

University of Georgia

Tomato and weed response to V-10142 formulations.

Trial ID: Veg19-06
Location: Ponder (5141)

Study Dir.: Stanley Culpepper
Investigator: Stanley Culpepper

Reps: 3 Plots: 6 by 16 feet
Spray vol: 14.8 gal/ac Mix size: 1 liters (min .37041)

| Trt No. | Treatment Name | Form Conc | Form Type | Rate | Form Rate | Unit | Grow Stg | Appl Code | Amt to Measure | Product | Plot No. By Rep | | |
|---------|----------------|-----------|------------|-------|-----------|-----------|----------|-------------|----------------|---------|-----------------|---|---|
| | | | | | | | | | | | 1 | 2 | 3 |
| 1 | V-10142 | 75 | WDG | 0.075 | LB A/A | POST | A | 0.8096 g/mx | 101 | 210 | 303 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 2 | V-10142 | 3.3 | FL | 0.075 | LB A/A | POST | A | 1.535 ml/mx | 102 | 209 | 307 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 3 | V-10142 | 75 | WDG | 0.1 | LB A/A | POST | A | 1.08 g/mx | 103 | 201 | 306 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 4 | V-10142 | 3.3 | FL | 0.1 | LB A/A | POST | A | 2.047 ml/mx | 104 | 202 | 304 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 5 | V-10142 | 75 | WDG | 0.15 | LB A/A | POST | A | 1.619 g/mx | 105 | 203 | 301 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 6 | V-10142 | 3.3 | FL | 0.15 | LB A/A | POST | A | 3.071 ml/mx | 106 | 205 | 310 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 7 | V-10142 | 75 | WDG | 0.2 | LB A/A | POST | A | 2.159 g/mx | 107 | 208 | 302 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 8 | V-10142 | 3.3 | FL | 0.2 | LB A/A | POST | A | 4.095 ml/mx | 108 | 206 | 309 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 9 | Sandea | 75 | DF | 0.047 | LB A/A | POST | A | 0.5074 g/mx | 109 | 207 | 305 | | |
| | NIS | L | 0.25 % V/V | POST | A | 2.5 ml/mx | | | | | | | |
| 10 | Non-treated | | | | | | | | 110 | 204 | 308 | | |

Sort Order: Treatment

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

| Amount* | Unit | Treatment Name | Form Conc | Form Type | Lot Code |
|---------|------|----------------|-----------|-----------|----------|
| 7.084 | g | V-10142 | 75 | WDG | |
| 28.122 | ml | NIS | | L | |
| 13.435 | ml | V-10142 | 3.3 | FL | |
| 0.634 | g | Sandea | 75 | DF | |

* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1 liters (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 1 liters.

Trial Comments

OBJECTIVE: Evaluate tomato response to V-10142 applied topically.

CROP RESPONSE:

1. No visual injury was noted throughout the trial.
2. With a CV of 2.57, there were no differences in plant heights when measuring 7 plants per plot at 12 d after application.

GENERAL COMMENTS:

