

North Carolina State University

Efficacy of Weed and Feeds on Dollarweed

Trial ID: 02-T23 Study Dir.: Jason Hinton
 Location: Wrightsville Beach Investigator: Fred Yelverton

GENERAL TRIAL INFORMATION

Study Director: Jason Hinton **Title:** Research Technician
Affiliation: North Carolina State University
Postal Code: 27695
Investigator: Fred Yelverton **Title:** Professor
Affiliation: North Carolina State University
Postal Code: 27695

TRIAL LOCATION

City: Wrightsville Beach **Trial Status:** Complete
State/Prov.: NC
Postal Code: 28480 **Initiation Date:** 05-29-02
Country: USA

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	HYDsp	Dollarweed	Hydrocotyle species

SITE AND DESIGN

Plot Width, Unit: 3 FT **Plot Length, Unit:** 3 FT **Reps:** 3
Study Design: SPLIT-BLOCK

APPLICATION DESCRIPTION

	A	B
Application Date:	05-29-02	05-29-02
Time of Day:	1-2:00 PM	2-3:00 PM
Application Method:	Spread	Spread
Application Timing:	Dry	Wet
Applic. Placement:	Soil	Soil/Fol.
Air Temp., Unit:	75.8 F	75.2 F
% Relative Humidity:	81	83
Wind Velocity, Unit:	10.9 MPH	8.1 MPH
Dew Presence (Y/N):	N	Y
Water Hardness:	N/A	N/A
Soil Temp., Unit:	79 F	79 F
Soil Moisture:	Fair/Poor	Fair/Poor
% Cloud Cover:	40	100

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	HYDsp Mowed	HYDsp Mowed
Stage Scale:	1-2 Inch	1-2 Inch
Density, Unit:	5 Ft ²	5 Ft ²

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	ShakerCan	ShakerCan

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Trt No	Treatment Application Comment
	Light drizzle at 3:00 PM
	Wet treatments were applied after wetting foliage with sprinkler can.

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Weed Code							HYDspp	HYDspp	
Rating Data Type							CONTROL	CONTROL	
Rating Unit							%	%	
Rating Date							06-05-02	06-12-02	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	
1	AND1001	G		3.5 LB/1000 FT2			Wet A	11.7 b-f	20.0 d-i
2	AND1002	G		3.5 LB/1000 FT2			Wet A	11.7 b-f	31.7 b-f
3	AND1003	G		3.5 LB/1000 FT2			Wet A	5.0 def	13.3 e-i
4	AND1004	G		3.5 LB/1000 FT2			Wet A	8.3 c-f	18.3 e-i
5	AND1005	G		3.5 LB/1000 FT2			Wet A	10.0 c-f	20.0 d-i
6	AND1006	G		3.5 LB/1000 FT2			Wet A	13.3 b-e	13.3 e-i
7	AND1007	G		3.5 LB/1000 FT2			Wet A	5.0 def	25.0 c-i
8	AND1008	G		3.5 LB/1000 FT2			Wet A	3.3 ef	31.7 b-f
9	AND1009	G		3.5 LB/1000 FT2			Wet A	5.0 def	18.3 e-i
10	AND1010	G		3.5 LB/1000 FT2			Wet A	3.3 ef	30.0 b-g
11	AND1011	G		3.5 LB/1000 FT2			Wet A	8.3 c-f	31.7 b-f
12	AND1012	G		3.5 LB/1000 FT2			Wet A	1.7 ef	5.0 f-i
13	AND1013	G		3.5 LB/1000 FT2			Wet A	0.0 f	1.7 hi
14	AND1014	G		3.5 LB/1000 FT2			Wet A	0.0 f	1.7 hi
15	AND1015	G		3.5 LB/1000 FT2			Wet A	0.0 f	5.0 f-i
16	AND1016	G		3.5 LB/1000 FT2			Wet A	0.0 f	8.3 e-i
17	AND1017	G		3.5 LB/1000 FT2			Wet A	1.7 ef	3.3 ghi
18	AND1018	G		3.5 LB/1000 FT2			Wet A	5.0 def	23.3 c-i
19	AND1019	G		3.5 LB/1000 FT2			Wet A	3.3 ef	13.3 e-i
20	AND1020	G		3.5 LB/1000 FT2			Wet A	1.7 ef	10.0 e-i
21	AND1021	G		3.5 LB/1000 FT2			Wet A	5.0 def	26.7 c-i
22	AND1022	G		3.5 LB/1000 FT2			Wet A	1.7 ef	8.3 e-i

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Rating Data Type							CONTROL	CONTROL
Rating Unit							%	%
Rating Date							06-05-02	06-12-02
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code
45	AND1019	G		3.5 LB/1000 FT2			Dry	B
46	AND1020	G		3.5 LB/1000 FT2			Dry	B
47	AND1021	G		3.5 LB/1000 FT2			Dry	B
48	AND1022	G		3.5 LB/1000 FT2			Dry	B
49	AND1023	G		4.0 LB/1000 FT2			Dry	B
50	AND1024	G		4.0 LB/1000 FT2			Dry	B
51	AND1038 (Turf Builder+II)	G		3.45 LB/1000 FT2			Dry	B
52	Nontreated						Dry	B
LSD (P=.05)							12.20	27.04
Standard Deviation							7.55	16.73
CV							98.09	82.44
Bartlett's X2							75.964	60.562
P(Bartlett's X2)							0.001*	0.088
Replicate F							1.697	9.673
Replicate Prob(F)							0.1883	0.0001
Treatment F							7.756	1.974
Treatment Prob(F)							0.0001	0.0018

Means followed by same letter do not significantly differ (P=.05, LSD)

