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			Tra	nspla	nt sq	uash	respo	onse t	o Dual Mag	num ai	nd Pr	owl.		
Tri Loc	al ID: Veg71-06 ation: LTF-Grass	s farm	n		I	Stud nvest	ly Dir igato	r.: St or: St	anley Culpe anley Culpe	epper epper				
Rep Spra	s: 4 ay vol: 14.8 gal/ac	Plots	: 6 by ! Mix siz	50 feet ze: 2 lite	ers (m	in 1.54	434)							
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot N 1	lo. By 2	Rep 3	4	
1	None 1 d after transplant									101	205	302	403	
2	None 5 d after transplant									102	206	303	401	
3	Prowl H20 1 d after transplant	4		EC	2	PT/A			33.78 ml/mx	103	202	304	406	
4	Prowl H20 5 d after transplant	4		EC	2	PT/A			33.78 ml/mx	104	203	306	402	
5	Dual Magnum 1 d after transplant	7.62		EC	1.33	PT/A			22.46 ml/mx	105	201	305	404	
6	Dual Magnum 5 d after transplant	7.62		EC	1.33	PT/A			22.46 ml/mx	106	204	301	405	

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
84.451	ml	Prowl H20	4	EC	
56.160	ml	Dual Magnum	7.62	EC	

'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 2 liters (mix size basis).
 Product amount calculations increased 25 % for overage adjustment.

Trial Comments

OBJECTIVE: Determine squash response to Prowl H20 and Dual Magnum applied overtop of squash growing on mulch.

VISUAL INJURY:

1. Injury from Prowl H20 overtop of squash the same day of planting was severe.

2. Injury from Prowl H20 overtop of squash 5 d after transplanting ranged from 27 to 56% with injury increasing overtime.

3. Squash response to Dual Magnum was more positive. Injury did not appear to be impacted by application timing. Injury was up to 19% but this rate of Dual Magnum is 2.66 times that desired in the squash crop. Additionally, squash did recover from all injury issues.

PINK PURSLANE:

1. Populations were light and rainfall occurred after each herbicide application.

2. Control was excellent during early to mid-season.

CONCLUSIONS: Further research is needed to address the potential for Dual Magnum in squash at a rate of 0.5 to 0.66 pt/A.

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Trial ID: Veg71-06 Location: LTF-Grass farm		Study D: Investigat	ir.: Stanl tor: Stanl	.ey Culpep .ey Culpep	per
Weed Code					PORPI
Crop Code	CUUPE	CUPPE	CUPPE	CUPPE	
Rating Data Type	injury	injury	injury	injury	injury
Rating Unit	%	%	%	%	%
Rating Date	Sep-06-06	Sep-11-06	Sep-18-06	Sep-27-06	Sep-18-06
Assessed By	SC	SC	SC	SC	SC
Trt-Eval Interval	11 DA-A	16 DA-A	23 DA-A	32 DA-A	23 DA-A
Trt Treatment Rate					
No. Name Rate Unit	1	2	3	4	5
1 None	0 b	0 d	0 d	0 b	0 b
1 d after transplant					
2 None	0 b	0 d	10 cd	0 b	0 b
5 d after transplant					
3 Prowl H20 2 PT/A	68 a	73 a	80 a	70 a	99 a
1 d after transplant					
4 Prowl H20 2 PT/A	19 b	27 b	33 b	56 a	98 a
5 d after transplant					
5 Dual Magnum 1.33 PT/A	6 b	13 c	13 cd	0 b	97 a
1 d after transplant					
6 Dual Magnum 1.33 PT/A	8 b	14 c	19 c	6 b	96 a
5 d after transplant					
LSD (P=.05)	17.5	11.9	11.9	16.5	4.7
Standard Deviation	11.6	7.9	7.9	11.0	3.1
CV	70.02	37.46	30.81	49.61	4.85
Bartlett's X2	8.642	6.856	11.57	2.743	2.629
P(Bartlett's X2)	0.034*	0.077	0.021*	0.254	0.269

Transplant squash response to Dual Magnum and Prowl.

