

University of Georgia

Response of GR Palmer amaranth, grasses, and other broadleaf weeds to 2,4-D, DHT-014, and Clarity alone or mixed with Ignite.

Trial ID: C40-10
Location: TyTy-Annex

Study Director: Jill Chaffin
Investigator: Stanley Culpepper

Use 1 liters(s) per treatment mixture to spray 14.8 gal/ac

Plots: 6 by 25 feet

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Amt Product to Measure	Plot No. 1	By Rep 2	3	4
1	None Ignite	2.34	L	23	oz/a	8in weed	A	12.14 ml/mx	101	216	304	401
2	None No Ignite								102	205	306	402
3	DHT-014 Ignite	2 2.34	L L	2 23	pt/a oz/a	8in weed 8in weed	A A	16.89 ml/mx 12.14 ml/mx	103	209	310	403
4	DHT-014 No Ignite	2	L	2	pt/a	8in weed	A	16.89 ml/mx	104	206	302	404
5	DHT-014 Ignite	2 2.34	L L	3 23	pt/a oz/a	8in weed 8in weed	A A	25.34 ml/mx 12.14 ml/mx	105	208	316	405
6	DHT-014 No Ignite	2	L	3	pt/a	8in weed	A	25.34 ml/mx	106	211	313	406
7	DHT-014 Ignite	2 2.34	L L	4 23	pt/a oz/a	8in weed 8in weed	A A	33.78 ml/mx 12.14 ml/mx	107	210	301	407
8	DHT-014 No Ignite	2	L	4	pt/a	8in weed	A	33.78 ml/mx	108	203	315	408
9	Weedar 64 Ignite	3.8 2.34	L L	1 23	pt/a oz/a	8in weed 8in weed	A A	8.445 ml/mx 12.14 ml/mx	109	202	314	409
10	Weedar 64 No Ignite	3.8	L	1	pt/a	8in weed	A	8.445 ml/mx	110	204	309	410
11	Weedar 64 Ignite	3.8 2.34	L L	1.5 23	pt/a oz/a	8in weed 8in weed	A A	12.67 ml/mx 12.14 ml/mx	111	207	305	411
12	Weedar 64 No Ignite	3.8	L	1.5	pt/a	8in weed	A	12.67 ml/mx	112	218	317	412
13	Weedar 64 Ignite	3.8 2.34	L L	2 23	pt/a oz/a	8in weed 8in weed	A A	16.89 ml/mx 12.14 ml/mx	113	215	311	413
14	Weedar 64 No Ignite	3.8	L	2	pt/a	8in weed	A	16.89 ml/mx	114	201	308	414
15	Clarity Ignite	4 2.34	L L	0.5 23	pt/a oz/a	8in weed 8in weed	A A	4.223 ml/mx 12.14 ml/mx	115	214	319	415
16	Clarity No Ignite	4	L	0.5	pt/a	8in weed	A	4.223 ml/mx	116	219	312	416
17	Clarity Ignite	4 2.34	L L	1 23	pt/a oz/a	8in weed 8in weed	A A	8.445 ml/mx 12.14 ml/mx	117	213	303	417
18	Clarity No Ignite	4	L	1	pt/a	8in weed	A	8.445 ml/mx	118	212	318	418
19	Clarity Ignite	4 2.34	L L	2 23	pt/a oz/a	8in weed 8in weed	A A	16.89 ml/mx 12.14 ml/mx	119	220	307	419
20	Clarity No Ignite	4	L	2	pt/a	8in weed	A	16.89 ml/mx	120	217	320	420

Sort Order: Treatment

University of Georgia

Response of GR Palmer amaranth, grasses, and other broadleaf weeds to 2,4-D, DHT-014, and Clarity alone or mixed with Ignite.

Trial ID: C40-10

Study Director: Jill Chaffin

Location: TyTy-Annex

Investigator: Stanley Culpepper

Trial Comments

OBJECTIVE: Determine Texas panicum response to DHT-014, Weedar, or Clarity applied alone or mixed with Ignite.

Texas Panicum:

1. Ignite provided 90% control at 22 DAT.
2. Mixing DHT at 2 , 3 or 4 pt/A with Ignite reduced control 12, 20, or 21% respectively, at 22 DAT.
3. Mixing Weedar at 1, 1.5, or 2 pt/A with Ignite reduced control 9, 9, and 20% respectively, at 22 DAT.
4. Mixing Clarity at 0.5, 1, or 2 pt/A with Ignite did not impact control at any evaluation time.

Morningglory:

1. Ignite, DHT 014, Weedar, or Clarity provided complete control when applied alone or in various combinations.

University of Georgia

Response of GR Palmer amaranth, grasses, and other broadleaf weeds to 2,4-D, DHT-014, and Clarity alone or mixed with Ignite.

Trial ID: C40-10
Location: TyTy-Annex

Study Director: Jill Chaffin
Investigator: Stanley Culpepper

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	PANTE	PANTE	PANTE	PANTE	PANTE	IPOHG	IPOHG	IPOHG	IPOHG
Rating Date	5/12/2010	5/17/2010	5/22/2010	5/28/2010	6/12/2010	5/12/2010	5/22/2010	5/17/2010	5/28/2010
Rating Data Type	control	control	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%	%
Crop Stage	SC	SC	SC	SC	SC	SC	SC	SC	SC
Days After Last Applic.	6	11	16	22	37	6	16	11	22
Trt-Eval Interval	6 DA-A	11 DA-A	16 DA-A	22 DA-A	37 DA-A	6 DA-A	16 DA-A	11 DA-A	22 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7	8	9	10
1	None Ignite	23	oz/a	90.0	a 94.0	ab 92.0	a 90.0	a 70.0	a	99.0	a 99.0	a 99.0	a 99.0
2	None No Ignite			0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	0.0	c 0.0	b 0.0	b 0.0
3	DHT-014 Ignite	2	pt/a	90.0	a 89.8	cd 81.5	b 78.3	b 58.8	b	99.0	a 99.0	a 99.0	a 99.0
4	DHT-014 No Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
5	DHT-014 Ignite	2	pt/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
6	DHT-014 No Ignite	3	pt/a	89.8	a 84.0	ef 74.5	cd 69.5	c 50.0	c	99.0	a 99.0	a 99.0	a 99.0
7	DHT-014 Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
8	DHT-014 No Ignite	3	pt/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
9	DHT-014 Ignite	4	pt/a	90.0	a 83.0	f 72.3	d 68.8	c 51.3	c	99.0	a 99.0	a 99.0	a 99.0
10	DHT-014 No Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
11	Weedar 64 Ignite	4	pt/a	90.0	a 92.8	bc 85.0	b 81.0	b 62.5	b	99.0	a 99.0	a 99.0	a 99.0
12	Weedar 64 No Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	91.3	a 99.0	a 99.0	a 99.0
13	Weedar 64 Ignite	1	pt/a	90.0	a 87.0	de 82.5	b 80.5	b 52.5	c	99.0	a 99.0	a 99.0	a 99.0
14	Weedar 64 No Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	67.5	b 99.0	a 99.0	a 99.0
15	Weedar 64 Ignite	1.5	pt/a	90.0	a 82.8	f 77.0	c 70.0	c 51.3	c	99.0	a 99.0	a 99.0	a 99.0
16	Weedar 64 No Ignite	2	pt/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
17	Weedar 64 Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
18	Weedar 64 No Ignite	2	pt/a	90.0	a 96.3	a 93.0	a 90.5	a 70.0	a	99.0	a 99.0	a 99.0	a 99.0
19	Clarity Ignite	0.5	pt/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
20	Clarity No Ignite	0.5	pt/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
21	Clarity Ignite	1	pt/a	69.8	b 94.0	ab 93.5	a 93.5	a 72.5	a	99.0	a 99.0	a 99.0	a 99.0
22	Clarity No Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
23	Clarity Ignite	1	pt/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
24	Clarity No Ignite	2	pt/a	90.5	a 94.5	ab 94.5	a 94.8	a 70.8	a	99.0	a 99.0	a 99.0	a 99.0
25	Clarity Ignite	23	oz/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
26	Clarity No Ignite	2	pt/a	0.0	c 0.0	g 0.0	e 0.0	d 0.0	d	90.0	a 99.0	a 99.0	a 99.0
LSD (P=.05)				12.83	3.10	3.69	5.17	5.48	.	14.24	0.00	0.00	0.00
Standard Deviation				9.07	2.19	2.61	3.65	3.88	.	10.07	0.00	0.00	0.00
CV				20.62	4.88	6.17	8.95	12.72	.	11.32	0.0	0.0	0.0
Bartlett's X2				38.129	14.132	5.839	9.003	8.32	.	13.093	0.0	0.0	0.0
P(Bartlett's X2)				0.001*	0.118	0.756	0.342	0.502	.	0.001*	.	.	.
Replicate F				0.940	2.567	0.781	1.623	1.279		1.039	0.000	0.000	0.000
Replicate Prob(F)				0.4275	0.0633	0.5096	0.1940	0.2903		0.3823	1.0000	1.0000	1.0000
Treatment F				99.967	1782.437	1126.121	540.356	271.214		19.513	0.000	0.000	0.000
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001		0.0001	1.0000	1.0000	1.0000

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.

University of Georgia

Pest Type W Weed
 Pest Code IPOHG
 Rating Date 6/12/2010
 Rating Data Type control
 Rating Unit %
 Crop Stage SC
 Days After Last Applic. 37
 Trt-Eval Interval 37 DA-A

Trt No.	Treatment Name	Rate	Rate Unit		
1	None			99.0	a
2	Ignite	23	oz/a	0.0	b
3	No Ignite				
3	DHT-014	2	pt/a	99.0	a
4	Ignite	23	oz/a		
4	DHT-014	2	pt/a	99.0	a
5	No Ignite				
5	DHT-014	3	pt/a	99.0	a
6	Ignite	23	oz/a		
6	DHT-014	3	pt/a	99.0	a
7	No Ignite				
7	DHT-014	4	pt/a	99.0	a
8	Ignite	23	oz/a		
8	DHT-014	4	pt/a	99.0	a
9	No Ignite				
9	Weedar 64	1	pt/a	99.0	a
10	Ignite	23	oz/a		
10	Weedar 64	1	pt/a	99.0	a
11	No Ignite				
11	Weedar 64	1.5	pt/a	99.0	a
12	Ignite	23	oz/a		
12	Weedar 64	1.5	pt/a	99.0	a
13	No Ignite				
13	Weedar 64	2	pt/a	99.0	a
14	Ignite	23	oz/a		
14	Weedar 64	2	pt/a	99.0	a
15	No Ignite				
15	Clarity	0.5	pt/a	99.0	a
16	Ignite	23	oz/a		
16	Clarity	0.5	pt/a	99.0	a
17	No Ignite				
17	Clarity	1	pt/a	99.0	a
18	Ignite	23	oz/a		
18	Clarity	1	pt/a	99.0	a
19	No Ignite				
19	Clarity	2	pt/a	99.0	a
20	Ignite	23	oz/a		
20	Clarity	2	pt/a	99.0	a
	No Ignite				

LSD (P=.05) 0.00
 Standard Deviation 0.00
 CV 0.0
 Bartlett's X2 0.0
 P(Bartlett's X2) .

Replicate F 0.000
 Replicate Prob(F) 1.0000
 Treatment F 0.000
 Treatment Prob(F) 1.0000

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.

University of Georgia

Response of GR Palmer amaranth, grasses, and other broadleaf weeds to 2,4-D, DHT-014, and Clarity alone or mixed with Ignite.

Trial ID: C40-10

Study Director: Jill Chaffin

Location: TyTy-Annex

Investigator: Stanley Culpepper

General Trial Information

Study Director:	Stanley Culpepper	Title:	Ext. Weed Science
Affiliation:	University of Georgia		
Postal Code:	31793		
Investigator:	Stanley Culpepper	Title:	Ext. Weed Science
Affiliation:	Univ. of Georgia		
Postal Code:	31793		

Trial Location

City:	TyTy	Trial Status:	completed
State/Prov.:	GA	Trial Reliability:	excellent
		Initiation Date:	5/6/2010
Country:	USA		
Directions:			

Objectives:

Conclusions:

Crop Description

Crop 1: NONE non-crop
Variety: .

Pest Description

Pest 1 Type: W **Code:** PANTE **Panicum texanum**
Common Name: Texas panicum

Pest 2 Type: W **Code:** IPOHG **Ipomoea hederacea integriscul**
Common Name: Entireleaf morningglory

Site and Design

Plot Width, Unit:	6	FT	Site Type:	On farm
Plot Length, Unit:	25	FT	Tillage Type:	No-tillage
Replications:	4		Study Design:	Factorial

Trial Initiation Comments:

Field Prep./Maintenance:

Soil Description

Texture: loamy sand

Moisture Conditions

Overall Moisture Conditions: moist

Closest Weather Station: UGA Ponder Farm

Distance: 1

Unit: mi

Application Description

A

Application Date: 5/6/2010
Time of Day: 8:00 am
Application Method: broadcast
Application Timing: 8" weed
Application Placement: overtop
Air Temperature, Unit: 78 F
% Relative Humidity: 82
Wind Velocity, Unit: 0 mph
Dew Presence (Y/N): Y
Soil Temperature, Unit: 74 F
Soil Moisture: moist
% Cloud Cover: 0

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: NONE

University of Georgia

Pest Stage At Each Application

A

Pest 1 Code, Disc., Scale: PANTE W .
Height, Unit: 7 in
Height Minimum, Maximum: 6 8
Pest 2 Code, Disc., Scale: IPOHG W
Height, Unit: 7 in
Height Minimum, Maximum: 6 8
Density, Unit: 12 ydsq
Coverage, Unit: 100 %

Application Equipment

A

Appl. Equipment: backpack
Operating Pressure: 24
Pressure Unit: psi
Nozzle Type: flat fan
Nozzle Size: 11002
Nozzle Spacing, Unit: 18 in
Nozzles/Row: 2
Boom Length, Unit: 4.5 ft
Boom Height, Unit: 15 in
Ground Speed, Unit: 3 mph
Carrier: water
Spray Volume: 15
Volume Unit: GAL/AC
Propellant: CO2
Tank Mix (Y/N): Y