#### University of Georgia PHY485WRF response to Ignite mixtures.

|      | al ID: C31-0       |        |      |        |           |         | -         |        | anley Culpe |        |     |             |     |
|------|--------------------|--------|------|--------|-----------|---------|-----------|--------|-------------|--------|-----|-------------|-----|
|      | ation: Attap       |        |      |        |           | Inv     | vestigato | r: Sta | anley Culpe | pper   |     |             |     |
| Rep  |                    |        |      | 2 by 2 |           |         |           |        |             |        |     |             |     |
| Spra | ay vol: 14.8 gal/a |        |      |        | : 2 liter | rs (min | 1.5434)   |        |             |        |     |             |     |
|      | Treatment          | Form I |      |        |           |         | Grow      | Appl   | Amt Product | Plot N |     |             |     |
|      | Name               | Conc l | Unit | Туре   | Rate      | Unit    | Stg       | Code   | to Measure  | 1      | 2   | 3           | 4   |
| 1    | PHY485WRF          |        |      |        |           |         |           |        |             | 101    | 204 | 302         | 404 |
|      | Ignite             | 2.34   |      | L      |           |         | POT-3lf   | А      | 30.62 ml/mx |        |     |             |     |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT+ 14d  | В      | 30.62 ml/mx |        |     |             |     |
| 2    | PHY485WRF          |        |      |        |           |         |           |        |             | 102    | 207 | 307         | 409 |
|      | Ignite             | 2.34   |      | L      |           |         | POT+ 14d  | -      | 30.62 ml/mx |        |     |             |     |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT+ 28d  | С      | 30.62 ml/mx |        |     |             |     |
| 3    | PHY485WRF          |        |      |        |           |         |           |        |             | 109    | 206 | 305         | 407 |
|      | WeatherMax         | 4.5    |      | L      | 22        | OZ/A    | POT-3lf   | А      | 23.23 ml/mx |        |     |             |     |
|      | WeatherMax         | 4.5    |      | L      | 22        | OZ/A    | POT+ 14d  | В      | 23.23 ml/mx |        |     |             |     |
| 4    | PHY485WRF          |        |      |        |           |         |           |        |             | 104    | 210 | 309         | 405 |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT       | А      | 30.62 ml/mx |        |     |             |     |
|      | WeatherMax         | 4.5    |      | L      | 22        | OZ/A    | POT+ 14d  | В      | 23.23 ml/mx |        |     |             |     |
| 5    | PHY485WRF          |        |      |        |           |         |           |        |             | 105    | 209 | 306         | 401 |
|      | WeatherMax         | 4.5    |      | L      | 22        | OZ/A    | POT       | А      | 23.23 ml/mx |        |     |             |     |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT+ 14d  | В      | 30.62 ml/mx |        |     |             |     |
| 6    | PHY485WRF          |        |      |        |           |         |           |        |             | 106    | 201 | 310         | 406 |
| -    | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT       | А      | 30.62 ml/mx |        |     |             |     |
|      | Staple             | 3.2    |      | L      | 1.7       | OZ/A    | POT       | А      | 1.795 ml/mx |        |     |             |     |
|      | WeatherMax         | 4.5    |      | L      | 22        | OZ/A    | POT+ 14d  | В      | 23.23 ml/mx |        |     |             |     |
| 7    | PHY485WRF          |        |      |        |           |         |           |        |             | 107    | 205 | 301         | 402 |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT       | А      | 30.62 ml/mx | -      |     | -           |     |
|      | Dual Magnum        | 7.64   |      | L      | 16        | OZ/A    | POT       | А      | 16.89 ml/mx |        |     |             |     |
|      | WeatherMax         | 4.5    |      | L      | 22        | OZ/A    | POT+ 14d  | В      | 23.23 ml/mx |        |     |             |     |
| 8    | FM 955 LLB2        |        |      |        |           |         |           |        |             | 103    | 208 | 303         | 408 |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT-3lf   | А      | 30.62 ml/mx |        |     |             |     |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT+ 14d  | В      | 30.62 ml/mx |        |     |             |     |
| 9    | FM 955 LLB2        |        |      |        |           |         |           |        |             | 108    | 203 | 308         | 403 |
|      | Ignite             | 2.34   |      | L      | 29        | OZ/A    | POT+ 14d  | В      | 30.62 ml/mx |        |     |             |     |
|      | Ignite             | 2.34   |      | L      |           |         | POT+ 28d  |        | 30.62 ml/mx |        |     |             |     |
| 10   | Non-treated        |        |      |        |           |         |           |        |             | 110    | 202 | 304         | 410 |
|      |                    |        |      |        |           |         |           |        |             |        |     | <b>20</b> 1 |     |

