Feb-21-07 (Onion8-05) Spray/Seeding Plan Page 1 of 6

University of Georgia

Transplant onion and weed response to sequential Chateau applications.

Trial ID: Onion8-05 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)

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Trt	Treatment	Form	Form		Rate	Grow	Appl	Amt Product	Plot N	lo. By	Rep		 	
No.	Name	Conc	Туре	Rate	Unit	Stg	Code	to Measure	1	2	3	4		
1	Chateau	51	DG	1	OZ/A	transpla	Α	0.506 g/mx	101	202	306	402		
2	Chateau	51	DG	1.5	OZ/A	transpla	Α	0.759 g/mx	102	212	308	407		
3	Chateau	51	DG	2	OZ/A	transpla	Α	1.012 g/mx	103	205	304	403		
4	Chateau	51	DG	0.5	OZ/A	transpla	Α	0.253 g/mx	104	210	307	408		
	Chateau	51	DG	0.5	OZ/A	3WATP	В	0.253 g/mx						
5	Chateau	51	DG	0.5	OZ/A	transpla	Α	0.253 g/mx	105	209	303	404		
	Chateau	51	DG	0.5	OZ/A	6WATP	С	0.253 g/mx						
6	Chateau	51	DG	1	OZ/A	transpla	Α	0.506 g/mx	106	207	301	410		
	Chateau	51	DG	1	OZ/A	3WATP	В	0.506 g/mx						
7	Chateau	51	DG			transpla		0.506 g/mx	107	204	312	405		
	Chateau	51	DG	1	OZ/A	6WATP	С	0.506 g/mx						
8	Chateau	51	DG			transpla		0.759 g/mx	108	206	310	401		
	Chateau	51	DG	1.5	OZ/A	3WATP	В	0.759 g/mx						
9	Chateau	51	DG	-		transpla		0.759 g/mx	109	211	305	406		
	Chateau	51	DG	1.5	OZ/A	6WATP	С	0.759 g/mx						
10	Chateau	51	DG			transpla		0.506 g/mx	110	208	302	412		
	Prowl	3.3	EC	2	PT/A	transpla	Α	16.89 ml/mx						
11	Chateau	51	DG			transpla		0.253 g/mx	111	201	311	409		
	Prowl		EC			transpla		8.445 ml/mx						
	Chateau	51	DG			3WATP		0.253 g/mx						
4.5	Prowl	3.3	EC	1	PI/A	transpla	R	8.445 ml/mx		000	000	444		
12	Non-tretaed								112	203	309	411		

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
11.702	g	Chateau	51	DG	
42.225	ml	Prowl	3.3	EC	

^{* &#}x27;Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1 liters (mix size basis).

Trial Comments

OBJECTIVE: Evaluate Transplant Onion Response to Valor Systems.

VISUAL ONION INJURY:

- 1. Rainfall and irrigation throughout the season were heavy.
- 2. At 10 d after the at transplant applications, visual plant burn was only noted with Prowl/Chateau mixtures.
- 3. At 28 d after the at transplant applications, stunting was greater than 10% with all Chateau alone treatments except when applied at 0.5 oz/A. Interestingly, less stunting was noted with the Prowl/Chateau mixtures than with Chateau alone which may have been in response to earlier foliar injury delaying onion growth.
- 4. By mid and late-season plant stunting and occasional stand loss was severe with all treatments.
- 5. There was a trend for less injury with 0.5 oz of Chateau followed by another 0.5 oz of Chateau applied 6 wks later.
- 6. Injury from a Chateau at 0.5 oz/A alone or with Prowl would have likely been acceptable if no follow up application had been made.

^{*} Product amount calculations increased 25 % for overage adjustment.

Feb-21-07 (Onion8-05) Trial Comments Page 2 of 6

University of Georgia

CONCLUSIONS:

- 1. A trial studying irrigation/watering must be conducted as injury at this location was far greater than injury on farms.
- 2. Another trial looking at various combinations of Chateau/Goal/Prowl should be conducted in an effort to reduce the injury potential noted with both Chateau and Goal by slightly reducing the rate of each product in a systems approach.

University of Georgia

Transplant onion and weed response to sequential Chateau applications.

Trial ID: Onion8-05 Study Dir.: Stanley Culpepper Location: VORF Investigator: Stanley Culpepper