1. Feb 22, 2006: Telone C35 applied over trial area.

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| Weed Code | | LYPES | LYPES | LYPES | plant 1 | plant 2 | plant 3 | plant 4 | plant 5 | |
|-------------------|--------------------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| Crop Code | | LYPES | LYPES | LYPES | LYPES | LYPES | LYPES | LYPES | LYPES | |
| Rating Data Type | | injury | injury | injury | ht | ht | ht | ht | ht | |
| Rating Unit | | % | % | % | cm | cm | cm | cm | cm | |
| Rating Date | | Apr-29-06 | May-05-06 | May-16-06 | May-03-06 | May-03-06 | May-03-06 | May-03-06 | May-03-06 | |
| Trt-Eval Interval | | 8 DA-A | 14 DA-A | 25 DA-A | 12 DA-A | 12 DA-A | 12 DA-A | 12 DA-A | 12 DA-A | |
| ARM Action Codes | | | | | | | | | | |
| Trt No. | Treatment Name | Rate | Rate | Rate | Rate | Rate | Rate | Rate | Rate | |
| | | Unit | Unit | Unit | Unit | Unit | Unit | Unit | Unit | |
| | | | | | | | | | | |
| 1 | V-10142 NIS | 0.075 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 71 a | 72 ab | 71 ab | 69 abc | 68 a |
| 2 | V-10142 NIS | 0.075 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 73 a | 73 ab | 71 ab | 70 ab | 70 a |
| 3 | V-10142 NIS | 0.1 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 73 a | 73 a | 67 bcd | 69 abc | 69 a |
| 4 | V-10142 NIS | 0.1 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 69 a | 71 ab | 71 a | 68 abc | 65 a |
| 5 | V-10142 NIS | 0.15 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 69 a | 70 ab | 70 abc | 68 abc | 70 a |
| 6 | V-10142 NIS | 0.15 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 70 a | 72 ab | 69 a-d | 65 bc | 69 a |
| 7 | V-10142 NIS | 0.2 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 70 a | 69 ab | 69 a-d | 71 ab | 68 a |
| 8 | V-10142 NIS | 0.2 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 65 a | 67 ab | 65 d | 63 c | 68 a |
| 9 | Sandea NIS | 0.047 LB A/A 0.25 % V/V | 0 a | 0 a | 0 a | 73 a | 65 b | 69 a-d | 75 a | 63 a |
| 10 | Non-treated | | 0 a | 0 a | 0 a | 69 a | 70 ab | 66 cd | 68 abc | 68 a |
| | LSD (P=.05) | | 0.0 | 0.0 | 0.0 | 8.2 | 7.2 | 3.7 | 6.2 | 7.3 |
| | Standard Deviation | | 0.0 | 0.0 | 0.0 | 4.8 | 4.2 | 2.2 | 3.6 | 4.2 |
| | CV | | 0.0 | 0.0 | 0.0 | 6.84 | 5.96 | 3.16 | 5.26 | 6.27 |
| | Bartlett's X2 | | 0.0 | 0.0 | 0.0 | 7.622 | 12.22 | 12.749 | 12.032 | 9.568 |
| | P(Bartlett's X2) | | . | . | . | 0.573 | 0.201 | 0.121 | 0.211 | 0.387 |

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

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| Weed Code | plant 6 | plant 7 | Avg7plan |
|--------------------|----------------|---------------|-----------------|
| Crop Code | LYPES | LYPES | LYPES |
| Rating Data Type | ht | ht | ht |
| Rating Unit | cm | cm | cm |
| Rating Date | May-03-06 | May-03-06 | May-03-06 |
| Trt-Eval Interval | 12 DA-A | 12 DA-A | 12 DA-A |
| ARM Action Codes | | | T1 |
| Trt No. | Treatment Name | Rate | Unit |
| | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 1 | V-10142 NIS | 0.075 0.25 | LB A/A % V/V |
| | | | 71 ab |
| | | | 74 a |
| | | | 71 a |
| 2 | V-10142 NIS | 0.075 0.25 | LB A/A % V/V |
| | | | 73 a |
| | | | 67 a |
| | | | 71 a |
| 3 | V-10142 NIS | 0.1 0.25 | LB A/A % V/V |
| | | | 70 ab |
| | | | 69 a |
| | | | 70 a |
| 4 | V-10142 NIS | 0.1 0.25 | LB A/A % V/V |
| | | | 72 ab |
| | | | 70 a |
| | | | 69 a |
| 5 | V-10142 NIS | 0.15 0.25 | LB A/A % V/V |
| | | | 68 ab |
| | | | 68 a |
| | | | 69 ab |
| 6 | V-10142 NIS | 0.15 0.25 | LB A/A % V/V |
| | | | 70 ab |
| | | | 73 a |
| | | | 70 a |
| 7 | V-10142 NIS | 0.2 0.25 | LB A/A % V/V |
| | | | 69 ab |
| | | | 69 a |
| | | | 69 a |
| 8 | V-10142 NIS | 0.2 0.25 | LB A/A % V/V |
| | | | 64 b |
| | | | 69 a |
| | | | 66 b |
| 9 | Sandea NIS | 0.047 0.25 | LB A/A % V/V |
| | | | 70 ab |
| | | | 68 a |
| | | | 69 ab |
| 10 | Non-treated | | |
| | | | 69 ab |
| | | | 71 a |
| | | | 69 ab |
| LSD (P=.05) | 7.1 | 7.8 | 3.1 |
| Standard Deviation | 4.2 | 4.5 | 1.8 |
| CV | 5.97 | 6.5 | 2.57 |
| Bartlett's X2 | 11.727 | 3.685 | 8.152 |
| P(Bartlett's X2) | 0.164 | 0.931 | 0.519 |