Sort Order: Treatment

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

| Amount* | Unit | Treatment Name | Form Conc | Form Type | Lot Code |
|---------|------|----------------|-----------|-----------|----------|
| 459.249 | ml   | Ignite         | 2.34      | L         |          |
| 174.198 | ml   | WeatherMax     | 4.5       | L         |          |
| 2.243   | ml   | Staple         | 3.2       | L         |          |
| 21.115  | 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.

PHY485WRF response to Ignite mixtures.

Trial ID: C31-07 Location: Attapulgus Study Dir.: Stanley Culpepper Investigator: Stanley Culpepper

Trial Comments

OBJECTIVE: Determine Widestrike Tolerance to Ignite Applied Topically.

COTTON RESPONSE:

1. Ignite applied overtop of 3 leaf cotton caused 14 to 15% visual chlorosis. The addition of Staple with Ignite did not increase injury. Dual mixed

with Ignite did increase injury by 5 to 6%. Glyphosate caused less than 2% injury.

2. Six leaf cotton was injured 17% by Ignite. This application following the 3 leaf application only injured cotton 19%.

3. Little injury was noted with the Ignite application to 11 leaf cotton.

4. Cotton recovered very quickly from all treatments.

#### SEED COTTON:

1. The non-treated control was maintained weed free. Yield of Widestrike cotton was not impacted by Ignite.

2. Culpepper screwed up and allowed the research farm to overspray the trial with glyphosate to maintain it weed free thereby destroying the potential yield from the FiberMax cultivars.

May 11: PRE broadcast applications of Prowl H2O 1qt/A and Cotoran 1 qt/A.

July 15: Broadcast application of glyphosate over trial area.

|     |                               |       |              | P         | HY485WRF | response | to Ignite | mixture  | s.        |               |
|-----|-------------------------------|-------|--------------|-----------|----------|----------|-----------|----------|-----------|---------------|
| Tri | al ID: C31-0                  | 7     |              |           | Stu      | dy Dir.: | Stanley C | ulpepper |           |               |
| Loc | ation: Attap                  | ulgus |              |           | Inves    | tigator: | Stanley C | ulpepper |           |               |
| Wee | ed Code                       |       |              | INJURY    | INJURY   | INJURY   | INJURY    | INJURY   | SEED      | SEED          |
|     | o Code                        |       |              | COTTON    | COTTON   | COTTON   | COTTON    | COTTON   | COTTON    | COTTON        |
|     | ng Data Type                  |       |              | %         | %        | %        | %         | %        | Yield     | Yield         |
|     | ng Unit                       |       |              | control   | control  | control  |           | control  | lb/plot   | lb/A          |
|     | ng Date                       |       |              |           |          |          | Jun-24-07 |          | Oct-09-07 | Oct-09-07     |
|     | Eval Interval<br>Action Codes |       |              | 5 DA-A    | 13 DA-A  | 19 DA-A  | 27 DA-A   | 35 DA-A  |           | TY1           |
|     | ibsamples, Dec                |       |              |           |          |          |           |          |           | 111           |
|     | Treatment                     |       | Rate         |           |          |          |           |          |           | 1             |
|     | Name                          | Rate  |              | 1         | 2        | 3        | 4         | 5        | 6         | 7             |
|     | PHY485WRF                     | Nato  | Onit         | '<br>14 b | 6 b      | <br>19 a | 9 a       | <br>1 a  | 10 a      | ,<br>2978.1 a |
|     | Ignite                        | 29    | OZ/A         | 14 0      | 0.0      | 19 d     | 9 a       | Id       | 10 a      | 2970.1 a      |
|     | Ignite                        |       | OZ/A         |           |          |          |           |          |           |               |
| 2   | PHY485WRF                     |       |              | 0 c       | 0 e      | 17 a     | 6 ab      | 0 a      | 11 a      | 3264.1 a      |
| _   | Ignite                        | 29    | OZ/A         |           |          |          | 0 4.0     | 0 4      |           | 0 <u> </u>    |
|     | Ignite                        |       | OZ/A         |           |          |          |           |          |           |               |
| 3   | PHY485WRF                     |       |              | 2 c       | 0 e      | 3 d      | 0 c       | 0 a      | 11 a      | 3298.2 a      |
|     | WeatherMax                    | 22    | OZ/A         |           |          |          |           |          |           |               |
|     | WeatherMax                    | 22    | OZ/A         |           |          |          |           |          |           |               |
| 4   | PHY485WRF                     |       |              | 15 b      | 5 bc     | 7 с      | 4 bc      | 0 a      | 11 a      | 3142.1 a      |
|     | Ignite                        | 29    | OZ/A         |           |          |          |           |          |           |               |
|     | WeatherMax                    | 22    | OZ/A         |           |          |          |           |          |           |               |
| 5   | PHY485WRF                     |       |              | 1 c       | 1 de     | 15 b     | 3 bc      | 0 a      | 11 a      | 3319.3 a      |
|     | WeatherMax                    |       | OZ/A         |           |          |          |           |          |           |               |
|     | Ignite                        | 29    | OZ/A         |           |          |          |           |          |           |               |
| 6   | PHY485WRF                     |       |              | 14 b      | 4 bcd    | 8 c      | 4 bc      | 0 a      | 10 a      | 2954.8 a      |
|     | Ignite                        |       | OZ/A         |           |          |          |           |          |           |               |
|     | Staple<br>WeatherMax          |       | OZ/A<br>OZ/A |           |          |          |           |          |           |               |
| 7   | PHY485WRF                     | 22    | 0Z/A         | 21 -      | 10 -     | 0.0      | C ab      | 0.5      | 44 -      | 2050 4 -      |
|     | Ignite                        | 20    | OZ/A         | 21 a      | 10 a     | 8 c      | 6 ab      | 0 a      | 11 a      | 3059.4 a      |
|     | Dual Magnum                   |       | OZ/A         |           |          |          |           |          |           |               |
|     | WeatherMax                    |       | OZ/A         |           |          |          |           |          |           |               |
| 8   | FM 955 LLB2                   |       | •=           | 0 c       | 3 cde    | 0 e      | 0 c       | 0 a      |           |               |
| Ŭ   | Ignite                        | 29    | OZ/A         |           | 0 000    | 00       | 00        | υu       |           |               |
|     | Ignite                        |       | OZ/A         |           |          |          |           |          |           |               |
| 9   | FM 955 LLB2                   |       |              | 1 c       | 0 e      | 0 e      | 0 c       | 0 a      |           |               |
|     | Ignite                        | 29    | OZ/A         |           |          |          |           |          |           |               |
|     | Ignite                        | 29    | OZ/A         |           |          |          |           |          |           |               |
| 10  | Non-treated                   |       |              | 0 c       | 0 e      | 0 e      | 0 c       | 0 a      | 10 a      | 3036.1 a      |
| LSD | (P=.05)                       |       |              | 2.8       | 3.1      | 2.1      | 3.8       | 1.1      | 1.4       | 411.94        |
|     | ndard Deviation               |       |              | 1.9       | 2.1      | 1.4      | 2.7       | 0.8      | 1.0       | 280.08        |
| CV  |                               |       |              | 28.76     | 73.82    | 18.68    | 82.9      | 632.46   | 8.94      | 8.94          |
|     | lett's X2                     |       |              | 4.225     | 4.933    | 0.551    | 5.819     | 0.0      | 17.566    | 17.566        |
| P(B | artlett's X2)                 |       |              | 0.646     | 0.294    | 0.968    | 0.324     |          | 0.014*    | 0.014*        |

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

Column 7: TY1 = 290.4\*[C6]

|                                    | PHY  | 485WRF response to Ignite mixtures.                              |           |
|------------------------------------|--|--|-----------|
| Trial ID: C31-0<br>Location: Attap |  | Study Dir.: Stanley Culpepper<br>Investigator: Stanley Culpepper |           |
|                                    | GENERAL TH                                     | RIAL INFORMATION   |           |
| -                                  | Stanley Culpepper<br>Univ. of Georgia<br>31794 | Title: Ext. Weed   | Science   |
| -                                  | Stanley Culpepper<br>Univ. of Georgia<br>31794 | Title: Ext. Weed   | Science   |
|                                    | TRIA   | AL LOCATION  |           |
| City: Att                          | tapulgus                                       |  | completed |
| State/Prov.: GA                    |  | Trial Reliability:   |           |
| Postal Code:                       |  | Initiation Date:   | -         |
| Country: USA                       |  | Planned Completion Date:   |           |
| _                                  |  | N-Latitude of LL Corner °:                                       |           |
| Directions:                        | Corner: Unit                                   | t: Angle y-axis to North °:                                      |           |
| Directions:                        |  |  |           |
|                                    | COOPERA  | ATOR/LANDOWNER   |           |
| Cooperator:                        |  | Country:   |           |
| Org:                               |  | Phone No:  |           |
|                                    |  | Fax No:  |           |
|                                    |  |  |           |
| -                                  |  |  |           |
|                                    |  |  |           |
| Postal Code:                       |  |  |           |
| Conducted Under                    | GLP (Y/N): N                                   | Conducted Under GEP (Y/N): N                                     |           |
|                                    |  | Description:   |           |
|                                    |  |  |           |
| Objective:                         |  |  |           |
| Conclusions:                       |  |  |           |

| CROP  | AND      | WEED | DESCRIPTION    |
|-------|----------|------|----------------|
| CILOI | 1 11 1 1 |      | DEDCIGITI LION |

|      |       | -               |            |              |          |
|------|-------|-----------------|------------|--------------|----------|
| Weed | Code  | Common          | Name       | Scientific   | Name     |
| 1.   |       |                 |            |              |          |
|      |       |                 |            |              |          |
| Crop | 1: GC | SHI COTTON, SHO | ORT STAPLE | Variety: PHY | 7 485 WF |

| 0- 0 F |         |             | 001101., | Dirotti D |               |        |        |          |         | 11 100  |             |
|--------|---------|-------------|----------|-----------|---------------|--------|--------|----------|---------|---------|-------------|
| Plant  | ing Dat | te: May     | y-11-07  |           | Pla           | nting  | Method | 1: seede | d       |         |             |
| Rate:  | 3       | per         | ft       | Dept      | <b>h:</b> 0.5 | in     |        | Perenni  | al Age: | :       |             |
| Row S  | pacing  | <b>:</b> 36 | in       | Spacin    | g Withi       | n Row  | : 4    | inch     | Seed I  | Bed: fl | lat         |
| Soil   | Tempera | ature:      | 82 E     | Soil      | Moistur       | e: mo  | ist    | Em       | ergence | e Date: | : May-16-07 |
|        |         |             |          |           |               |        |        |          |         |         |             |
|        |         |             |          | S         | ITE ANI       | DESI   | GN     |          |         |         |             |
| Plot   | Width,  | Unit:       | 12       | FT        | Plot Le       | ength, | Unit:  | 25       | FT      | Reps:   | 4           |
| Site   | Type:   | Atta        | apulgus  | Researc   | h Cente       | er     |        |          |         |         |             |
|        |         |             |          |           |               |        |        |          |         |         |             |

 Tillage Type: Conventional
 Study Design: RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

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

|     |      | Maintenance    | Form | Form | Form |      | Rate |
|-----|------|----------------|------|------|------|------|------|
| No. | Date | Treatment Name | Conc | Unit | Туре | Rate | Unit |
| 1.  |      |                |      |      |      |      |      |

|         |                 | S   | OIL DESCRIPTION | 1          |
|---------|-----------------|-----|-----------------|------------|
| % Sand: | 84 % <b>OM:</b> | 1.3 | Texture:        | loamy sand |
| % Silt: | 8 <b>pH:</b>    | 6.0 | Soil Name:      |            |
| % Clay: | 8 <b>CEC:</b>   |     | Fert. Level:    |            |

|         | ADDITIONAL M | IEASURED ELEMEN | ITS  |
|---------|--------------|-----------------|------|
| Element |              | Quantity        | Unit |
|         |              |                 |      |

| MOISTURE C | ONDITIONS |
|------------|-----------|
|------------|-----------|

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

#### Overall Moisture Conditions: irrigated

Closest Weather Station: \_\_\_\_\_ Distance: \_\_\_\_ Unit: \_\_

\_\_\_\_\_

|                                 | APPLICATION DESCRIPTION |       |           |       |           |       |
|---------------------------------|-------------------------|-------|-----------|-------|-----------|-------|
|                                 | A                       |       | В         |       | C         |       |
| Application Date:               | May-                    | 28-07 | Jun-1     | 10-07 | Jun-      | 24-07 |
| Time of Day:                    | 7:30                    | am    | 8:30      | am    | 8:00      | am    |
| Application Method:             | broadcast               |       | broadcast |       | broadcast |       |
| Application Timing:             | POT-3leaf               |       | POT+14D   |       | POT+28D   |       |
| Applic. Placement:              | overtop                 |       | overtop   |       | overtop   |       |
| Air Temp., Unit:                | 74                      | F     | 87        | F     | 83        | F     |
| <pre>% Relative Humidity:</pre> | 66                      |       | 50        |       | 45        |       |
| Wind Velocity, Unit:            | 0                       | mph   | 0         | mph   | 0         | mph   |
| Dew Presence (Y/N):             | N                       |       | Ν         |       | Y         |       |
| Water Hardness:                 |                         |       |           |       |           |       |
| Soil Temp., Unit:               | 74                      | F     | 85        | F     | 85        | F     |
| Soil Moisture:                  | fair                    |       | moist     |       | moist     |       |
| % Cloud Cover:                  | 0                       |       | 0         |       | 40        |       |

#### CROP STAGE AT EACH APPLICATION

|                     | A         | В          | C          |
|---------------------|-----------|------------|------------|
| Crop 1 Code, Stage: | GOSHI POT | GOSHI +14d | GOSHI +28d |
| Stage Scale:        | 2 leaf    | 6 leaf     | 11 leaf    |
| Height, Unit:       | 3 in      | 8 in       | 15 in      |

#### WEED STAGE AT EACH APPLICATION

|                     | A | В | C |
|---------------------|---|---|---|
| Weed 1 Code, Stage: |   |   |   |
| Stage Scale:        |   |   |   |
| Density, Unit:      |   |   |   |

|                       | APPLICATION EQUIPMENT |     |          |     |          |     |
|-----------------------|-----------------------|-----|----------|-----|----------|-----|
|                       |                       | А   |          | в   |          | C   |
| Appl. Equipment:      | backpack              |     | backpack |     | backpack |     |
| Operating Pressure:   | 24                    |     | 24       |     | 24       |     |
| Nozzle Type:          | flat                  | fan | flat     | fan | flat     | fan |
| Nozzle Size:          | 11002                 | 2   | 1100     | 2   | 1100     | 2   |
| Nozzle Spacing, Unit: | 18                    | in  | 18       | in  | 18       | in  |
| Nozzles/Row:          | 2                     |     | 2        |     | 2        |     |
| Band Width, Unit:     |                       |     |          |     |          |     |
| Boom Length, Unit:    | 4.5                   | ft  | 4.5      | ft  | 4.5      | ft  |
| Boom Height, Unit:    | 15                    | in  | 15       | in  | 15       | in  |
| Ground Speed, Unit:   | 3                     | mph | 3        | mph | 3        | mph |
| Incorporation Equip.: |                       |     |          |     |          |     |
| Hours to Incorp.:     |                       |     |          |     |          |     |
| Incorp. Depth, Unit:  |                       |     |          |     |          |     |
| Carrier:              | water                 |     | water    |     | water    |     |
| Spray Volume, Unit:   | 15                    | GPA | 15       | GPA | 15       | GPA |
| Spray pH:             |                       |     |          |     |          |     |
| Propellant:           | CO2                   |     | C02      |     | CO2      |     |
| Tank Mix (Y/N):       | Y                     |     | Y        |     | Y        |     |

Trt No

Treatment Application Comment