------|------|
|         |          |      |

### Moisture Conditions

Overall Moisture Conditions: Drip irrigation  
 Closest Weather Station: \_\_\_\_\_ Distance: \_\_\_\_\_ Unit: \_\_\_\_\_

|    | Date | Time | Amount | Unit | Type | Interval | Unit |
|----|------|------|--------|------|------|----------|------|
| 1. |      |      |        |      |      |          |      |

# University of Georgia

## Application Description

|                                | A         | B         | C         | D         |
|--------------------------------|-----------|-----------|-----------|-----------|
| <b>Application Date:</b>       | Aug-04-07 | Aug-11-07 | Aug-15-07 | Aug-17-07 |
| <b>Time of Day:</b>            | 8:30 am   | 8:30 am   | 8:00 am   | 8:00 am   |
| <b>Application Method:</b>     | broadcast | broadcast | broadcast | broadcast |
| <b>Application Timing:</b>     | 14 d      | 14 d      | 1 d       | 1 d       |
| <b>Application Placement:</b>  | overtop   | overtop   | overtop   | overtop   |
| <b>Applied By:</b>             |           |           |           |           |
| <b>Air Temperature, Unit:</b>  | 78 F      | 89 F      | 80 F      | 83 F      |
| <b>% Relative Humidity:</b>    | 68        | 66        | 67        | 70        |
| <b>Wind Velocity, Unit:</b>    | 0 mph     | 3 mph     | 2 mph     | 0 mph     |
| <b>Wind Direction:</b>         |           |           |           |           |
| <b>Dew Presence (Y/N):</b>     | n         | n         | y         | y         |
| <b>Water Hardness:</b>         |           |           |           |           |
| <b>Soil Temperature, Unit:</b> |           | 90 F      | 88 F      | 90 F      |
| <b>Soil Moisture:</b>          | moist     | moist     | moist     | moist     |
| <b>% Cloud Cover:</b>          | 0         | 0         | 0         | 0         |
| <b>Next Rain Occurred On:</b>  |           |           |           |           |

## Crop Stage At Each Application

|                                 | A          | B          | C          | D          |
|---------------------------------|------------|------------|------------|------------|
| <b>Crop 1 Code, BBCH Scale:</b> | CUMSA BVVT | CUMSA BVVT | CUMSA BVVT | CUMSA BVVT |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            |            |            |
| <b>Stage Minimum, Percent:</b>  |            |            |            |            |
| <b>Stage Maximum, Percent:</b>  |            |            |            |            |
| <b>Diameter, Unit:</b>          |            |            |            |            |
| <b>Height, Unit:</b>            |            |            |            |            |
| <b>Height Minimum, Maximum:</b> |            |            |            |            |
| <b>Crop 2 Code, BBCH Scale:</b> | CUMSA BVVT | CUMSA BVVT | CUMSA BVVT | CUMSA BVVT |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            |            |            |
| <b>Stage Minimum, Percent:</b>  |            |            |            |            |
| <b>Stage Maximum, Percent:</b>  |            |            |            |            |
| <b>Diameter, Unit:</b>          |            |            |            |            |
| <b>Height, Unit:</b>            |            |            |            |            |
| <b>Height Minimum, Maximum:</b> |            |            |            |            |
| <b>Crop 3 Code, BBCH Scale:</b> | CUUPE BVVT | CUUPE BVVT | CUUPE BVVT | CUUPE BVVT |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            |            |            |
| <b>Stage Minimum, Percent:</b>  |            |            |            |            |
| <b>Stage Maximum, Percent:</b>  |            |            |            |            |
| <b>Diameter, Unit:</b>          |            |            |            |            |
| <b>Height, Unit:</b>            |            |            |            |            |
| <b>Height Minimum, Maximum:</b> |            |            |            |            |



# University of Georgia

|                                 |            |            |            |            |
|---------------------------------|------------|------------|------------|------------|
| <b>Crop 4 Code, BBCH Scale:</b> | CUUPE BVVT | CUUPE BVVT | CUUPE BVVT | CUUPE BVVT |
| <b>Stage Scale Used:</b>        | BBCH       | BBCH       | BBCH       | BBCH       |
| <b>Stage Majority, Percent:</b> |            |            |            |            |
| <b>Stage Minimum, Percent:</b>  |            |            |            |            |
| <b>Stage Maximum, Percent:</b>  |            |            |            |            |
| <b>Diameter, Unit:</b>          |            |            |            |            |
| <b>Height, Unit:</b>            |            |            |            |            |
| <b>Height Minimum, Maximum:</b> |            |            |            |            |
|                                 |            |            |            |            |

