

# University of Idaho

## Pink Rot Fungicide Trial Powdery Scab Fungicide Trial

Trial ID: Pink Rot Parker  
Location: Parker, ID

Study Director: Syngenta  
Investigator: Dr. Jeff Miller

### General Trial Information

**Study Director:** Syngenta, IPC, USDA  
**Investigator:** Dr. Jeff Miller  
**Affiliation:** University of Idaho  
**Postal Code:** 83210  
**E-mail:** jsmiller@uidaho.edu  
**Title:** Potato Pathologist

### Trial Location

**City:** Parker  
**State/Prov.:** ID  
**Postal Code:** 83445  
**Country:** USA  
**E-Longitude of LL Corner °:** 111.464310  
**Altitude of LL Corner:** 4930.00 **Unit:** FT  
**Directions:**  
**Trial Status:** ESTABLISHED  
**Initiation Date:** 14/May/2004  
**Planned Completion Date:** 13/Oct/2004  
**N-Latitude of LL Corner °:** 43.569550  
**Angle y-axis to North °:** 0.00

### Objectives:

Evaluate fungicide applications for control of pink rot and powdery scab.

### Conclusions:

1. Pink rot was not present at measurable levels in the plots. Only three infected tubers were found.
2. Significant differences among treatments were only observed for US#2 tubers, 4-6 oz. None of the treatments differed from the untreated control.
3. Powdery scab was not significantly different for any of the treatments. The index and incidence of powdery scab in the untreated control was intermediate compared to other treatments.

### Cooperator/Landowner

**Cooperator:** Gary Taylor  
**Organization:** Crapo Farms  
**Address 1:** 1908 E 500 N  
**City:** St. Anthony  
**State/Prov:** ID  
**Postal Code:** 83445  
**Country:** USA  
**Phone No:** 208-624-3293  
**Fax No:** 208-624-3122  
**E-mail:** 4ttaylor@msn.com

### Crop Description

**Crop 1:** SOLTU Solanum tuberosum Potato  
**Variety:** Russet Burbank  
**BBCH Scale:** BPOT  
**Planting Method:** HILLED  
**Depth, Unit:** 6 IN  
**Row Spacing, Unit:** 36 IN  
**Seed Bed:** COARSE  
**Soil Moisture:** SLIGHTLY WET  
**Planting Date:** 14/May/2004  
**Rate, Unit:** 14520 P/A  
**Spacing Within Row, Unit:** 12 IN  
**Soil Temperature, Unit:** 58 F

### Pest Description

**Pest 1 Type:** D **Code:** PHYTER *Phytophthora erythroseptica*  
**Common Name:** Pink rot of potato  
**Pest 2 Type:** D **Code:** SPONSU *Spongospora subterranea*  
**Common Name:** Powdery scab of potato

### Site and Design

**Plot Width, Unit:** 12 FT  
**Plot Length, Unit:** 30 FT  
**Replications:** 4  
**Site Type:** FIELD  
**Tillage Type:** CONVENTIONAL-TILL  
**Study Design:** Randomized Complete Block

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## Soil Description

Fert. Level: GOOD

## Application Description

|                         | A           | B           | C           | D           |
|-------------------------|-------------|-------------|-------------|-------------|
| Application Date:       | 14/May/2004 | 14/Jul/2004 | 29/Jul/2004 | 18/Aug/2004 |
| Time of Day:            | 1:00-4:30   | 3:30-4:00   | 12-12:20    | 1:15-1:45   |
| Application Method:     | SPRAY       | SPRAY       | SPRAY       | SPRAY       |
| Application Timing:     | ATPLAN      |             |             |             |
| Application Placement:  | INFURR      | BANSOI      | BANSOI      | BANSOI      |
| Applied By:             | Miller, J.  | Fletcher, F | Fletcher, F | Fletcher, F |
| Air Temperature, Unit:  | 55 F        | 92 F        | 82 F        | 82 F        |
| % Relative Humidity:    | 45          | 52          | 54          | 64          |
| Wind Velocity, Unit:    | 8 MPH       | 2 MPH       | 4 MPH       | 4 MPH       |
| Wind Direction:         | SW          | SE          | S           | N           |
| Dew Presence (Y/N):     | N           | N           | N           | N           |
| Soil Temperature, Unit: | 58 F        | 70 F        | 61 F        | 64 F        |
| Soil Moisture:          | EXCESSIVE   | EXCESSIVE   | EXCESSIVE   | ADEQUATE    |
| % Cloud Cover:          | 75          | 30          | 2           | 85          |

## Application Equipment

|                       | A            | B           | C           | D           |
|-----------------------|--------------|-------------|-------------|-------------|
| Appl. Equipment:      | IFAP sprayer | Foliar boom | Foliar boom | Foliar boom |
| Operating Pressure:   | 20           | 20          | 20          | 20          |
| Pressure Unit:        | PSI          | PSI         | PSI         | PSI         |
| Nozzle Type:          | Teejet       | Teejet      | Teejet      | Teejet      |
| Nozzle Size:          | 11001 VS     | 11001 VS    | 11001 VS    | 11001 VS    |
| Nozzle Spacing, Unit: | 36 IN        | 13 IN       | 13 IN       | 13 IN       |
| Nozzles/Row:          | 1            | 2.75        | 2.75        | 2.75        |
| Band Width, Unit:     | 12 IN        | 12 IN       | 12 IN       | 12 IN       |
| Boom Length, Unit:    | 6 FT         | 12 FT       | 12 FT       | 12 FT       |
| Boom Height, Unit:    | 12 IN        | 3.5 FT      | 3.5 FT      | 3.5 FT      |
| Ground Speed, Unit:   | 0.5 MPH      |             |             |             |
| Incorporation Equip.: | DG plant     | None        | None        | None        |
| Hours to Incorp.:     | 0            | N/A         | N/A         | N/A         |
| Incorp. Depth, Unit:  | 6 IN         | N/A N/A     | N/A N/A     | N/A N/A     |
| Carrier:              | Water        | Water       | Water       | Water       |
| Spray Volume:         | 21.7         |             |             |             |
| Volume Unit:          | GAL/AC       | GAL/AC      | GAL/AC      | GAL/AC      |
| Propellant:           | CO2          | Comp. air   | Comp. air   | Comp. air   |
| Tank Mix (Y/N):       | N            |             |             |             |

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## Pink Rot Fungicide Trial Powdery Scab Fungicide Trial