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

Column 11: T1 = @AVG([C4].[C10])

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Trial ID: Veg19-06 Study Dir.: Stanley Culpepper
Location: Ponder (5141) Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: University of Georgia
Postal Code: 31794
Investigator: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: University of Georgia
Postal Code: 31794

TRIAL LOCATION

City: TyTy **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** good
Postal Code: 31795 **Initiation Date:** Feb-22-06
Country: USA **Planned Completion Date:** _____
E-Longitude of LL Corner °: _____ **N-Latitude of LL Corner °:** _____
Altitude of LL Corner: _____ **Unit:** _____ **Angle y-axis to North °:** _____
Directions:

COOPERATOR/LANDOWNER

Cooperator: _____ **Country:** _____
Org: _____ **Phone No:** _____
Address 1: _____ **Fax No:** _____
Address 2: _____
City: _____
State/Prov: _____
Postal Code: _____

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N
Guidelines: _____ **Guideline Description:** _____

Objective:

Conclusions:

CROP AND WEED DESCRIPTION

| Weed | Code | Common Name | Scientific Name |
|------|------|-------------|-----------------|
| 1. | . | | |

Crop 1: LYPES Tomato **Variety:** Amelia
Planting Date: Mar-13-06 **Planting Method:** transplant
Rate: 1 18 inch **Depth:** 1 in **Perennial Age:** ____ ____
Row Spacing: 6 feet **Spacing Within Row:** 18 inch **Seed Bed:** plastic
Soil Temperature: 74 F **Soil Moisture:** drip **Emergence Date:** _____

SITE AND DESIGN

Plot Width, Unit: 6 FT **Plot Length, Unit:** 16 FT **Reps:** 3
Site Type: Ponder Reasearch Farm
Tillage Type: Conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

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

MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 94 % OM: 6.4 Texture: sand
 % Silt: 2 pH: 1.3 Soil Name: Tifton sandy loam
 % Clay: 4 CEC: _____ Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

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

MOISTURE CONDITIONS

| No. | Date | Time | Amount | Unit | Type | Interval | Unit |
|-----|------|------|--------|------|------|----------|------|
| 1. | | | | | | | |

Overall Moisture Conditions: drip irrigation

Closest Weather Station: _____ Distance: _____ Unit: __

APPLICATION DESCRIPTION

| | A |
|----------------------|-----------|
| Application Date: | Apr-21-06 |
| Time of Day: | 8:00am |
| Application Method: | Broadcast |
| Application Timing: | POST |
| Applic. Placement: | overtop |
| Air Temp., Unit: | 74 F |
| % Relative Humidity: | 64 |
| Wind Velocity, Unit: | 3 mph |
| Dew Presence (Y/N): | n |
| Water Hardness: | |
| Soil Temp., Unit: | 81 F |
| Soil Moisture: | drip |
| % Cloud Cover: | 0 |

CROP STAGE AT EACH APPLICATION

| | A |
|---------------------|------------|
| Crop 1 Code, Stage: | LYPES POST |
| Stage Scale: | bloom |
| Height, Unit: | 20 in |

WEED STAGE AT EACH APPLICATION

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

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APPLICATION EQUIPMENT

| | A |
|-----------------------|----------|
| Appl. Equipment: | backpack |
| Operating Pressure: | 24 |
| Nozzle Type: | flat fan |
| Nozzle Size: | 11002 |
| Nozzle Spacing, Unit: | 18 inch |
| Nozzles/Row: | 2 |
| Band Width, Unit: | |
| Boom Length, Unit: | 4.5 ft |
| Boom Height, Unit: | 15 inch |
| Ground Speed, Unit: | 3 mph |
| Incorporation Equip.: | |
| Hours to Incorp.: | |
| Incorp. Depth, Unit: | |
| Carrier: | water |
| Spray Volume, Unit: | 14.8 GPA |
| Spray pH: | |
| Propellant: | CO2 |
| Tank Mix (Y/N): | Y |

| Trt No | Treatment Application Comment |
|--------|-------------------------------|
| | |