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

Feb-21-07 (Veg71-06)

University of Georgia

	Transplant	squash response to Dual Magnum and	d Prowl.
Trial ID: Veg7	71-06	Study Dir.: Stanley Culpepper	
Location: LTF-	-Grass farm	Investigator: Stanley Culpepper	
	GENERAL TRI	LAL INFORMATION	
Study Director	: Stanley Culpepper	Title: Ext. Weed	l Science
Affiliation:	Univ. of Georgia		
Postal Code:	31794		
Investigator:	Stanley Culpepper	Title: Ext. Weed	l Science
Affiliation:	Univ. of Georgia		
Postal Code:	31794		
	TRIAI	LOCATION	
City: I	ГуТу	Trial Status:	completed
State/Prov.: G	JA	Trial Reliability:	excellent
Postal Code: 3	31794	Initiation Date:	Aug-26-06
Country: U	JSA	Planned Completion Date:	:
E-Longitude of	LL Corner °:	N-Latitude of LL Corner °:	:
Altitude of LI	Corner: Unit:	: Angle y-axis to North °:	:
Directions:			
	COOPERAI	for/landowner	
Cooperator: _		Country:	
Org: _		Phone No:	
Address 1: _		Fax No:	
Address 2: _			
City: _			
State/Prov: _			
Postal Code: _			
Conducted Unde	er GLP (Y/N): N	Conducted Under GEP (Y/N): N	
Guidelines: _	Guideline De	escription:	
Objective:			
Conclusions:			

CROP	AND	WEED	DESCRIPTION	

Weed	Code	Common Na	ame	Scientific Name
1.	PORPI	pink pursl	lane	

Crop	1:	CUUPE	SQUASH,	SUMMER			Vari	Lety: Pi	relude		
Plant	ing	Date:	Aug-26-06		Plantin	g Metho	d: trans	splant			
Rate:	1	f	t	Depth:	1 in		Perenni	ial Age	•		
Row S	Row Spacing: 6 feet Spacing Within Row: 12 inch Seed Bed: raised/mulch										
Soil	Soil Temperature: 104 F Soil Moisture: drip Emergence Date:										
				SIT	E AND DES	IGN					
Plot	Widt	h, Uni	t: 6	FT Pl	ot Length	, Unit:	50	FT	Reps: 4		
Site	Туре	e: L	ewis Tayl	or Farms							

 Tillage Type:
 conventional
 Study Design:
 FACTORIAL

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

University of Georgia

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

					SOIL DESCRIPTION	1	
%	Sand:	94	% OM:	1.1	Texture:	sand	
%	silt:	2	pH:	6.4	Soil Name:		
%	Clay:	4	CEC:		Fert. Level:		

ADDITIONAL M	IEASURED ELEMEN	TS
Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Туре	Interval	Unit
1.							

Overall Moisture Conditions: _____ Distance: ____ Unit: ___

APPLICATION DESCRIPTION

	A	в
Application Date:	Aug-26-06	Aug-31-06
Time of Day:	1 pm	9 am
Application Method:	broadcast	broadcast
Application Timing:	1 d	5 d
Applic. Placement:	overtop	overtop
Air Temp., Unit:	96 F	80 F
% Relative Humidity:	44	70
Wind Velocity, Unit:	0 mph	0 mph
Dew Presence (Y/N):	n	n
Water Hardness:		
Soil Temp., Unit:	104 F	84 F
Soil Moisture:	moist	moist
% Cloud Cover:	50	0

CROP STAGE AT EACH APPLICATION

	A	В
Crop 1 Code, Stage:	CUUPE 1 d	CUUPE 5 d
Stage Scale:	3 lf	1 new lf
Height, Unit:	3 in	3.5 in

WEED STAGE AT EACH APPLICATION

	A	В
Weed 1 Code, Stage:	PORPI preplant	PORPI preplant
Stage Scale:	not up	not up
Density, Unit:	5 ydsq	5 ydsq

Site Description Page 5 of 5

APPLICATION EQUIPMENT А в backpack backpack Appl. Equipment: Operating Pressure: 23 23 fl<u>at</u> fan flat fan Nozzle Type: 11002 11002 Nozzle Size: Nozzle Spacing, Unit: 18 in 18 in Nozzles/Row: Band Width, Unit: 4.5 feet Boom Length, Unit: 4.5 feet 15 15 Boom Height, Unit: inch inch mph 3 3 mph Ground Speed, Unit: Incorporation Equip.: Hours to Incorp.: Incorp. Depth, Unit: Carrier: water water Spray Volume, Unit: 14.8 14.8 GPA GPA Spray pH:

CO2

Y

Trt No

Propellant:

Tank Mix (Y/N):

Treatment Application Comment

University of Georgia

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C02

Y