# University of Georgia

**Controlling the previous bell pepper crop while preparing for a 2nd crop on mulch.**

Trial ID: Veg31-14 Study Dir.: A. Stanley Culpepper
Location: UGA Ponder Farm Investigator: Stanley Culpepper

Use 1 liters(s) per treatment mixture to spray 14.8 gal/ac
Plots: 6 by 30 feet

| Trt No. | Treatment Name | Rate Unit | Grow Stg | Appl Code | Amt Product to Measure | Plot No. By Rep 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Dominus 4 GPA | | preplant | A | | 101 | 202 | 304 | 402 | 501 |
| 2 | Dominus 7 GPA | | preplant | A | | 102 | 205 | 303 | 401 | 502 |
| 3 | Dominus 10 GPA | | preplant | A | | 103 | 201 | 302 | 403 | 503 |
| 4 | Vapam 60 GPA | | preplant | A | | 104 | 203 | 305 | 404 | 504 |
| 5 | Non-treated | | | | | 105 | 204 | 301 | 405 | 505 |

Sort Order: Treatment

Trial Comments

OBJECTIVE: Compare Dominus to Vapam for the control of a previous pepper crop while preparing for a second crop on mulch.

VISUAL CONTROL:
1. At 4 DAT, Vapam controlled pepper at least 17% more thanany Dominus treatment.
2. At 12 DAT, Vapam was 20, 33, 57% more effective controlling bell pepper than Dominus at 10, 7, or 4 GPA, respectively.
3. By 31 DAT, Vapam was the only system providing complete control. At this time, Dominus at 4,7, and 10 GPA controlled bell pepper 33, 46, and 74%, respectively.
3. Little changes occurred between 31 and 46 DAT.

GENERAL COMMENTS:
1. Treatments included 5 beds (32") bed top that were 60 feet long. Thus the treated area was 13.33 feet wide and 60 feet long equalling 800 square feet.
2. Prior to injection beds were watered an hr once a day for a week ensuring good moisture.
3. For the 4 gal/A rate of Dominus: 278 mls of Dominus was injected from 2:50 through 4:25 pm (95 min) followed by a 60 minute flush out.
4. From 5:27 through 6:59 (93 min) 487 mls of Dominus was injected as the 7 GPA rate followed by 51 minutes of flush out.
5. From 7:53 through 9:37 (105 min) 695 mls of Dominus was injected as the 10 GPA rate followed by 50 minutes of flush out.
6. At 10:35 pm through 11:26 (61 min) Vapam at 4170 mls was injected as the 60 GPA rate followed by 59 minutes of flush out.

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| Trt No. | Treatment Name | Rate Unit | 1 | | 2 | | 3 | | 4 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Crop Code | | | CPSAN | | CPSAN | | CPSAN | | CPSAN | |
| Rating Data Type | | | control | | control | | control | | control | |
| Rating Unit | | | % | | % | | % | | % | |
| Rating Date | | | 7/15/2014 | | 7/23/2014 | | 8/11/2014 | | 8/26/2014 | |
| Trt-Eval Interval | | | 4 DA-A | | 12 DA-A | | 31 DA-A | | 46 DA-A | |
| 1 | Dominus 4 GPA | | 12.0 | c | 33.0 | d | 33.0 | d | 26.0 | d |
| 2 | Dominus 7 GPA | | 16.0 | c | 57.0 | c | 46.0 | c | 42.0 | c |
| 3 | Dominus 10 GPA | | 25.2 | b | 70.0 | b | 74.0 | b | 70.0 | b |
| 4 | Vapam 60 GPA | | 42.0 | a | 90.2 | a | 100.0 | a | 100.0 | a |
| 5 | Non-treated | | 0.0 | d | 0.0 | e | 0.0 | e | 0.0 | e |
| LSD (P=.05) | | | 4.77 | | 5.77 | | 8.51 | | 6.65 | |
| Standard Deviation | | | 3.56 | | 4.30 | | 6.34 | | 4.96 | |
| CV | | | 18.69 | | 8.6 | | 12.54 | | 10.43 | |
| Bartlett's X2 | | | 3.133 | | 5.765 | | 1.926 | | 2.689 | |
| P(Bartlett's X2) | | | 0.372 | | 0.124 | | 0.382 | | 0.261 | |
| Replicate F | | | 1.543 | | 6.030 | | 1.714 | | 2.599 | |
| Replicate Prob(F) | | | 0.2374 | | 0.0037 | | 0.1960 | | 0.0756 | |
| Treatment F | | | 97.358 | | 327.709 | | 182.584 | | 305.137 | |
| Treatment Prob(F) | | | 0.0001 | | 0.0001 | | 0.0001 | | 0.0001 | |

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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Location: UGA Ponder Farm Investigator: Stanley Culpepper

## GENERAL TRIAL INFORMATION

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

## TRIAL LOCATION

**City:** TyTy **Trial Status:** completed
**State/Prov.:** GA **Trial Reliability:** excellent
**Postal Code:** 31795 **Initiation Date:** 7/11/2014
**Country:** USA

**Conducted Under GLP (Y/N):** N **Conducted Under GEP (Y/N):** N

## CROP AND WEED DESCRIPTION

| Weed Code | Common Name | Scientific Name |
|---|---|---|
| 1. | CPSAN | bell pepper |

## SITE AND DESIGN

**Plot Width, Unit:** 6 FT **Plot Length, Unit:** 30 FT **Reps:** 5
**Site Type:** UGA Ponder Farm
**Tillage Type:** Plasticulture **Study Design:** RANDOMIZED COMPLETE BLOCK

## SOIL DESCRIPTION

**% Sand:** 88 **% OM:** 0.79 **Texture:** loamy sand
**% Silt:** 7 **pH:** 6.2
**% Clay:** 5

**Overall Moisture Conditions:** DRIP IRRIGAITON
**Closest Weather Station:** www.griffin.uga.edu/aemn/ **Distance:** 250 **Unit:** yd

## APPLICATION DESCRIPTION

| | A |
|---|---|
| **Application Date:** | 7/11/2014 |
| **Time of Day:** | see |
| **Application Method:** | comment |
| **Application Timing:** | section |
| **Applic. Placement:** | drip tape |
| **Air Temp., Unit:** | 93 F |
| **% Relative Humidity:** | 62 |
| **Wind Velocity, Unit:** | 7 mph |
| **Dew Presence (Y/N):** | n |
| **Soil Temp., Unit:** | 98 F |
| **Soil Moisture:** | moist |
| **% Cloud Cover:** | 0 |

## WEED STAGE AT EACH APPLICATION

| | A |
|---|---|
| **Weed 1 Code, Stage:** | CPSAN |
| **Stage Scale:** | 30 inch |
| **Density, Unit:** | 2 ft |

## APPLICATION EQUIPMENT

| | A |
|---|---|
| **Appl. Equipment:** | See |
| **Operating Pressure:** | comments |