

University of Georgia

Seeded onion response to Chateau as a spray or impregnated treatment.

Trial ID: Onion1-06

Study Dir.: Stanley Culpepper

Location: VORF

Investigator: Stanley Culpepper

Reps: 4

Plots: 6 by 25 feet

Spray vol: 14.8 gal/ac

Mix size: 1 liters (min .77168)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code	Amt to Measure	Product	Plot No. By Rep			
										1	2	3	4
1	Non-treated									101	204	301	403
2	Chateau	51	DF	2	OZ/A	1	leaf	A	1.012 g/mx	102	201	303	401
3	Chateau IMPREGNATED	51	DF	2	OZ/A	1	leaf	A	1.012 g/mx	103	202	304	402
4	Goal XL	2	L	4	OZ/A	1	leaf	A	2.111 ml/mx	104	203	302	404

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
1.265	g	Chateau	51	DF	
1.265	g	Chateau IMPREGNATED	51	DF	
2.639	ml	Goal XL	2	L	

* '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.

Trial Comments

OBJECTIVE: Determine if Chateau causes less onion injury when applied impregnated on fertilizer as compared to being sprayed.

Onion Response:

- At 13 DAT (remember irrigation occurring most days), injury from Chateau was severe with 20% less injury in the impregnated plots. By mid-season, Chateau regardless of application method killed the seeded onions.
- Goal provided minimal injury.

Henbit Response:

- Little henbit was present at time of application; thus, herbicide treatments provided excellent residual control.

GENERAL COMMENTS:

- Chateau and Goal were applied in water as noted in the application section. The Chateau impregnated treatment was spread over the plot area using glass jars with holes poked in the tops. A minimum of 16 passes per plot was used to provide uniform application.
- In the non-treated control as well as in other plots receiving spray treatments, fertilizer was spread over those plots providing the exact amount of fertilizer over the trial area.

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Weed Code		onion	onion	onion	LAMAM	
Crop Code		injury	injury	injury	control	
Rating Data Type		percent	percent	percent	percent	
Rating Unit		Nov-18-05	Dec-25-05	Jan-08-06	Nov-18-05	
Rating Date		Andrew	Andrew	Andrew	Andrew	
Crop Stage		13 DA-A	51 DA-A	65 DA-A	13 DA-A	
Trt-Eval Interval						
Trt No.	Treatment Name	Rate	1	2	3	4
		Rate Unit				
1	Non-treated		0 c	0 c	0 c	0 c
2	Chateau	2 OZ/A	91 a	99 a	99 a	100 a
3	Chateau IMPREGNATED	2 OZ/A	70 b	99 a	98 a	93 b
4	Goal XL	4 OZ/A	0 c	9 b	8 b	100 a
LSD (P=.05)			8.8	3.2	2.8	2.8
Standard Deviation			5.5	2.0	1.8	1.7
CV			13.76	3.83	3.42	2.36
Bartlett's X2			0.28	0.175	3.657	0.0
P(Bartlett's X2)			0.597	0.916	0.161	.

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

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 Location: VORF 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: Vidalia **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** excellent
Postal Code: _____ **Initiation Date:** Oct-17-05
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.	LAMAM	henbit	

Crop 1: ALLCE ONION **Variety:** Century
Planting Date: Oct-17-05 **Planting Method:** seeded
Rate: 1 3 in **Depth:** 0.25 in **Perennial Age:** ____ ____
Row Spacing: 15 inch **Spacing Within Row:** 3 inch **Seed Bed:** flat
Soil Temperature: 69 F **Soil Moisture:** fair/irrigat **Emergence Date:** Oct-27-05

SITE AND DESIGN

Plot Width, Unit: 6 FT **Plot Length, Unit:** 25 FT **Reps:** 4
Site Type: Vidalia Research 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: 86 % OM: 0.47 Texture: loamy sand
 % Silt: 10 pH: 6.0 Soil Name: _____
 % 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: irrigated very often

Closest Weather Station: _____ Distance: _____ Unit: __

APPLICATION DESCRIPTION

	A
Application Date:	Nov-04-05
Time of Day:	9 am
Application Method:	see trt
Application Timing:	2 leaf
Applic. Placement:	see trt
Air Temp., Unit:	65 F
% Relative Humidity:	56
Wind Velocity, Unit:	0 mph
Dew Presence (Y/N):	n
Water Hardness:	
Soil Temp., Unit:	61 F
Soil Moisture:	moist
% Cloud Cover:	0

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	ALLCE .
Stage Scale:	1 leaf
Height, Unit:	1.5 in

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	LAMAM .
Stage Scale:	PRE
Density, Unit:	0.25 ydsq

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APPLICATION EQUIPMENT

	A
Appl. Equipment:	backpack
Operating Pressure:	24
Nozzle Type:	flat fan
Nozzle Size:	11002
Nozzle Spacing, Unit:	18 in
Nozzles/Row:	1
Band Width, Unit:	
Boom Length, Unit:	4.5 feet
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):	N

Trt No	Treatment Application Comment