ПОС	ation, vor	T.			1117	estigator.	beamey	curpepper
	p Code			onion 	onion		onion	onion
	ng Data Type	9		injury			injury	injury
	ng Unit			percent	•			
	ng Date			Dec-20-05		Jan-08-06		
	essed By			AM	SC	AM	AM	SC
Trt-l	Eval Interval			10 DA-A	29 DA-A	29 DA-A	47 DA-A	84 DA-A
Trt	Treatment		Rate					
No.	Name	Rate	Unit	1	2	3	4	5
1	Chateau	1	OZ/A	0 с	12 bc	13 abc	18 b-e	20 e
2	Chateau	1.5	OZ/A	0 с	15 ab	15 ab	19 b-e	24 cde
3	Chateau	2	OZ/A	0 c	19 a	18 a	25 b	30 bc
4	Chateau	0.5		0 c	7 cd	8 cd	11 ef	21 e
	Chateau	0.5	OZ/A					
5	Chateau		OZ/A	0 с	12 bc	6 d	6 fg	18 e
	Chateau	0.5	OZ/A					
6	Chateau	1	OZ/A	0 c	11 bc	11 bcd	23 bc	29 bcd
	Chateau	1	OZ/A					
7	Chateau	1	OZ/A	0 с	11 bc	9 cd	15 cde	31 b
	Chateau	1	OZ/A					
8	Chateau	1.5	OZ/A	0 с	16 ab	16 ab	59 a	48 a
	Chateau		OZ/A					
9	Chateau	1.5	OZ/A	0 с	12 bc	15 ab	21 bcd	41 a
ľ	Chateau		OZ/A	0 0	12 50	10 45	2. 500	α
10	Chateau		OZ/A	15 a	5 de	9 cd	14 c-f	21 e
10	Prowl		PT/A	15 a	J de	9 Cu	14 6-1	21 6
11	Chateau		OZ/A	8 b	4 de	6 d	13 def	23 de
l ' '	Prowl		PT/A	0.5	+ uc	o u	15 dei	25 de
	Chateau		OZ/A					
	Prowl		PT/A					
12	Non-tretaed		-	0 с	0 e	0 e	0 g	0 f
LSD	(P=.05)			2.0	5.4	4.7	8.0	6.5
	ndard Deviati	on		1.4	3.7	3.3	5.6	4.5
CV				74.61	36.66	31.45	30.1	17.68
	lett's X2			0.349	17.695	6.273	18.777	5.316
P(B	artlett's X2)			0.555	0.039*	0.792	0.043*	0.869
-	/							

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

Feb-21-07 (Onion8-05) Site Description Page 4 of 6

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		of ocorgia
	Transplant onion ar	nd weed response to sequential Chateau applications.
Trial ID: Onio	on8-05	Study Dir.: Stanley Culpepper
Location: VORE		Investigator: Stanley Culpepper
		TRIAL INFORMATION
Study Director	: Stanley Culpepper	Title: Ext. Weed Science
_	Univ. of Georgia	TIOLO: Meed bolemee
Postal Code:	_	
	31.71	
Investigator:	Andrew MacRae	Title: Ext. Weed Science
_	Univ. of Georgia	
Postal Code:		
	T D T	'AL LOCATION
City: \		AL LOCATION Trial Status: completed
State/Prov.: (Trial Reliability: good
Postal Code: _		Initiation Date: Dec-08-05
Country:		Planned Completion Date:
-		N-Latitude of LL Corner o:
		t: Angle y-axis to North o:
Directions:		
	COOPER	ATOR/LANDOWNER
Cooperator:		Country:
Org:		Phone No:
Address 1:		Fax No:
Address 2:		
City:		
State/Prov:		
Postal Code: _		
	(()	
		Conducted Under GEP (Y/N): N
Guidelines: _	Guideline	Description:
Objective:		
Conclusions:		
concruptions.		
		WEED DESCRIPTION
Weed Code	Common Name	Scientific Name
1. .		
Gran 1. ALLOS	ONTON	Yani ahaa Cambaana
Crop 1: ALLCE		Variety: Century
-	Dec-08-05	Planting Method: transplant
	4.5 inch Depth:	
		<pre>ithin Row: 4.5 inch Seed Bed: flat sture: fair/irrigat Emergence Date:</pre>
		AND DESIGN
Plot Width, Un		t Length, Unit: 25 FT Reps: 4
	Vidalia Research Farm	
Tillage Type:	Conventional	Study Design: RANDOMIZED COMPLETE BLOCK
Trial Initiati	on Comments:	

Previous Pesticides

Year

Previous Crops

University of Georgia

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

Texture: loamy sand

SOIL DESCRIPTION

% Sand: 86 % OM: 0.47 Texture: 1

% Silt: 10 pH: 5.9 Soil Name: __

% Clay: 4 CEC: ____ Fert. Level: Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Туре	Interval	Unit
1.							

Overall Moisture Conditions: irrigated aggressively

Closest Weather Station: _____ Distance: ____ Unit: __

APPLICATION DESCRIPTION

INTELECTION DESCRIPTION						
		A		В		С
Application Date:	Dec-	10-05	Jan-	-08-06	Jan-	-26-06
Time of Day:	9 am		9 an	n	9 ar	n
Application Method:	broa	dcast	broa	adcast	broa	adcast
Application Timing:	tran	splan	3WAT	ransp	6WAT	Transp
Applic. Placement:	over	top	over	rtop	ovei	ctop
Air Temp., Unit:	50	F	44	F	43	F
% Relative Humidity:	64		56		23	
Wind Velocity, Unit:	0	mph	1	mph	2	mph
Dew Presence (Y/N):	n		n		n	
Water Hardness:						
Soil Temp., Unit:	54	F	49	F	48	F
Soil Moisture:	wet		mois	st	fair	_
% Cloud Cover:	0		2		0	

CROP STAGE AT EACH APPLICATION

	A	В	C
Crop 1 Code, Stage:	ALLCE .	ALLCE .	ALLCE .
Stage Scale:	transplan	1 new lf	3 new lf
Height, Unit:	4 inch	5 inch	6 inch

WEED STAGE AT EACH APPLICATION

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

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APPLICATION EQUIPMENT

				DQUII MDI	-	
		A		В		С
Appl. Equipment:	backr	pack	backı	pack	backı	pack
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:	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:	wateı	r	wate	r	wate	r
Spray Volume, Unit:	14.8	GPA	14.8	GPA	14.8	GPA
Spray pH:						_
Propellant:	CO2		CO2		CO2	_
Tank Mix (Y/N):	N		N		N	

Trt No	Treatment Application Comment