Trial ID: Pink Rot Parker  
Location: Parker, ID

Study Director: Syngenta, IPC, USDA  
Investigator: Dr. Jeff Miller

Reps: 4

Plots: 12 by 30 feet

| Trt No. | Treatment Name  | Form Conc | Form Type | Rate | Rate Unit | Appl Code | Spray Volume | Volume Unit | Plot No. By Rep |     |     |     |     |
|---------|-----------------|-----------|-----------|------|-----------|-----------|--------------|-------------|-----------------|-----|-----|-----|-----|
|         |                 |           |           |      |           |           |              |             | 1               | 2   | 3   | 4   |     |
| 1       | Untreated Check |           |           |      |           |           |              |             | 101             | 205 | 302 | 404 |     |
| 2       | RIDOMIL GOLD EC | 4         | EC        | 6.1  | fl oz/a   | A         |              | 21.7        | GAL/AC          | 102 | 208 | 310 | 409 |
| 3       | RIDOMIL GOLD EC | 4         | EC        | 6.1  | fl oz/a   | A         |              | 21.7        | GAL/AC          | 103 | 209 | 301 | 405 |
|         | OMEGA           | 500       | F         | 8    | fl oz/a   | A         |              | 21.7        | GAL/AC          |     |     |     |     |
| 4       | OMEGA           | 500       | F         | 8    | fl oz/a   | A         |              | 21.7        | GAL/AC          | 104 | 210 | 304 | 402 |
| 5       | OMEGA           | 500       | F         | 16   | fl oz/a   | A         |              | 21.7        | GAL/AC          | 105 | 203 | 307 | 403 |
| 6       | RIDOMIL GOLD MZ |           | WP        | 2.5  | lb/a      | BC        |              | 11.77       | GAL/AC          | 106 | 207 | 305 | 401 |
| 7       | RIDOMIL GOLD MZ |           | WP        | 2.5  | lb/a      | BCD       |              | 11.77       | GAL/AC          | 107 | 206 | 303 | 406 |
| 8       | Phostrol        | 6.69      | DC        | 10   | pt/a      | BCD       |              | 11.77       | GAL/AC          | 108 | 204 | 308 | 407 |
| 9       | F-68            |           | SL        | 64   | fl oz/a   | ABCD      |              | 11.77       | GAL/AC          | 109 | 201 | 306 | 408 |
| 10      | HeadsUp         |           | SL        | 0.5  | gal/a     | A         |              | 21.7        | GAL/AC          | 110 | 202 | 309 | 410 |

>4: Weight (pounds/plot) of tubers less than 4 ounces.

Culls: Weight (pounds/plot) of misshapen tubers.

4-6 oz US 1: Weight (pounds/plot) of US#1 grade tubers between 4 and 6 ounces.

6-10 oz US 1: Weight (pounds/plot) of US#1 grade tubers between 6 and 10 ounces.

>10 US 1: Weight (pounds/plot) of US#1 grade tubers over 10 ounces.

4-6 oz US 2: Weight (pounds/plot) of US#2 grade tubers between 4 and 6 ounces.

6-10 oz US 2: Weight (pounds/plot) of US#2 grade tubers between 6 and 10 ounces.

>10 US 2: Weight (pounds/plot) of US#2 grade tubers over 10 ounces.

Total yield: Weight (hundredweight/acre) of all harvested tubers.

Market yield: Weight ((hundredweight/acre) of all US#1 and #2 tubers.

% US 1: Percentage of US#1 tubers (based on total yield weight).

% Over 6 oz: Percentage of tubers weighing over 6 oz. (based on total yield weight).

Gross return: Estimated US dollar value of harvested tubers based on a mock contract

\$4.50 for each cwt of marketable yield

\$2.50 for each cwt of process culls (estimated at 75% of >4 oz and Culls)

Incentive for percentage of US#1 (\$1.50/cwt if >60, -\$1.50/cwt if 40-60, -\$3.00/cwt if <40)

Incentive for percentage over 6 oz (\$1.50/cwt if >50, -\$1.50/cwt if 40-50, -\$5.00/cwt if <40)

P. Scab Index: Powdery scab index. Tubers sorted into classes based on percentage of tuber surface covered.

0 = No scab, 1 = 1-5%, 2 = 6-10%, 3 = 11-15%, 4 = 16-20%, and 5 = >20%.

(In previous years, more classes were used, but powdery scab pressure was light this year.)

Ratings for all stem and tuber powdery scab evaluations were used to calculate a single composite severity index for each plot:

$$\text{Index} = \frac{\sum_{i=1}^n X_i \times i}{\text{Total number of tubers} \times n}$$

$i$  = Rating class

$n$  = Maximum rating class

$X_i$  = Number of tubers in class  $i$

P. Scab Incidence: Percentage of tubers with powdery scab lesions.

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| Description        |                 | >4          | Culls       | 4-6 oz US 1 | 6-10 oz. US 1 |         |         |
|--------------------|-----------------|-------------|-------------|-------------|---------------|---------|---------|
| Part Rated         |                 |             |             |             |               |         |         |
| Rating Date        |                 | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004   |         |         |
| Rating Data Type   |                 |             |             |             |               |         |         |
| Rating Unit        |                 |             |             |             |               |         |         |
| Trt No.            | Treatment Name  | Rate        | Appl        |             |               |         |         |
|                    |                 | Rate Unit   | Code        |             |               |         |         |
| 1                  | Untreated Check |             |             | 32.30 a     | 4.60 a        | 33.73 a | 43.65 a |
| 2                  | RIDOMIL GOLD EC | 6.1 fl oz/a | A           | 36.15 a     | 3.73 a        | 37.18 a | 52.70 a |
| 3                  | RIDOMIL GOLD EC | 6.1 fl oz/a | A           | 34.35 a     | 4.45 a        | 32.08 a | 43.28 a |
|                    | OMEGA           | 8 fl oz/a   | A           |             |               |         |         |
| 4                  | OMEGA           | 8 fl oz/a   | A           | 31.23 a     | 3.13 a        | 34.38 a | 45.60 a |
| 5                  | OMEGA           | 16 fl oz/a  | A           | 31.18 a     | 4.49 a        | 29.79 a | 44.82 a |
| 6                  | RIDOMIL GOLD MZ | 2.5 lb/a    | BC          | 32.73 a     | 3.40 a        | 33.48 a | 49.70 a |
| 7                  | RIDOMIL GOLD MZ | 2.5 lb/a    | BCD         | 35.82 a     | 2.95 a        | 35.86 a | 38.54 a |
| 8                  | Phostrol        | 10 pt/a     | BCD         | 31.63 a     | 4.88 a        | 31.73 a | 50.25 a |
| 9                  | F-68            | 64 fl oz/a  | ABCD        | 31.95 a     | 3.99 a        | 32.33 a | 50.69 a |
| 10                 | HeadsUp         | 0.5 gal/a   | A           | 31.85 a     | 4.09 a        | 35.63 a | 47.84 a |
| LSD (P=.05)        |                 |             |             | 7.115       | 3.257         | 10.019  | 16.013  |
| LSD (P=.10)        |                 |             |             | 5.894       | 2.698         | 8.300   | 13.266  |
| Standard Deviation |                 |             |             | 4.863       | 2.226         | 6.848   | 10.946  |
| CV                 |                 |             |             | 14.77       | 56.08         | 20.37   | 23.44   |
| Bartlett's X2      |                 |             |             | 9.612       | 9.29          | 6.897   | 11.544  |
| P(Bartlett's X2)   |                 |             |             | 0.383       | 0.411         | 0.648   | 0.24    |

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

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

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## Pink Rot Fungicide Trial Powdery Scab Fungicide Trial

Trial ID: Pink Rot Parker  
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Investigator: Dr. Jeff Miller

| AOV For >4 29/Sep/2004            |    |                |             |       |         |  |
|-----------------------------------|----|----------------|-------------|-------|---------|--|
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 717.639951     |             |       |         |  |
| Replicate                         | 3  | 49.811011      | 16.603670   | 0.702 | 0.5605  |  |
| Treatment                         | 9  | 123.799707     | 13.755523   | 0.582 | 0.7985  |  |
| Error                             | 23 | 544.029233     | 23.653445   |       |         |  |
| AOV For Culls 29/Sep/2004         |    |                |             |       |         |  |
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 133.439589     |             |       |         |  |
| Replicate                         | 3  | 3.996798       | 1.332266    | 0.269 | 0.8472  |  |
| Treatment                         | 9  | 15.469131      | 1.718792    | 0.347 | 0.9487  |  |
| Error                             | 23 | 113.973659     | 4.955376    |       |         |  |
| AOV For 4-6 oz US 1 29/Sep/2004   |    |                |             |       |         |  |
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 1299.745908    |             |       |         |  |
| Replicate                         | 3  | 42.835271      | 14.278424   | 0.304 | 0.8219  |  |
| Treatment                         | 9  | 178.247038     | 19.805226   | 0.422 | 0.9096  |  |
| Error                             | 23 | 1078.663599    | 46.898417   |       |         |  |
| AOV For 6-10 oz. US 1 29/Sep/2004 |    |                |             |       |         |  |
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 4045.694843    |             |       |         |  |
| Replicate                         | 3  | 621.488735     | 207.162912  | 1.729 | 0.1890  |  |
| Treatment                         | 9  | 668.684836     | 74.298315   | 0.620 | 0.7678  |  |
| Error                             | 23 | 2755.521271    | 119.805273  |       |         |  |