### Pest Stage At Each Application

|                                   | A | B | C | D |
|-----------------------------------|---|---|---|---|
| <b>Pest 1 Code, Disc., Scale:</b> |   |   |   |   |
| <b>Stage Majority, Percent:</b>   |   |   |   |   |
| <b>Stage Minimum, Percent:</b>    |   |   |   |   |
| <b>Stage Maximum, Percent:</b>    |   |   |   |   |
| <b>Diameter, Unit:</b>            |   |   |   |   |
| <b>Height, Unit:</b>              |   |   |   |   |
| <b>Height Minimum, Maximum:</b>   |   |   |   |   |
| <b>Density, Unit:</b>             |   |   |   |   |
| <b>Coverage, Unit:</b>            |   |   |   |   |

### Application Equipment

|                                  | A        | B        | C        |
|----------------------------------|----------|----------|----------|
| <b>Appl. Equipment:</b>          | backpack | backpack | backpack |
| <b>Operating Pressure, Unit:</b> | 24       | 24       | 24       |
| <b>Nozzle Type:</b>              | flat fan | flat fan | flat fan |
| <b>Nozzle Size:</b>              | 11002    | 11002    | 11002    |
| <b>Nozzle Spacing, Unit:</b>     | 18 inch  | 18 inch  | 18 inch  |
| <b>Nozzles/Row:</b>              | 4        | 4        | 4        |
| <b>Nozzle Calibration, Unit:</b> |          |          |          |
| <b>Band Width, Unit:</b>         |          |          |          |
| <b>Boom ID:</b>                  |          |          |          |
| <b>Boom Length, Unit:</b>        | 4.5 ft   | 4.5 ft   | 4.5 ft   |
| <b>Boom Height, Unit:</b>        | 15 inch  | 15 inch  | 15 inch  |
| <b>Ground Speed, Unit:</b>       | 3 mph    | 3 mph    | 3 mph    |
| <b>Incorporation Equip.:</b>     |          |          |          |
| <b>Hours to Incorp.:</b>         |          |          |          |
| <b>Incorp. Depth, Unit:</b>      |          |          |          |
| <b>Carrier:</b>                  | water    | water    | water    |
| <b>Spray Volume, Unit:</b>       | 14.8     | 14.8     | 14.8     |
| <b>Mix Size, Unit:</b>           |          |          |          |
| <b>Spray pH:</b>                 |          |          |          |
| <b>Propellant:</b>               | CO2      | CO2      | CO2      |
| <b>Tank Mix (Y/N):</b>           |          |          |          |

# University of Georgia

|                                  |          |
|----------------------------------|----------|
|                                  | D        |
| <b>Appl. Equipment:</b>          | backpack |
| <b>Operating Pressure, Unit:</b> | 24       |
| <b>Nozzle Type:</b>              | flat fan |
| <b>Nozzle Size:</b>              | 11002    |
| <b>Nozzle Spacing, Unit:</b>     | 18 inch  |
| <b>Nozzles/Row:</b>              | 4        |
| <b>Nozzle Calibration, Unit:</b> |          |
| <b>Band Width, Unit:</b>         |          |
| <b>Boom ID:</b>                  |          |
| <b>Boom Length, Unit:</b>        | 4.5 ft   |
| <b>Boom Height, Unit:</b>        | 15 inch  |
| <b>Ground Speed, Unit:</b>       | 3 mph    |
| <b>Incorporation Equip.:</b>     |          |
| <b>Hours to Incorp.:</b>         |          |
| <b>Incorp. Depth, Unit:</b>      |          |
| <b>Carrier:</b>                  | water    |
| <b>Spray Volume, Unit:</b>       | 14.8     |
| <b>Mix Size, Unit:</b>           |          |
| <b>Spray pH:</b>                 |          |
| <b>Propellant:</b>               | CO2      |
| <b>Tank Mix (Y/N):</b>           |          |

Equipment Comment:

Trt No    Treatment Application Comment

\_\_\_\_\_

Date                      By                      Notes

\_\_\_\_\_

Date                      By                      Deviations

\_\_\_\_\_

Reasons: