| | | Seed | ded o | nion | respo | onse to | Dua | l Magnum, O | Outlo | ok, a | nd Pr | owl H |
|------|-----------------------------------|--------|---------|-----------|--------|-----------|---|-------------|--------|--------|-------|-------|
| Tri | al ID: Onion4-06 | | | | | Study | Dir. | : Stanley | Culpe | pper | | |
| Loc | ation: VORF | | | | II | nvestig | ator | : Stanley | Culpe | pper | | |
| Rep | s: 4 | Plots: | 6 by 2 | 5 feet | | | | | | | | |
| Spra | ay vol: 14.8 gal/ac | ľ | Mix siz | e: 1 lite | ers (m | in .77168 | 3) | | | | | |
| Trt | Treatment | Form | Form | _ | Rate | Grow A | ppl | Amt Product | Plot N | lo. By | Rep | |
| No. | Name | Conc | Туре | Rate | Unit | Stg C | ode | to Measure | 1 | 2 | 3 | 4 |
| 1 | Dual Magnum PRE Application | 7.62 | L | 8 | OZ/A | A A | | 4.223 ml/mx | 101 | 210 | 304 | 412 |
| 2 | Dual Magnum 1 leaf application | 7.62 | L | 8 | OZ/A | B | • | 4.223 ml/mx | 102 | 215 | 312 | 418 |
| 3 | Dual Magnum 6 leaf application | 7.62 | L | 8 | OZ/A | C C | ; | 4.223 ml/mx | 103 | 207 | 310 | 411 |
| 4 | Dual Magnum | 7.62 | L | 16 | OZ/A | A | | 8.446 ml/mx | 104 | 209 | 320 | 405 |
| 5 | Dual Magnum | 7.62 | L | 16 | OZ/A | B | | 8.446 ml/mx | 105 | 211 | 303 | 413 |
| 6 | Dual Magnum 6 leaf application | 7.62 | L | 16 | OZ/A | C C | ; | 8.446 ml/mx | 106 | 214 | 318 | 419 |
| 7 | Outlook PRE Application | 6 | L | 8 | OZ/A | A | | 4.223 ml/mx | 107 | 213 | 309 | 420 |
| 8 | Outlook 1 leaf application | 6 | L | 8 | OZ/A | B | - | 4.223 ml/mx | 108 | 206 | 315 | 407 |
| 9 | Outlook 6 leaf application | 6 | L | 8 | OZ/A | C | ; | 4.223 ml/mx | 109 | 203 | 305 | 410 |
| 10 | Outlook PRE Application | 6 | L | 16 | OZ/A | A A | <u>, </u> | 8.446 ml/mx | 110 | 212 | 314 | 417 |
| 11 | Outlook 1 leaf application | 6 | L | 16 | OZ/A | B | | 8.446 ml/mx | 111 | 202 | 316 | 409 |
| 12 | Outlook 6 leaf application | 6 | L | 16 | OZ/A | 0 0 | ; ; ; | 8.446 ml/mx | 112 | 220 | 319 | 404 |
| 13 | Prowl H20 PRE Application | 3.8 | L | 1 | PT/A | A A | | 8.445 ml/mx | 113 | 201 | 302 | 403 |
| 14 | Prowl H20 1 leaf application | 3.8 | L | 1 | PT/A | B | • | 8.445 ml/mx | 114 | 216 | 308 | 415 |
| 15 | Prowl H20 6 leaf application | 3.8 | L | 1 | PT/A | C | ; | 8.445 ml/mx | 115 | 218 | 313 | 408 |
| 16 | Prowl H20 PRE Application | 3.8 | L | 2 | PT/A | A A | | 16.89 ml/mx | 116 | 204 | 311 | 402 |
| 17 | Prowl H20 1 leaf application | 3.8 | L | 2 | PT/A | B | 6 | 16.89 ml/mx | 117 | 219 | 306 | 401 |
| 18 | Prowl H20 6 leaf application | 3.8 | L | 2 | PT/A | C | ; | 16.89 ml/mx | 118 | 205 | 307 | 416 |
| 19 | Non-treated control | | | | | | | | 119 | 208 | 317 | 414 |
| 20 | Non-treated control | | | | | | | | 120 | 217 | 301 | 406 |
| ~ | | | | | | | | | | | | ' |

Sort Order: Treatment

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

| Amount* | Unit | Treatment Name | Form Conc | Form Type | Lot Code |
|---------|------|----------------|-----------|-----------|----------|
| 47.509 | ml | Dual Magnum | 7.62 | L | |
| 47.509 | ml | Outlook | 6 | L | |
| 95.007 | ml | Prowl H20 | 3.8 | L | |

| Reps: 4 | | | Plots: 6 by 25 fee | t | | |
|--|--------------------------------------|--|---|--|--|---|
| Spray vol | l: 14.8 | 3 gal/ac | Mix size: 1 li | ters (min .7 | 7168) | |
| Trt | Tr> | Form | Form | | Rate | Plot No. By Rep |
| No. | N> | Conc | Туре | Rate | Unit | |
| Product of | quant | tities requ | ired for listed treatr | nents and a | applications | in one trial: |
| * 'Per are * Produc | ∋a' ca ⊧t amc | lculations ount calcu | based on spray vo lations increased 2 | lume= 14.8 5 % for ove | gal/ac, mix rage adjust | : size= 1 liters (mix size basis). ment. |
| | | | | | Trial Co | omments |
| OBJECTI | VE: D | etermine so | eeded onion response | to Dual Mag | num, Outlook | , and Prowl H20. |
| VISUAL 0 1. PRE a 2. Injury 3. 6 leaf | ONION applica from f applic | I INJURY: ations of all 1-2 leaf ap cations cau | products caused sev plications was greater used no onion injury, re | ere injury, ge r than 10% w egardless of | enerally Outlo /ith only Dual herbicide trea | ook was the safest. Magnum. atment. |
| CONCLU 1. In a se leaf stage | SIONS ∋eded e. | 3: onion syst | em when following D | acthal PRE ar | nd at spike, P | rowl H20 at 1 leaf, Outlook or Dual Magnum should be applied near the 6 |

| | See | ded o | onion resp | onse to D | ual Magnu | m, Outloo | k, and Pr |
|-------------------------------------|------|-------|------------|------------|------------|------------|-----------|
| Trial ID: Onion4-06 | | | | Study Di | ir.: Stanl | lev Culper | per |
| Location: VORF | | | - | Investigat | cor: Stanl | ley Culper | per |
| Crop Code | | | onion | onion | onion | onion | onion |
| Rating Data Type | | | injury | injury | injury | injury | injury |
| Rating Unit | | | percent | percent | percent | percent | percent |
| Rating Date | | | Nov-22-05 | Dec-20-05 | Jan-08-06 | Jan-08-06 | Jan-26-06 |
| Crop Stage | | | Andrew | Andrew | | Andrew | Andrew |
| Assessed By | | | | | | | |
| | | Dete | 30 DA-A | 64 DA-A | 63 DA-A | 63 DA-A | TUT DA-A |
| No Name | Rate | LInit | 1 | 2 | 3 | 4 | 5 |
| 1 Dual Magnum | 8 | OZ/A | 96 a | 83 b | 93 a | 86 bc | 68 c |
| 2 Dual Magnum | 8 | OZ/A | 0 d | 6 e | 16 e | 8 f | 4 f |
| 1 leaf application | 0 | 07/4 | 0.4 | 0.0 | 0 f | 0 f | 0 f |
| 6 leaf application | 0 | UZ/A | 0 0 | 0.6 | 01 | 01 | 01 |
| 4 Dual Magnum PRE Application | 16 | OZ/A | 89 b | 86 b | 93 a | 91 b | 79 b |
| 5 Dual Magnum 1 leaf application | 16 | OZ/A | 0 d | 8 e | 38 d | 15 e | 16 e |
| 6 Dual Magnum 6 leaf application | 16 | OZ/A | 0 d | 0 e | 0 f | 0 f | 0 f |
| 7 Outlook PRE Application | 8 | OZ/A | 81 c | 63 d | 64 c | 73 d | 51 d |
| 8 Outlook 1 leaf application | 8 | OZ/A | 0 d | 4 e | 4 f | 5 f | 0 f |
| 9 Outlook 6 leaf application | 8 | OZ/A | 0 d | 0 e | 0 f | 0 f | 0 f |
| 10 Outlook PRE Application | 16 | OZ/A | 90 b | 73 c | 85 b | 83 c | 61 cd |
| 11 Outlook 1 leaf application | 16 | OZ/A | 0 d | 8 e | 7 f | 8 f | 11 ef |
| 12 Outlook 6 leaf application | 16 | OZ/A | 0 d | 0 e | 0 f | 0 f | 0 f |
| 13 Prowl H20 PRE Application | 1 | PT/A | 99 a | 98 a | 95 a | 99 a | 85 b |
| 14 Prowl H20 1 leaf application | 1 | PT/A | 0 d | 4 e | 1 f | 4 f | 0 f |
| 15 Prowl H20 6 leaf application | 1 | PT/A | 0 d | 1 e | 0 f | 0 f | 0 f |
| 16 Prowl H20 PRE Application | 2 | PT/A | 100 a | 99 a | 95 a | 100 a | 100 a |
| 17 Prowl H20 1 leaf application | 2 | PT/A | 0 d | 4 e | 5 f | 6 f | 3 f |
| 18 Prowl H20 6 leaf application | 2 | PT/A | 0 d | 0 e | 0 f | 0 f | 0 f |
| 19 Non-treated control | | | h 0 | 0 e | 0 f | 0 f | 0 f |
| 20 Non-treated control | | | h 0 | 0 A | 0 f | 0 f | 0 f |
| LSD (P- 05) | | | 51 | 2 Q Q | 60 | | 10.5 |
| Standard Deviation | | | 3.6 | 6.2 | 4.4 | 4.7 | 7.4 |
| CV | | | 12.97 | 23.13 | 14.8 | 16.25 | 31.19 |
| Bartlett's X2 | | | 27.512 | 53.747 | 25.499 | 36.612 | 16.1 |
| P(Bartlett's X2) | | | 0.001* | 0.001* | 0.002* | 0.001* | 0.041* |

| Crop Code | onion | onion | onion | onion | onion |
|-------------------|-----------|-----------|-----------|-----------|-----------|
| Rating Data Type | injury | injury | injury | injury | injury |
| Rating Unit | percent | percent | percent | percent | percent |
| Rating Date | Nov-22-05 | Dec-20-05 | Jan-08-06 | Jan-08-06 | Jan-26-06 |
| Crop Stage | Andrew | Andrew | | Andrew | Andrew |
| Assessed By | AM | AM | SC | AM | AM |
| Trt-Eval Interval | 36 DA-A | 64 DA-A | 83 DA-A | 83 DA-A | 101 DA-A |

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

Field Prep./Maintenance:

Feb-21-07 (Onion4-06)

University of Georgia

| | Seeded onion r | esponse to Dual Magnum, Outlook, and | l Prowl H20. |
|---|--|--|-------------------------------------|
| Trial ID: Onion Location: VORF | 4-06 | Study Dir.: Stanley Culpepper Investigator: Stanley Culpepper | |
| | GENERAL I | RIAL INFORMATION | |
| Study Director: Affiliation: Postal Code: | Stanley Culpepper Univ. of Georgia 31794 | Title: Ext. Weed | Science |
| Investigator: Affiliation: Postal Code: | Andrew MacRae Univ. of Georgia 31794 | Title: Ext. Weed | Science |
| | TRI | AL LOCATION | |
| City: Vi State/Prov.: GA Postal Code: Country: US E-Longitude of Altitude of LL Directions: | dalia A A LL Corner °: Corner: Uni | Trial Status: Trial Reliability: Initiation Date: Planned Completion Date: N-Latitude of LL Corner °: t: Angle y-axis to North °: | completed excellent Oct-17-05 |
| | COODER | | |
| Cooperator: Org: Address 1: Address 2: City: State/Prov: Postal Code: | | Country: Phone No: Fax No: | |
| Conducted Under Guidelines: | GLP (Y/N): N Guideline | Conducted Under GEP (Y/N): N Description: | |
| Objective: | | | |
| Conclusions: | | | |

Weed Code Common Name Scientific Name 1. . . . Crop 1: ALLCE ONION Variety: Century Planting Date: Oct-17-05 Planting Method: seeded

CROP AND WEED DESCRIPTION

| Rate: 1 | 3 in | | Depth | : 0.25 | in | Pe | rennia | al Age: | | |
|---------------|------|------|---------|---------------|--------|----------|--------------|---------|--------|-----------|
| Row Spacing: | 15 | inch | Spacing | Within | Row: | 3 i: | nch | Seed B | ed: fl | at |
| Soil Temperat | ure: | 69 E | Soil M | loisture | : fai | r/irriga | t Eme | ergence | Date: | Oct-27-05 |
| | | | ст | רדאג שידי | ספינים | NT | | | | |

| | | | | | 0110 14 | | 514 | | | | |
|--------|--------|--------|--------|---------------|----------|----------|--------|--------|---------------|-------|---|
| Plot W | idth, | Unit: | 6 | \mathbf{FT} | Plot I | Length, | Unit: | 25 | \mathbf{FT} | Reps: | 4 |
| Site T | ype: | Vidi | alia | Onion | Research | Center | | | | | |
| Tillag | е Туре | : Conv | rentic | onal | 5 | Study De | esign: | FACTOR | IAL | | |

Trial Initiation Comments:

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

MAINTENANCE

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

| | | | | | SOIL DESCRIPTION | ı |
|---|-------|----|-------|------|------------------|------------|
| % | Sand: | 86 | % OM: | 0.47 | Texture: | loamy sand |
| % | silt: | 10 | pH: | 5.9 | Soil Name: | |
| % | Clay: | 4 | CEC: | | Fert. Level: | |

| ADDITIONAL M | ieasured elemen | ITS |
|--------------|-----------------|------|
| Element | Quantity | Unit |
| | | |

MOISTURE CONDITIONS

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

Overall Moisture Conditions: irrigated often Closest Weather Station: _____ Distance: ____ Unit: ___

| | APPLICATION DESCRIPTION | | | | | |
|----------------------|-------------------------|-----|-----------|-----|-----------|-----|
| | A | | В | | C | |
| Application Date: | Oct-17-05 | | Nov-04-05 | | Jan-26-06 | |
| Time of Day: | 9 am | | 9 am | | 9 am | |
| Application Method: | broadcast | | broadcast | | broadcast | |
| Application Timing: | PRE | | 1 leaf | | 6 leaf | |
| Applic. Placement: | overtop | | overtop | | overtop | |
| Air Temp., Unit: | 69 | F | 65 | F | 66 | F |
| % Relative Humidity: | 44 | | 56 | | 23 | |
| Wind Velocity, Unit: | 3 | mph | 0 | mph | 3 | mph |
| Dew Presence (Y/N): | n | | У | | n | |
| Water Hardness: | | | | | | |
| Soil Temp., Unit: | 69 | F | 61 | F | 48 | F |
| Soil Moisture: | fair/irri | | moist | | moist | |
| % Cloud Cover: | 0 | | 0 | | 0 | |

CROP STAGE AT EACH APPLICATION

| | A | В | С | |
|---------------------|---------|---------|----------|--|
| Crop 1 Code, Stage: | ALLCE . | ALLCE . | ALLCE . | |
| Stage Scale: | PRE | 1 leaf | 5-6 leaf | |
| Height, Unit: | 0 inch | 2 inch | 5 inch | |

WEED STAGE AT EACH APPLICATION

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

| | APPLICATION EQUIPMENT | | | | | |
|-----------------------|-----------------------|------|-------|------|-------|------|
| | | А | | в | | C |
| Appl. Equipment: | backp | pack | backp | pack | backp | pack |
| Operating Pressure: | 24 | | 24 | | 24 | |
| Nozzle Type: | flat | fan | flat | fan | flat | fan |
| Nozzle Size: | 11002 | | 11002 | | 11002 | |
| Nozzle Spacing, Unit: | 18 | in | 18 | in | 18 | in |
| Nozzles/Row: | 1 | | 1 | | 1 | |
| Band Width, Unit: | | | | | | |
| Boom Length, Unit: | 4.5 | feet | 4.5 | feet | 4.5 | feet |
| Boom Height, Unit: | 15 | inch | 15 | inch | 15 | inch |
| Ground Speed, Unit: | 3 | mph | 3 | mph | 3 | mph |
| Incorporation Equip.: | | | | | | |
| Hours to Incorp.: | | | | | | |
| Incorp. Depth, Unit: | | | | | | |
| Carrier: | water | r | water | r | water | r |
| Spray Volume, Unit: | 14.8 | GPA | 14.8 | GPA | 14.8 | GPA |
| Spray pH: | | | | | | |
| Propellant: | CO2 | | CO2 | | CO2 | |
| Tank Mix (Y/N): | N | | Ν | | N | |

Trt No

Treatment Application Comment