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| Description        |                          |                          |                | >10 US 1    | 4-6 oz US 2 | 6-10 oz US 2 | >10 Over US 2 |
|--------------------|--------------------------|--------------------------|----------------|-------------|-------------|--------------|---------------|
| Part Rated         |                          |                          |                |             |             |              |               |
| Rating Date        |                          |                          |                | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004  | 29/Sep/2004   |
| Rating Data Type   |                          |                          |                |             |             |              |               |
| Rating Unit        |                          |                          |                |             |             |              |               |
| Trt No.            | Treatment Name           | Rate                     | Appl Unit Code |             |             |              |               |
| 1                  | Untreated Check          |                          |                | 30.23 a     | 2.00 abc    | 3.45 a       | 4.28 a        |
| 2                  | RIDOMIL GOLD EC          | 6.1 fl oz/a              | A              | 41.08 a     | 2.73 a      | 3.33 a       | 6.13 a        |
| 3                  | RIDOMIL GOLD EC<br>OMEGA | 6.1 fl oz/a<br>8 fl oz/a | A<br>A         | 30.78 a     | 2.43 ab     | 4.25 a       | 7.13 a        |
| 4                  | OMEGA                    | 8 fl oz/a                | A              | 41.68 a     | 1.20 bcd    | 3.25 a       | 3.88 a        |
| 5                  | OMEGA                    | 16 fl oz/a               | A              | 37.58 a     | 0.63 cd     | 3.04 a       | 4.97 a        |
| 6                  | RIDOMIL GOLD MZ          | 2.5 lb/a                 | BC             | 27.73 a     | 1.83 abc    | 2.88 a       | 4.95 a        |
| 7                  | RIDOMIL GOLD MZ          | 2.5 lb/a                 | BCD            | 32.80 a     | 0.19 d      | 1.87 a       | 4.21 a        |
| 8                  | Phostrol                 | 10 pt/a                  | BCD            | 33.48 a     | 2.50 ab     | 2.83 a       | 5.75 a        |
| 9                  | F-68                     | 64 fl oz/a               | ABCD           | 37.81 a     | 0.87 cd     | 2.57 a       | 5.54 a        |
| 10                 | HeadsUp                  | 0.5 gal/a                | A              | 37.73 a     | 1.43 a-d    | 3.13 a       | 7.08 a        |
| LSD (P=.05)        |                          |                          |                | 14.311      | 1.458       | 2.244        | 4.683         |
| LSD (P=.10)        |                          |                          |                | 11.855      | 1.208       | 1.859        | 3.879         |
| Standard Deviation |                          |                          |                | 9.782       | 0.997       | 1.534        | 3.201         |
| CV                 |                          |                          |                | 27.88       | 63.1        | 50.16        | 59.38         |
| Bartlett's X2      |                          |                          |                | 14.823      | 12.819      | 6.298        | 8.152         |
| P(Bartlett's X2)   |                          |                          |                | 0.096       | 0.171       | 0.71         | 0.519         |

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

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| AOV For >10 US 1 29/Sep/2004      |    |                |             |       |         |  |
|-----------------------------------|----|----------------|-------------|-------|---------|--|
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 4066.322058    |             |       |         |  |
| Replicate                         | 3  | 1049.146119    | 349.715373  | 3.655 | 0.0273  |  |
| Treatment                         | 9  | 816.509928     | 90.723325   | 0.948 | 0.5047  |  |
| Error                             | 23 | 2200.666011    | 95.681131   |       |         |  |
| AOV For 4-6 oz US 2 29/Sep/2004   |    |                |             |       |         |  |
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 55.871247      |             |       |         |  |
| Replicate                         | 3  | 6.607413       | 2.202471    | 2.217 | 0.1133  |  |
| Treatment                         | 9  | 26.419067      | 2.935452    | 2.955 | 0.0173  |  |
| Error                             | 23 | 22.844767      | 0.993251    |       |         |  |
| AOV For 6-10 oz US 2 29/Sep/2004  |    |                |             |       |         |  |
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 72.463546      |             |       |         |  |
| Replicate                         | 3  | 4.612367       | 1.537456    | 0.653 | 0.5890  |  |
| Treatment                         | 9  | 13.723283      | 1.524809    | 0.648 | 0.7453  |  |
| Error                             | 23 | 54.127897      | 2.353387    |       |         |  |
| AOV For >10 Over US 2 29/Sep/2004 |    |                |             |       |         |  |
| SOURCE                            | DF | SUM OF SQUARES | MEAN SQUARE | F     | Prob(F) |  |
| Total                             | 35 | 404.221206     |             |       |         |  |
| Replicate                         | 3  | 121.204292     | 40.401431   | 3.944 | 0.0209  |  |
| Treatment                         | 9  | 47.395549      | 5.266172    | 0.514 | 0.8493  |  |
| Error                             | 23 | 235.621365     | 10.244407   |       |         |  |

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| Description        |                          |                          |           | Total Yield | Market Yield | % US 1      | % Over 6 oz |
|--------------------|--------------------------|--------------------------|-----------|-------------|--------------|-------------|-------------|
| Part Rated         |                          |                          |           | TUBER       | TUBER        | TUBER       | TUBER       |
| Rating Date        |                          |                          |           | 29/Sep/2004 | 29/Sep/2004  | 29/Sep/2004 | 29/Sep/2004 |
| Rating Data Type   |                          |                          |           | YIELD       | YIELD        | YIELD       | YIELD       |
| Rating Unit        |                          |                          |           | cwt/ac      | cwt/ac       | %           | %           |
| Trt No.            | Treatment Name           | Rate                     | Appl Code |             |              |             |             |
| 1                  | Untreated Check          |                          |           | 447.8 a     | 340.8 a      | 69.83 a     | 52.85 a     |
| 2                  | RIDOMIL GOLD EC          | 6.1 fl oz/a              | A         | 531.5 a     | 415.5 a      | 71.23 a     | 55.25 a     |
| 3                  | RIDOMIL GOLD EC<br>OMEGA | 6.1 fl oz/a<br>8 fl oz/a | A<br>A    | 461.0 a     | 348.3 a      | 66.55 a     | 53.55 a     |
| 4                  | OMEGA                    | 8 fl oz/a                | A         | 477.3 a     | 377.5 a      | 73.85 a     | 57.20 a     |
| 5                  | OMEGA                    | 16 fl oz/a               | A         | 454.5 a     | 350.9 a      | 71.84 a     | 58.03 a     |
| 6                  | RIDOMIL GOLD MZ          | 2.5 lb/a                 | BC        | 455.0 a     | 350.3 a      | 70.70 a     | 54.13 a     |
| 7                  | RIDOMIL GOLD MZ          | 2.5 lb/a                 | BCD       | 441.9 a     | 329.3 a      | 69.89 a     | 49.53 a     |
| 8                  | Phostrol                 | 10 pt/a                  | BCD       | 473.5 a     | 367.5 a      | 69.98 a     | 56.03 a     |
| 9                  | F-68                     | 64 fl oz/a               | ABCD      | 481.1 a     | 377.3 a      | 72.84 a     | 57.83 a     |
| 10                 | HeadsUp                  | 0.5 gal/a                | A         | 489.9 a     | 386.0 a      | 71.72 a     | 56.37 a     |
| LSD (P=.05)        |                          |                          |           | 83.15       | 85.56        | 5.109       | 10.319      |
| LSD (P=.10)        |                          |                          |           | 68.88       | 70.88        | 4.233       | 8.548       |
| Standard Deviation |                          |                          |           | 56.84       | 58.48        | 3.492       | 7.053       |
| CV                 |                          |                          |           | 12.06       | 16.05        | 4.93        | 12.81       |
| Bartlett's X2      |                          |                          |           | 10.181      | 7.858        | 9.813       | 9.796       |
| P(Bartlett's X2)   |                          |                          |           | 0.336       | 0.548        | 0.366       | 0.367       |

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

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| AOV For Total Yield TUBER 29/Sep/2004 YIELD cwt/ac  |    |                |              |       |         |  |
|-----------------------------------------------------|----|----------------|--------------|-------|---------|--|
| SOURCE                                              | DF | SUM OF SQUARES | MEAN SQUARE  | F     | Prob(F) |  |
| Total                                               | 35 | 125900.247501  |              |       |         |  |
| Replicate                                           | 3  | 26880.925600   | 8960.308533  | 2.774 | 0.0643  |  |
| Treatment                                           | 9  | 24721.093934   | 2746.788215  | 0.850 | 0.5798  |  |
| Error                                               | 23 | 74298.227968   | 3230.357738  |       |         |  |
| AOV For Market Yield TUBER 29/Sep/2004 YIELD cwt/ac |    |                |              |       |         |  |
| SOURCE                                              | DF | SUM OF SQUARES | MEAN SQUARE  | F     | Prob(F) |  |
| Total                                               | 35 | 138128.427958  |              |       |         |  |
| Replicate                                           | 3  | 36038.434493   | 12012.811498 | 3.512 | 0.0313  |  |
| Treatment                                           | 9  | 23428.552935   | 2603.172548  | 0.761 | 0.6520  |  |
| Error                                               | 23 | 78661.440529   | 3420.062632  |       |         |  |
| AOV For % US 1 TUBER 29/Sep/2004 YIELD %            |    |                |              |       |         |  |
| SOURCE                                              | DF | SUM OF SQUARES | MEAN SQUARE  | F     | Prob(F) |  |
| Total                                               | 35 | 569.993824     |              |       |         |  |
| Replicate                                           | 3  | 144.920158     | 48.306719    | 3.961 | 0.0206  |  |
| Treatment                                           | 9  | 144.568145     | 16.063127    | 1.317 | 0.2816  |  |
| Error                                               | 23 | 280.505521     | 12.195892    |       |         |  |
| AOV For % Over 6 oz TUBER 29/Sep/2004 YIELD %       |    |                |              |       |         |  |
| SOURCE                                              | DF | SUM OF SQUARES | MEAN SQUARE  | F     | Prob(F) |  |
| Total                                               | 35 | 1712.733797    |              |       |         |  |
| Replicate                                           | 3  | 319.200460     | 106.400153   | 2.139 | 0.1229  |  |
| Treatment                                           | 9  | 249.376985     | 27.708554    | 0.557 | 0.8175  |  |
| Error                                               | 23 | 1144.156352    | 49.745928    |       |         |  |

# University of Idaho

| Description        |                 |             |           | Gross Return | P. Scab Index | P. Scab Incidence |             |
|--------------------|-----------------|-------------|-----------|--------------|---------------|-------------------|-------------|
| Part Rated         |                 |             |           | TUBER        | TUBER         | TUBER             |             |
| Rating Date        |                 |             |           | 29/Sep/2004  | 14/Oct/2004   | 14/Oct/2004       |             |
| Rating Data Type   |                 |             |           | INCGRO       | PESSEV        | PESINC            |             |
| Rating Unit        |                 |             |           | DOLLAR       | 0-5           | %                 |             |
| Trt No.            | Treatment Name  | Rate        | Appl Unit | Code         |               |                   |             |
| 1                  | Untreated Check |             |           |              | 2272.74 a     | 0.95 a            | 4.23 a      |
| 2                  | RIDOMIL GOLD EC | 6.1 fl oz/a | A         |              | 2838.67 a     | 0.76 a            | 3.61 a      |
| 3                  | RIDOMIL GOLD EC | 6.1 fl oz/a | A         |              | 2612.40 a     | 1.25 a            | 6.14 a      |
|                    | OMEGA           | 8 fl oz/a   | A         |              |               |                   |             |
| 4                  | OMEGA           | 8 fl oz/a   | A         |              | 3017.89 a     | 0.99 a            | 4.81 a      |
| 5                  | OMEGA           | 16 fl oz/a  | A         |              | 2792.82 a     | 1.44 a            | 5.58 a      |
| 6                  | RIDOMIL GOLD MZ | 2.5 lb/a    | BC        |              | 2589.89 a     | 0.51 a            | 2.57 a      |
| 7                  | RIDOMIL GOLD MZ | 2.5 lb/a    | BCD       |              | 1883.07 a     | 0.71 a            | 3.60 a      |
| 8                  | Phostrol        | 10 pt/a     | BCD       |              | 2954.46 a     | 0.47 a            | 2.33 a      |
| 9                  | F-68            | 64 fl oz/a  | ABCD      |              | 2989.51 a     | 0.28 a            | 1.42 a      |
| 10                 | HeadsUp         | 0.5 gal/a   | A         |              | 3150.85 a     | 0.71 a            | 3.61 a      |
| LSD (P=.05)        |                 |             |           |              | 1051.17       | 0.83              | 3.45        |
| LSD (P=.10)        |                 |             |           |              | 870.81        | 0.69              | 2.85        |
| Standard Deviation |                 |             |           |              | 718.498119    | 0.5676173539      | 2.355269191 |
| CV                 |                 |             |           |              | 26.51         | 70.37             | 62.15       |
| Bartlett's X2      |                 |             |           |              | 8.431         | 15.005            | 11.0        |
| P(Bartlett's X2)   |                 |             |           |              | 0.491         | 0.091             | 0.276       |

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

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

# University of Idaho

## Pink Rot Fungicide Trial Powdery Scab Fungicide Trial

Trial ID: Pink Rot Parker  
Location: Parker, ID

Study Director: Syngenta, IPC, USDA  
Investigator: Dr. Jeff Miller

| AOV For Gross Return TUBER 29/Sep/2004 INCGRO DOLLAR |    |                 |                |        |         |  |
|------------------------------------------------------|----|-----------------|----------------|--------|---------|--|
| SOURCE                                               | DF | SUM OF SQUARES  | MEAN SQUARE    | F      | Prob(F) |  |
| Total                                                | 35 | 22018341.788282 |                |        |         |  |
| Replicate                                            | 3  | 4747260.805343  | 1582420.268448 | 3.065  | 0.0482  |  |
| Treatment                                            | 9  | 5397573.353635  | 599730.372626  | 1.162  | 0.3633  |  |
| Error                                                | 23 | 11873507.629304 | 516239.462144  |        |         |  |
| AOV For P. Scab Index TUBER 14/Oct/2004 PESSEV 0-5   |    |                 |                |        |         |  |
| SOURCE                                               | DF | SUM OF SQUARES  | MEAN SQUARE    | F      | Prob(F) |  |
| Total                                                | 35 | 20.867916       |                |        |         |  |
| Replicate                                            | 3  | 8.833054        | 2.944351       | 9.139  | 0.0004  |  |
| Treatment                                            | 9  | 4.624506        | 0.513834       | 1.595  | 0.1755  |  |
| Error                                                | 23 | 7.410356        | 0.322189       |        |         |  |
| AOV For P. Scab Incidence TUBER 14/Oct/2004 PESINC % |    |                 |                |        |         |  |
| SOURCE                                               | DF | SUM OF SQUARES  | MEAN SQUARE    | F      | Prob(F) |  |
| Total                                                | 35 | 410.514447      |                |        |         |  |
| Replicate                                            | 3  | 205.799745      | 68.599915      | 12.366 | 0.0001  |  |
| Treatment                                            | 9  | 77.126982       | 8.569665       | 1.545  | 0.1913  |  |
| Error                                                | 23 | 127.587720      | 5.547292       |        |         |  |

# University of Idaho

**Pink Rot Fungicide Trial  
Powdery Scab Fungicide Trial**

Trial ID: Pink Rot Parker  
Location: Parker, ID

Study Director: Syngenta, IPC, USDA  
Investigator: Dr. Jeff Miller

| Description       |                     | >4          | Culls       | 4-6 oz US 1 | 6-10 oz. US 1 |        |
|-------------------|---------------------|-------------|-------------|-------------|---------------|--------|
| Part Rated        |                     | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004   |        |
| Rating Date       |                     |             |             |             |               |        |
| Rating Data Type  |                     |             |             |             |               |        |
| Rating Unit       |                     |             |             |             |               |        |
| Trt Treatment     | Rate Appl           |             |             |             |               |        |
| No. Name          | Rate Unit Code Plot |             |             |             |               |        |
| 1 Untreated Check |                     | 101         | 31.30       | 5.70        | 33.70         | 46.60  |
|                   |                     | 205         | 37.30       | 3.60        | 31.50         | 41.10  |
|                   |                     | 302         | 31.10       | 4.90        | 42.30         | 37.20  |
|                   |                     | 404         | 29.50       | 4.20        | 27.40         | 49.70  |
|                   | Mean =              |             | 32.30       | 4.60        | 33.73         | 43.65  |
| 2 RIDOMIL GOLD EC | 6.1 fl oz/a A       | 102         | 34.60       | 5.50        | 45.20         | 56.30  |
|                   |                     | 208         | 47.00       | 5.20        | 43.10         | 44.10  |
|                   |                     | 310         | 36.30       | 1.70        | 36.20         | 40.20  |
|                   |                     | 409         | 26.70       | 2.50        | 24.20         | 70.20  |
|                   | Mean =              |             | 36.15       | 3.73        | 37.18         | 52.70  |
| 3 RIDOMIL GOLD EC | 6.1 fl oz/a A       | 103         | 35.30       | 5.10        | 35.00         | 48.00  |
| OMEGA             | 8 fl oz/a A         | 209         | 33.90       | 6.70        | 27.50         | 21.10  |
|                   |                     | 301         | 35.80       | 3.20        | 31.10         | 42.50  |
|                   |                     | 405         | 32.40       | 2.80        | 34.70         | 61.50  |
|                   | Mean =              |             | 34.35       | 4.45        | 32.08         | 43.28  |
| 4 OMEGA           | 8 fl oz/a A         | 104         | 37.20       | 2.40        | 32.10         | 40.10  |
|                   |                     | 210         | 27.20       | 3.60        | 27.10         | 49.10  |
|                   |                     | 304         | 31.00       | 3.00        | 38.70         | 50.70  |
|                   |                     | 402         | 29.50       | 3.50        | 39.60         | 42.50  |
|                   | Mean =              |             | 31.23       | 3.13        | 34.38         | 45.60  |
| 5 OMEGA           | 16 fl oz/a A        | 105         | 29.20       | 2.30        | 22.70         | 38.30  |
|                   |                     | 203         | 29.60       | 7.10        | 28.50         | 47.80  |
|                   |                     | 307         | 31.53*      | 4.66*       | 31.08*        | 44.28* |
|                   |                     | 403         | 34.40       | 3.90        | 36.90         | 48.90  |
|                   | Mean =              |             | 31.18       | 4.49        | 29.79         | 44.82  |
| 6 RIDOMIL GOLD MZ | 2.5 lb/a BC         | 106         | 41.40       | 0.00        | 40.80         | 39.90  |
|                   |                     | 207         | 25.20       | 4.50        | 29.00         | 64.50  |
|                   |                     | 305         | 32.20       | 7.40        | 26.40         | 50.50  |
|                   |                     | 401         | 32.10       | 1.70        | 37.70         | 43.90  |
|                   | Mean =              |             | 32.73       | 3.40        | 33.48         | 49.70  |

# University of Idaho

| Description      |                 |            |      |        | >4          | Culls       | 4-6 oz US 1 | 6-10 oz. US 1 |
|------------------|-----------------|------------|------|--------|-------------|-------------|-------------|---------------|
| Part Rated       |                 |            |      |        |             |             |             |               |
| Rating Date      |                 |            |      |        | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004   |
| Rating Data Type |                 |            |      |        |             |             |             |               |
| Rating Unit      |                 |            |      |        |             |             |             |               |
| Trt              | Treatment       | Rate       | Appl |        |             |             |             |               |
| No.              | Name            | Rate Unit  | Code | Plot   |             |             |             |               |
| 7                | RIDOMIL GOLD MZ | 2.5 lb/a   | BCD  | 107    | 32.40       | 4.80        | 29.60       | 46.80         |
|                  |                 |            |      | 206    | 37.80       | 1.70        | 35.00       | 13.80         |
|                  |                 |            |      | 303    | 39.10       | 2.90        | 42.30       | 48.50         |
|                  |                 |            |      | 406    | 33.97*      | 2.41*       | 36.54*      | 45.05*        |
|                  |                 |            |      | Mean = | 35.82       | 2.95        | 35.86       | 38.54         |
| 8                | Phostrol        | 10 pt/a    | BCD  | 108    | 27.70       | 8.40        | 20.10       | 35.30         |
|                  |                 |            |      | 204    | 30.60       | 5.20        | 30.80       | 46.30         |
|                  |                 |            |      | 308    | 36.40       | 2.60        | 37.10       | 58.00         |
|                  |                 |            |      | 407    | 31.80       | 3.30        | 38.90       | 61.40         |
|                  |                 |            |      | Mean = | 31.63       | 4.88        | 31.73       | 50.25         |
| 9                | F-68            | 64 fl oz/a | ABCD | 109    | 34.80       | 4.00        | 33.50       | 48.50         |
|                  |                 |            |      | 201    | 30.40       | 1.40        | 31.50       | 49.40         |
|                  |                 |            |      | 306    | 32.29*      | 4.16*       | 33.61*      | 50.14*        |
|                  |                 |            |      | 408    | 30.30       | 6.40        | 30.70       | 54.70         |
|                  |                 |            |      | Mean = | 31.95       | 3.99        | 32.33       | 50.69         |
| 10               | HeadsUp         | 0.5 gal/a  | A    | 110    | 36.70       | 3.80        | 37.20       | 46.30         |
|                  |                 |            |      | 202    | 33.80       | 2.10        | 38.80       | 51.10         |
|                  |                 |            |      | 309    | 26.90       | 6.90        | 30.20       | 39.60         |
|                  |                 |            |      | 410    | 30.00*      | 3.54*       | 36.30*      | 54.35*        |
|                  |                 |            |      | Mean = | 31.85       | 4.09        | 35.63       | 47.84         |

# University of Idaho

| Description      |                          |             |           |           | >10 US 1    | 4-6 oz US 2 | 6-10 oz US 2 | >10 Over US 2 |       |      |      |
|------------------|--------------------------|-------------|-----------|-----------|-------------|-------------|--------------|---------------|-------|------|------|
| Part Rated       |                          |             |           |           | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004  | 29/Sep/2004   |       |      |      |
| Rating Date      |                          |             |           |           |             |             |              |               |       |      |      |
| Rating Data Type |                          |             |           |           |             |             |              |               |       |      |      |
| Rating Unit      |                          |             |           |           |             |             |              |               |       |      |      |
| Trt No.          | Treatment Name           | Rate        | Appl Unit | Code      | Plot        |             |              |               |       |      |      |
| 1                | Untreated Check          |             |           |           | 101         | 33.20       | 4.70         | 6.20          | 7.00  |      |      |
|                  |                          |             |           |           | 205         | 28.10       | 1.70         | 1.80          | 2.70  |      |      |
|                  |                          |             |           |           | 302         | 28.30       | 0.10         | 4.00          | 3.20  |      |      |
|                  |                          |             |           |           | 404         | 31.30       | 1.50         | 1.80          | 4.20  |      |      |
|                  |                          |             |           |           | Mean =      | 30.23       | 2.00         | 3.45          | 4.28  |      |      |
| 2                | RIDOMIL GOLD EC          | 6.1 fl oz/a | A         |           | 102         | 49.80       | 4.00         | 5.90          | 11.40 |      |      |
|                  |                          |             |           |           | 208         | 25.80       | 2.60         | 1.00          | 2.40  |      |      |
|                  |                          |             |           |           | 310         | 25.90       | 3.00         | 2.10          | 1.20  |      |      |
|                  |                          |             |           |           | 409         | 62.80       | 1.30         | 4.30          | 9.50  |      |      |
|                  |                          |             |           |           | Mean =      | 41.08       | 2.73         | 3.33          | 6.13  |      |      |
| 3                | RIDOMIL GOLD EC<br>OMEGA | 6.1 fl oz/a | A         |           | 103         | 22.20       | 4.60         | 6.20          | 6.90  |      |      |
|                  |                          |             |           | 8 fl oz/a | A           |             | 209          | 34.60         | 2.20  | 4.20 | 7.20 |
|                  |                          |             |           |           |             |             | 301          | 37.70         | 1.00  | 3.70 | 5.70 |
|                  |                          |             | 405       | 28.60     | 1.90        | 2.90        | 8.70         |               |       |      |      |
|                  |                          |             | Mean =    | 30.78     | 2.43        | 4.25        | 7.13         |               |       |      |      |
| 4                | OMEGA                    | 8 fl oz/a   | A         |           | 104         | 29.30       | 1.40         | 2.70          | 3.20  |      |      |
|                  |                          |             |           |           | 210         | 54.50       | 0.90         | 4.80          | 3.20  |      |      |
|                  |                          |             |           |           | 304         | 34.70       | 2.00         | 2.30          | 1.30  |      |      |
|                  |                          |             |           |           | 402         | 48.20       | 0.50         | 3.20          | 7.80  |      |      |
|                  |                          |             |           |           | Mean =      | 41.68       | 1.20         | 3.25          | 3.88  |      |      |
| 5                | OMEGA                    | 16 fl oz/a  | A         |           | 105         | 39.90       | 0.40         | 1.50          | 4.40  |      |      |
|                  |                          |             |           |           | 203         | 41.00       | 1.20         | 3.20          | 5.30  |      |      |
|                  |                          |             |           |           | 307         | 33.61*      | 0.23*        | 2.55*         | 2.49* |      |      |
|                  |                          |             |           |           | 403         | 35.80       | 0.70         | 4.90          | 7.70  |      |      |
|                  |                          |             |           |           | Mean =      | 37.58       | 0.63         | 3.04          | 4.97  |      |      |
| 6                | RIDOMIL GOLD MZ          | 2.5 lb/a    | BC        |           | 106         | 18.70       | 2.80         | 2.10          | 2.40  |      |      |
|                  |                          |             |           |           | 207         | 28.50       | 0.90         | 2.60          | 8.00  |      |      |
|                  |                          |             |           |           | 305         | 33.00       | 1.40         | 2.70          | 7.20  |      |      |
|                  |                          |             |           |           | 401         | 30.70       | 2.20         | 4.10          | 2.20  |      |      |
|                  |                          |             |           |           | Mean =      | 27.73       | 1.83         | 2.88          | 4.95  |      |      |

# University of Idaho

| Description      |                 |            |           |        | >10 US 1    | 4-6 oz US 2 | 6-10 oz US 2 | >10 Over US 2 |
|------------------|-----------------|------------|-----------|--------|-------------|-------------|--------------|---------------|
| Part Rated       |                 |            |           |        | 29/Sep/2004 | 29/Sep/2004 | 29/Sep/2004  | 29/Sep/2004   |
| Rating Date      |                 |            |           |        |             |             |              |               |
| Rating Data Type |                 |            |           |        |             |             |              |               |
| Rating Unit      |                 |            |           |        |             |             |              |               |
| Trt No.          | Treatment Name  | Rate       | Appl Code | Plot   |             |             |              |               |
|                  |                 | Rate Unit  |           |        |             |             |              |               |
| 7                | RIDOMIL GOLD MZ | 2.5 lb/a   | BCD       | 107    | 36.70       | 0.60        | 2.40         | 7.30          |
|                  |                 |            |           | 206    | 31.00       | 0.00        | 0.80         | 2.90          |
|                  |                 |            |           | 303    | 22.50       | 0.20        | 2.20         | 0.00          |
|                  |                 |            |           | 406    | 40.99*      | -0.03*      | 2.07*        | 6.65*         |
|                  |                 |            |           | Mean = | 32.80       | 0.19        | 1.87         | 4.21          |
| 8                | Phostrol        | 10 pt/a    | BCD       | 108    | 20.10       | 1.40        | 2.40         | 6.60          |
|                  |                 |            |           | 204    | 30.60       | 3.30        | 4.70         | 5.20          |
|                  |                 |            |           | 308    | 31.60       | 2.50        | 0.80         | 0.00          |
|                  |                 |            |           | 407    | 51.60       | 2.80        | 3.40         | 11.20         |
|                  |                 |            |           | Mean = | 33.48       | 2.50        | 2.83         | 5.75          |
| 9                | F-68            | 64 fl oz/a | ABCD      | 109    | 22.80       | 0.90        | 3.40         | 2.40          |
|                  |                 |            |           | 201    | 37.70       | 0.60        | 2.20         | 5.90          |
|                  |                 |            |           | 306    | 33.84*      | 0.47*       | 2.09*        | 3.05*         |
|                  |                 |            |           | 408    | 56.90       | 1.50        | 2.60         | 10.80         |
|                  |                 |            |           | Mean = | 37.81       | 0.87        | 2.57         | 5.54          |
| 10               | HeadsUp         | 0.5 gal/a  | A         | 110    | 31.50       | 1.70        | 1.90         | 2.20          |
|                  |                 |            |           | 202    | 43.50       | 1.90        | 4.00         | 11.70         |
|                  |                 |            |           | 309    | 30.00       | 0.90        | 3.30         | 4.90          |
|                  |                 |            |           | 410    | 45.93*      | 1.20*       | 3.34*        | 9.52*         |
|                  |                 |            |           | Mean = | 37.73       | 1.43        | 3.13         | 7.08          |

# University of Idaho

| Description      |                 |             |      |      | Total Yield | Market Yield | % US 1      | % Over 6 oz |        |
|------------------|-----------------|-------------|------|------|-------------|--------------|-------------|-------------|--------|
| Part Rated       |                 |             |      |      | TUBER       | TUBER        | TUBER       | TUBER       |        |
| Rating Date      |                 |             |      |      | 29/Sep/2004 | 29/Sep/2004  | 29/Sep/2004 | 29/Sep/2004 |        |
| Rating Data Type |                 |             |      |      | YIELD       | YIELD        | YIELD       | YIELD       |        |
| Rating Unit      |                 |             |      |      | cwt/ac      | cwt/ac       | %           | %           |        |
| Trt              | Treatment       | Rate        | Appl |      |             |              |             |             |        |
| No.              | Name            | Rate        | Unit | Code | Plot        |              |             |             |        |
| 1                | Untreated Check |             |      |      | 101         | 489.0        | 382.0       | 67.40       | 55.20  |
|                  |                 |             |      |      | 205         | 429.0        | 310.0       | 68.10       | 49.90  |
|                  |                 |             |      |      | 302         | 439.0        | 334.0       | 71.30       | 48.10  |
|                  |                 |             |      |      | 404         | 434.0        | 337.0       | 72.50       | 58.20  |
|                  |                 |             |      |      | Mean =      | 447.8        | 340.8       | 69.83       | 52.85  |
| 2                | RIDOMIL GOLD EC | 6.1 fl oz/a | A    |      | 102         | 618.0        | 501.0       | 71.10       | 58.00  |
|                  |                 |             |      |      | 208         | 497.0        | 346.0       | 66.00       | 42.80  |
|                  |                 |             |      |      | 310         | 426.0        | 315.0       | 69.80       | 47.30  |
|                  |                 |             |      |      | 409         | 585.0        | 500.0       | 78.00       | 72.90  |
|                  |                 |             |      |      | Mean =      | 531.5        | 415.5       | 71.23       | 55.25  |
| 3                | RIDOMIL GOLD EC | 6.1 fl oz/a | A    |      | 103         | 474.0        | 357.0       | 64.40       | 51.00  |
|                  | OMEGA           | 8 fl oz/a   | A    |      | 209         | 399.0        | 281.0       | 60.60       | 48.80  |
|                  |                 |             |      |      | 301         | 467.0        | 353.0       | 69.30       | 55.80  |
|                  |                 |             |      |      | 405         | 504.0        | 402.0       | 71.90       | 58.60  |
|                  |                 |             |      |      | Mean =      | 461.0        | 348.3       | 66.55       | 53.55  |
| 4                | OMEGA           | 8 fl oz/a   | A    |      | 104         | 431.0        | 316.0       | 68.40       | 50.70  |
|                  |                 |             |      |      | 210         | 495.0        | 405.0       | 76.70       | 65.50  |
|                  |                 |             |      |      | 304         | 475.0        | 377.0       | 75.80       | 54.40  |
|                  |                 |             |      |      | 402         | 508.0        | 412.0       | 74.50       | 58.20  |
|                  |                 |             |      |      | Mean =      | 477.3        | 377.5       | 73.85       | 57.20  |
| 5                | OMEGA           | 16 fl oz/a  | A    |      | 105         | 403.0        | 311.0       | 72.70       | 60.60  |
|                  |                 |             |      |      | 203         | 475.0        | 369.0       | 71.70       | 59.40  |
|                  |                 |             |      |      | 307         | 436.9*       | 331.7*      | 72.78*      | 55.94* |
|                  |                 |             |      |      | 403         | 503.0        | 392.0       | 70.20       | 56.20  |
|                  |                 |             |      |      | Mean =      | 454.5        | 350.9       | 71.84       | 58.03  |
| 6                | RIDOMIL GOLD MZ | 2.5 lb/a    | BC   |      | 106         | 430.0        | 310.0       | 67.10       | 42.60  |
|                  |                 |             |      |      | 207         | 474.0        | 388.0       | 74.80       | 63.50  |
|                  |                 |             |      |      | 305         | 467.0        | 352.0       | 68.30       | 58.10  |
|                  |                 |             |      |      | 401         | 449.0        | 351.0       | 72.60       | 52.30  |
|                  |                 |             |      |      | Mean =      | 455.0        | 350.3       | 70.70       | 54.13  |



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| Description      |                 |            |      |        | Total Yield | Market Yield | % US 1      | % Over 6 oz |
|------------------|-----------------|------------|------|--------|-------------|--------------|-------------|-------------|
| Part Rated       |                 |            |      |        | TUBER       | TUBER        | TUBER       | TUBER       |
| Rating Date      |                 |            |      |        | 29/Sep/2004 | 29/Sep/2004  | 29/Sep/2004 | 29/Sep/2004 |
| Rating Data Type |                 |            |      |        | YIELD       | YIELD        | YIELD       | YIELD       |
| Rating Unit      |                 |            |      |        | cwt/ac      | cwt/ac       | %           | %           |
| Trt              | Treatment       | Rate       | Appl |        |             |              |             |             |
| No.              | Name            | Rate       | Unit | Code   | Plot        |              |             |             |
| 7                | RIDOMIL GOLD MZ | 2.5 lb/a   | BCD  | 107    | 466.0       | 358.0        | 70.40       | 58.00       |
|                  |                 |            |      | 206    | 357.0       | 242.0        | 64.90       | 39.40       |
|                  |                 |            |      | 303    | 458.0       | 336.0        | 71.80       | 46.40       |
|                  |                 |            |      | 406    | 486.7*      | 381.2*       | 72.46*      | 54.34*      |
|                  |                 |            |      | Mean = | 441.9       | 329.3        | 69.89       | 49.53       |
| 8                | Phostrol        | 10 pt/a    | BCD  | 108    | 354.0       | 249.0        | 61.90       | 52.80       |
|                  |                 |            |      | 204    | 455.0       | 351.0        | 68.70       | 55.40       |
|                  |                 |            |      | 308    | 491.0       | 378.0        | 75.00       | 53.50       |
|                  |                 |            |      | 407    | 594.0       | 492.0        | 74.30       | 62.40       |
|                  |                 |            |      | Mean = | 473.5       | 367.5        | 69.98       | 56.03       |
| 9                | F-68            | 64 fl oz/a | ABCD | 109    | 436.0       | 324.0        | 69.70       | 51.30       |
|                  |                 |            |      | 201    | 462.0       | 370.0        | 74.50       | 59.80       |
|                  |                 |            |      | 306    | 463.5*      | 358.0*       | 73.78*      | 55.73*      |
|                  |                 |            |      | 408    | 563.0       | 457.0        | 73.40       | 64.50       |
|                  |                 |            |      | Mean = | 481.1       | 377.3        | 72.84       | 57.83       |
| 10               | HeadsUp         | 0.5 gal/a  | A    | 110    | 468.0       | 351.0        | 71.30       | 50.80       |
|                  |                 |            |      | 202    | 543.0       | 439.0        | 71.40       | 59.00       |
|                  |                 |            |      | 309    | 414.0       | 316.0        | 69.90       | 54.50       |
|                  |                 |            |      | 410    | 534.7*      | 437.8*       | 74.30*      | 61.17*      |
|                  |                 |            |      | Mean = | 489.9       | 386.0        | 71.72       | 56.37       |

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| Description      |                          |             |            |             | Gross Return | P. Scab Index | P. Scab Incidence |             |
|------------------|--------------------------|-------------|------------|-------------|--------------|---------------|-------------------|-------------|
| Part Rated       |                          |             |            |             | TUBER        | TUBER         | TUBER             |             |
| Rating Date      |                          |             |            |             | 29/Sep/2004  | 14/Oct/2004   | 14/Oct/2004       |             |
| Rating Data Type |                          |             |            |             | INCGRO       | PESSEV        | PESINC            |             |
| Rating Unit      |                          |             |            |             | DOLLAR       | 0-5           | %                 |             |
| Trt No.          | Treatment Name           | Rate        | Appl Unit  | Code        | Plot         |               |                   |             |
| 1                | Untreated Check          |             |            |             | 101          | 3063.35724    | 0.693069349       | 2.97029740  |
|                  |                          |             |            |             | 205          | 1619.66984    | 0.808080873       | 2.52525283  |
|                  |                          |             |            |             | 302          | 1700.14702    | 0.807174942       | 4.03587477  |
|                  |                          |             |            |             | 404          | 2707.79885    | 1.477832704       | 7.38916328  |
|                  |                          |             |            |             | Mean =       | 2272.74315    | 0.946539497       | 4.23014683  |
| 2                | RIDOMIL GOLD EC          | 6.1 fl oz/a | A          |             | 102          | 3977.57291    | 0.000000000       | 0.00000000  |
|                  |                          |             |            |             | 208          | 1839.32123    | 1.061224567       | 5.30612283  |
|                  |                          |             |            |             | 310          | 1626.09501    | 0.361990995       | 1.80995494  |
|                  |                          |             |            |             | 409          | 3911.68838    | 1.626016422       | 7.31707408  |
|                  |                          |             |            |             | Mean =       | 2838.66923    | 0.762307959       | 3.60828793  |
| 3                | RIDOMIL GOLD EC<br>OMEGA | 6.1 fl oz/a | A          |             | 103          | 2896.74028    | 0.000000000       | 0.00000000  |
|                  |                          |             |            |             | 209          | 1486.04959    | 1.700000218       | 8.50000085  |
|                  |                          |             |            |             |              |               |                   |             |
|                  |                          | 405         | 3203.83821 | 2.489270698 | 12.01716829  |               |                   |             |
|                  |                          |             |            |             |              | Mean =        | 2612.40236        | 1.249338037 |
| 4                | OMEGA                    | 8 fl oz/a   | A          |             | 104          | 2585.28615    | 0.102040823       | 0.51020413  |
|                  |                          |             |            |             | 210          | 3208.19441    | 2.068965642       | 9.85221771  |
|                  |                          |             |            |             | 304          | 3009.99639    | 0.334728066       | 1.67364030  |
|                  |                          |             |            |             | 402          | 3268.08944    | 1.441441561       | 7.20720792  |
|                  |                          |             |            |             | Mean =       | 3017.89166    | 0.986793974       | 4.81081772  |
| 5                | OMEGA                    | 16 fl oz/a  | A          |             | 105          | 2506.33375    | 0.000000000       | 0.00000000  |
|                  |                          |             |            |             | 203          | 2965.89190    | 3.115578248       | 10.55276499 |
|                  |                          |             |            |             | 307          | 2552.37062*   | 1.174761532*      | 4.33684392* |
|                  |                          |             |            |             | 403          | 3146.66584    | 1.484716325       | 7.42358139  |
|                  |                          |             |            |             | Mean =       | 2792.81546    | 1.443763996       | 5.57829770  |
| 6                | RIDOMIL GOLD MZ          | 2.5 lb/a    | BC         |             | 106          | 1619.77873    | 0.088495584       | 0.44247793  |
|                  |                          |             |            |             | 207          | 3069.34674    | 0.256410267       | 1.28205145  |
|                  |                          |             |            |             | 305          | 2855.35820    | 0.196078454       | 0.98039226  |
|                  |                          |             |            |             | 401          | 2815.06522    | 1.512605222       | 7.56302575  |
|                  |                          |             |            |             | Mean =       | 2589.88722    | 0.513397387       | 2.56698682  |

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| Description      |                 |            |           |      | Gross Return | P. Scab Index | P. Scab Incidence |             |
|------------------|-----------------|------------|-----------|------|--------------|---------------|-------------------|-------------|
| Part Rated       |                 |            |           |      | TUBER        | TUBER         | TUBER             |             |
| Rating Date      |                 |            |           |      | 29/Sep/2004  | 14/Oct/2004   | 14/Oct/2004       |             |
| Rating Data Type |                 |            |           |      | INCGRO       | PESSEV        | PESINC            |             |
| Rating Unit      |                 |            |           |      | DOLLAR       | 0-5           | %                 |             |
| Trt No.          | Treatment Name  | Rate       | Appl Unit | Code | Plot         |               |                   |             |
| 7                | RIDOMIL GOLD MZ | 2.5 lb/a   | BCD       |      | 107          | 2890.20634    | 0.200000023       | 1.00000010  |
|                  |                 |            |           |      | 206          | 457.56154     | 0.804020187       | 4.02010100  |
|                  |                 |            |           |      | 303          | 1740.65777    | 0.524017506       | 2.62008765  |
|                  |                 |            |           |      | 406          | 2443.84595*   | 1.306806933*      | 6.75067540* |
|                  |                 |            |           |      | Mean =       | 1883.06794    | 0.708711159       | 3.59771621  |
| 8                | Phostrol        | 10 pt/a    | BCD       |      | 108          | 2067.46676    | 0.205128228       | 1.02564119  |
|                  |                 |            |           |      | 204          | 2828.13334    | 0.198019822       | 0.99009911  |
|                  |                 |            |           |      | 308          | 3043.75519    | 0.836820150       | 4.18410105  |
|                  |                 |            |           |      | 407          | 3878.47378    | 0.622568133       | 3.11284073  |
|                  |                 |            |           |      | Mean =       | 2954.45733    | 0.465634095       | 2.32817053  |
| 9                | F-68            | 64 fl oz/a | ABCD      |      | 109          | 2639.73635    | 0.000000000       | 0.00000000  |
|                  |                 |            |           |      | 201          | 2945.74541    | 0.326530638       | 1.63265328  |
|                  |                 |            |           |      | 306          | 2748.91068*   | 0.008888395*      | 0.18244720* |
|                  |                 |            |           |      | 408          | 3623.64782    | 0.776699084       | 3.88349548  |
|                  |                 |            |           |      | Mean =       | 2989.51006    | 0.278029529       | 1.42464890  |
| 10               | HeadsUp         | 0.5 gal/a  | A         |      | 110          | 2851.54667    | 0.666666753       | 3.33333359  |
|                  |                 |            |           |      | 202          | 3484.25596    | 0.549019690       | 2.74509839  |
|                  |                 |            |           |      | 309          | 2555.88331    | 0.322580668       | 1.61290340  |
|                  |                 |            |           |      | 410          | 3711.69715*   | 1.310302627*      | 6.76818868* |
|                  |                 |            |           |      | Mean =       | 3150.84553    | 0.712142420       | 3.61488092  |