

North Carolina State University

EFFICACY OF F8426 2EW ON HAIRY BITTERCRESS AND MOUSEEAR CHICKWEED IN COMMON

BERMUDAGRASS

Trial ID: 03-T3

Study Dir.: L.S. WARREN

Location: NCSU DRIVING RANGE

Investigator: Leon Warren

CROP STAGE AT EACH APPLICATION

A	
Crop 1 Code, Stage:	CYNDA MOWED
Stage Scale:	DORMANT
Height, Unit:	0.5 IN

WEED STAGE AT EACH APPLICATION

A	
Weed 1 Code, Stage:	CARHI FLOWERING
Stage Scale:	4-6"STALK
Density, Unit:	1-5 FT2
Weed 2 Code, Stage:	CERVU PREFLOWER
Stage Scale:	1-2 INCH
Density, Unit:	<1-3 FT3

APPLICATION EQUIPMENT

A	
Appl. Equipment:	BACSPR
Operating Pressure:	35 PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	XR 8002VS
Nozzle Spacing, Unit:	10 IN
Band Width, Unit:	40 IN
Boom Length, Unit:	40 IN
Boom Height, Unit:	10 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume, Unit:	32.5 GPA
Propellant:	COMCO2
Tank Mix (Y/N):	Y

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Weed Code										CARHI	CARHI	CARHI	CARHI	
Rating Data Type										INJURY	INJURY	INJURY	CONTROL	
Rating Unit										PERCENT	PERCENT	PERCENT	PERCENT	
Rating Date										3-10-03	3-13-03	3-21-03	3-28-03	
Trt-Eval Interval										3 DA-A	6 DA-A	14 DA-A	21 DA-A	
ARM Action Codes										P	P	P	P	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Product Rate	Product Unit	Grow Stg	Appl Code	Spray Volume				
1	F8426 X-77 SPREADER	2	EW L	1.16 0.25	fl oz/a % v/v			MAR 7 MAR 7	A A		6.3 bc	23.8 c	47.5 c	28.8 d
2	F8426 X-77 SPREADER	2	EW L	1.84 0.25	fl oz/a % v/v			MAR 7 MAR 7	A A		10.0 ab	40.0 ab	45.0 c	36.3 d
3	F8426 X-77 SPREADER	2	EW L	2.33 0.25	fl oz/a % v/v			MAR 7 MAR 7	A A		8.8 ab	40.0 ab	52.5 bc	61.3 c
4	F8426 TRIMEC CLASSIC X-77 SPREADER	2 3.32	EW L	1.16 2.5	fl oz/a pt/a			MAR 7 MAR 7 MAR 7	A A A		10.0 ab	40.0 ab	65.0 abc	88.8 ab
5	F8426 HORSEPOWER X-77 SPREADER	2 4.56	EW L	1.16 28	fl oz/a fl oz/a			MAR 7 MAR 7 MAR 7	A A A		12.5 ab	52.5 a	72.5 ab	90.0 ab
6	F8426 CHASER 2 AMINE X-77 SPREADER	2 3.85	EW EC	1.16 2.5	fl oz/a pt/a			MAR 7 MAR 7 MAR 7	A A A		15.0 a	41.3 ab	65.0 abc	87.5 ab
7	F8426 TURFLON ESTER X-77 SPREADER	2 4.0	EW EC	1.16 1.0	fl oz/a pt/a			MAR 7 MAR 7 MAR 7	A A A		13.8 a	28.8 bc	52.5 bc	86.3 ab
8	TRIMEC CLASSIC	3.32	L	4.0	pt/a			MAR 7	A		11.3 ab	42.5 ab	73.8 ab	87.5 ab
9	HORSEPOWER	4.56	L	3.0	pt/a			MAR 7	A		10.0 ab	30.0 bc	56.3 abc	71.3 bc
10	CHASER 2 AMINE	3.85	EC	3.0	pt/a			MAR 7	A		12.5 ab	38.8 ab	62.5 abc	77.5 abc
11	TURFLON ESTER	4.0	EC	2.0	pt/a			MAR 7	A		10.0 ab	37.5 bc	77.5 a	92.3 a
12	CHECK										0.0 c	0.0 d	0.0 d	0.0 e
LSD (P=.05)										6.39	14.04	22.47	18.86	
Standard Deviation										4.42	9.72	15.56	13.06	
CV										44.24	28.12	27.87	19.42	
Grand Mean										10.0	34.58	55.83	67.27	
Bartlett's X2										5.295	7.473	14.474	15.793	
P(Bartlett's X2)										0.871	0.487	0.152	0.106	
Replicate F										1.348	1.513	3.160	3.351	
Replicate Prob(F)										0.2756	0.2294	0.0375	0.0306	
Treatment F										3.135	7.346	6.918	21.111	
Treatment Prob(F)										0.0054	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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Weed Code										CARHI	CARHI	CERVU	CERVU	
Rating Data Type										CONTROL	CONTROL	INJURY	INJURY	
Rating Unit										PERCENT	PERCENT	PERCENT	PERCENT	
Rating Date										4-3-03	4-14-03	3-10-03	3-13-03	
Trt-Eval Interval										27 DA-A	38 DA-A	3 DA-A	6 DA-A	
ARM Action Codes										P	P	P	P	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Product Rate	Product Unit	Grow Stg	Appl Code	Spray Volume				
1	F8426 X-77 SPREADER	2	EW L	1.16 0.25	fl oz/a % v/v			MAR 7 MAR 7	A A		37.5 c	13.8 b	5.0 a-d	16.3 cd
2	F8426 X-77 SPREADER	2	EW L	1.84 0.25	fl oz/a % v/v			MAR 7 MAR 7	A A		50.0 b	17.5 b	7.5 abc	20.0 cd
3	F8426 X-77 SPREADER	2	EW L	2.33 0.25	fl oz/a % v/v			MAR 7 MAR 7	A A		50.0 b	13.8 b	5.0 a-d	23.8 c
4	F8426 TRIMEC CLASSIC X-77 SPREADER	2 3.32	EW L	1.16 2.5	fl oz/a pt/a			MAR 7 MAR 7 MAR 7	A A A		100.0 a	100.0 a	10.0 a	35.0 ab
5	F8426 HORSEPOWER X-77 SPREADER	2 4.56	EW L	1.16 28	fl oz/a fl oz/a			MAR 7 MAR 7 MAR 7	A A A		100.0 a	100.0 a	7.5 abc	42.5 a
6	F8426 CHASER 2 AMINE X-77 SPREADER	2 3.85	EW EC	1.16 2.5	fl oz/a pt/a			MAR 7 MAR 7 MAR 7	A A A		100.0 a	100.0 a	8.8 ab	32.5 b
7	F8426 TURFLON ESTER X-77 SPREADER	2 4.0	EW EC	1.16 1.0	fl oz/a pt/a			MAR 7 MAR 7 MAR 7	A A A		100.0 a	100.0 a	6.3 abc	15.0 de
8	TRIMEC CLASSIC	3.32	L	4.0	pt/a			MAR 7	A		100.0 a	100.0 a	6.3 abc	17.5 cd
9	HORSEPOWER	4.56	L	3.0	pt/a			MAR 7	A		100.0 a	100.0 a	3.8 bcd	13.8 de
10	CHASER 2 AMINE	3.85	EC	3.0	pt/a			MAR 7	A		100.0 a	100.0 a	3.8 bcd	7.5 ef
11	TURFLON ESTER	4.0	EC	2.0	pt/a			MAR 7	A		100.0 a	100.0 a	2.5 cd	18.8 cd
12	CHECK										0.0 d	0.0 c	0.0 d	0.0 f
LSD (P=.05)										6.02	5.76	5.34	8.20	
Standard Deviation										4.17	3.99	3.69	5.68	
CV										5.33	5.66	66.93	28.11	
Grand Mean										78.13	70.42	5.52	20.21	
Bartlett's X2										0.0	0.083	7.966	6.202	
P(Bartlett's X2)										.	0.959	0.538	0.798	
Replicate F										1.000	0.786	5.328	2.691	
Replicate Prob(F)										0.4051	0.5105	0.0042	0.0622	
Treatment F										275.727	484.167	2.286	17.395	
Treatment Prob(F)										0.0001	0.0001	0.0329	0.0001	

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Weed Code										CERVU	CERVU	CERVU	CERVU	
Rating Data Type										INJURY	CONTROL	CONTROL	CONTROL	
Rating Unit										PERCENT	PERCENT	PERCENT	PERCENT	
Rating Date										3-21-03	3-28-03	4-3-03	4-14-03	
Trt-Eval Interval										14 DA-A	21 DA-A	27 DA-A	38 DA-A	
ARM Action Codes										P	P	P	P	
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Product Rate	Product Unit	Grow Stg	Appl Code	Spray Volume				
1	F8426 X-77 SPREADER	2	EW	1.16	fl oz/a			MAR 7	A		6.3 fg	5.0 g	5.0 de	0.0 e
			L	0.25	% v/v			MAR 7	A					
2	F8426 X-77 SPREADER	2	EW	1.84	fl oz/a			MAR 7	A		15.0 efg	13.8 fg	5.0 de	0.0 e
			L	0.25	% v/v			MAR 7	A					
3	F8426 X-77 SPREADER	2	EW	2.33	fl oz/a			MAR 7	A		23.8 de	23.8 def	0.0 e	0.0 e
			L	0.25	% v/v			MAR 7	A					
4	F8426 TRIMEC CLASSIC X-77 SPREADER	2	EW	1.16	fl oz/a			MAR 7	A		47.5 ab	70.0 a	96.5 a	100.0 a
		3.32	L	2.5	pt/a			MAR 7	A					
			L	0.25	% v/v			MAR 7	A					
5	F8426 HORSEPOWER X-77 SPREADER	2	EW	1.16	fl oz/a			MAR 7	A		57.5 a	76.3 a	96.5 a	100.0 a
		4.56	L	28	fl oz/a			MAR 7	A					
			L	0.25	% v/v			MAR 7	A					
6	F8426 CHASER 2 AMINE X-77 SPREADER	2	EW	1.16	fl oz/a			MAR 7	A		40.0 bc	51.3 b	26.7 c	20.0 cd
		3.85	EC	2.5	pt/a			MAR 7	A					
			L	0.25	% v/v			MAR 7	A					
7	F8426 TURFLON ESTER X-77 SPREADER	2	EW	1.16	fl oz/a			MAR 7	A		23.8 de	32.5 cde	11.3 cde	21.3 cd
		4.0	EC	1.0	pt/a			MAR 7	A					
			L	0.25	% v/v			MAR 7	A					
8	TRIMEC CLASSIC	3.32	L	4.0	pt/a			MAR 7	A		23.8 de	42.5 bc	67.5 b	90.0 ab
9	HORSEPOWER	4.56	L	3.0	pt/a			MAR 7	A		28.8 cde	33.8 bcd	55.0 b	83.8 b
10	CHASER 2 AMINE	3.85	EC	3.0	pt/a			MAR 7	A		18.8 def	15.0 efg	15.0 cde	6.3 de
11	TURFLON ESTER	4.0	EC	2.0	pt/a			MAR 7	A		31.3 cd	33.8 bcd	20.0 cd	33.8 c
12	CHECK										0.0 g	0.0 g	0.0 e	0.0 e
LSD (P=.05)										15.86	17.75	17.07	16.21	
Standard Deviation										10.98	12.30	11.82	11.23	
CV										41.67	37.12	35.6	29.61	
Grand Mean										26.35	33.13	33.2	37.92	
Bartlett's X2										14.099	19.01	29.284	3.226	
P(Bartlett's X2)										0.169	0.025*	0.001*	0.665	
Replicate F										0.972	2.476	1.448	3.284	
Replicate Prob(F)										0.4178	0.0787	0.2471	0.0333	
Treatment F										8.862	15.193	37.711	57.388	
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	

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Trial Comments

03-05-03: STAKED OUT TEST - TOO WET TO APPLY TREATMENTS

03-07-03: APPLIED TREATMENTS

03-10-03: CARHI INJURY RATINGS BASED ON FLOWER STALK CURL AND TWISTING SYMPTOMS MORE THAN DISCOLORATION
CERVU INJURY RATINGS BASED ON LEAF CHLOROSIS

04-03-03: TEST AREA MOWED AND CARHI NOT NOTICEABLE EXCEPT IN PLOTS TREATED WITH F8426 (ROSETTES STILL HAD BROWNISH-GREEN APPEARANCE AND WERE NOT COMPLETELY CONTROLLED)

04-14-03: CARHI APPEARED TO HAVE RECOVERED IN ALL F8426 2EW TREATED PLOTS AS SEEDHEADS HAD REFORMED SINCE LAST MOWING