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Rating Data Type							CONTROL	CONTROL	
Rating Unit							%	%	
Rating Date							06-27-02	07-10-02	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	
1	AND1001	G		3.5 LB/1000 FT2			Wet A	81.7 a-d	25.0 e-i
2	AND1002	G		3.5 LB/1000 FT2			Wet A	75.0 a-d	40.0 c-i
3	AND1003	G		3.5 LB/1000 FT2			Wet A	80.0 a-d	25.0 e-i
4	AND1004	G		3.5 LB/1000 FT2			Wet A	93.3 abc	50.0 b-g
5	AND1005	G		3.5 LB/1000 FT2			Wet A	71.7 a-d	20.0 f-i
6	AND1006	G		3.5 LB/1000 FT2			Wet A	78.3 a-d	41.7 c-h
7	AND1007	G		3.5 LB/1000 FT2			Wet A	95.0 ab	33.3 c-i
8	AND1008	G		3.5 LB/1000 FT2			Wet A	90.0 abc	50.0 b-g
9	AND1009	G		3.5 LB/1000 FT2			Wet A	93.3 abc	58.3 a-f
10	AND1010	G		3.5 LB/1000 FT2			Wet A	88.3 a-d	33.3 c-i
11	AND1011	G		3.5 LB/1000 FT2			Wet A	78.3 a-d	28.3 d-i
12	AND1012	G		3.5 LB/1000 FT2			Wet A	70.0 a-d	25.0 e-i
13	AND1013	G		3.5 LB/1000 FT2			Wet A	55.0 cd	33.3 c-i
14	AND1014	G		3.5 LB/1000 FT2			Wet A	55.0 cd	25.0 e-i
15	AND1015	G		3.5 LB/1000 FT2			Wet A	83.3 a-d	83.3 ab
16	AND1016	G		3.5 LB/1000 FT2			Wet A	96.7 a	71.7 abc
17	AND1017	G		3.5 LB/1000 FT2			Wet A	81.7 a-d	41.7 c-h
18	AND1018	G		3.5 LB/1000 FT2			Wet A	50.0 d	25.0 e-i
19	AND1019	G		3.5 LB/1000 FT2			Wet A	86.7 a-d	33.3 c-i
20	AND1020	G		3.5 LB/1000 FT2			Wet A	61.7 a-d	25.0 e-i
21	AND1021	G		3.5 LB/1000 FT2			Wet A	86.7 a-d	50.0 b-g
22	AND1022	G		3.5 LB/1000 FT2			Wet A	81.7 a-d	48.3 b-h

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Rating Data Type							CONTROL	CONTROL	
Rating Unit							%	%	
Rating Date							07-24-02	09-11-02	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	
1	AND1001	G		3.5 LB/1000 FT2			Wet A	8.3 ef	0.0 e
2	AND1002	G		3.5 LB/1000 FT2			Wet A	25.0 c-f	40.0 a-e
3	AND1003	G		3.5 LB/1000 FT2			Wet A	16.7 def	0.0 e
4	AND1004	G		3.5 LB/1000 FT2			Wet A	33.3 c-f	31.7 a-e
5	AND1005	G		3.5 LB/1000 FT2			Wet A	41.7 a-f	0.0 e
6	AND1006	G		3.5 LB/1000 FT2			Wet A	41.7 a-f	21.7 cde
7	AND1007	G		3.5 LB/1000 FT2			Wet A	8.3 ef	8.3 de
8	AND1008	G		3.5 LB/1000 FT2			Wet A	41.7 a-f	16.7 cde
9	AND1009	G		3.5 LB/1000 FT2			Wet A	33.3 c-f	8.3 de
10	AND1010	G		3.5 LB/1000 FT2			Wet A	30.0 c-f	8.3 de
11	AND1011	G		3.5 LB/1000 FT2			Wet A	8.3 ef	8.3 de
12	AND1012	G		3.5 LB/1000 FT2			Wet A	0.0 f	8.3 de
13	AND1013	G		3.5 LB/1000 FT2			Wet A	25.0 c-f	0.0 e
14	AND1014	G		3.5 LB/1000 FT2			Wet A	8.3 ef	0.0 e
15	AND1015	G		3.5 LB/1000 FT2			Wet A	70.0 abc	65.0 abc
16	AND1016	G		3.5 LB/1000 FT2			Wet A	71.7 abc	56.7 a-d
17	AND1017	G		3.5 LB/1000 FT2			Wet A	31.7 c-f	25.0 cde
18	AND1018	G		3.5 LB/1000 FT2			Wet A	58.3 a-e	40.0 a-e
19	AND1019	G		3.5 LB/1000 FT2			Wet A	41.7 a-f	48.3 a-e
20	AND1020	G		3.5 LB/1000 FT2			Wet A	30.0 c-f	28.3 cde
21	AND1021	G		3.5 LB/1000 FT2			Wet A	41.7 a-f	8.3 de
22	AND1022	G		3.5 LB/1000 FT2			Wet A	56.7 a-e	25.0 cde

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Rating Unit							%	%	
Rating Date							07-24-02	09-11-02	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Product Rate	Product Unit	Grow Stg	Appl Code	
45	AND1019	G		3.5 LB/1000 FT2			Dry B	25.0 c-f	0.0 e
46	AND1020	G		3.5 LB/1000 FT2			Dry B	50.0 a-f	21.7 cde
47	AND1021	G		3.5 LB/1000 FT2			Dry B	51.7 a-e	23.3 cde
48	AND1022	G		3.5 LB/1000 FT2			Dry B	0.0 f	0.0 e
49	AND1023	G		4.0 LB/1000 FT2			Dry B	8.3 ef	8.3 de
50	AND1024	G		4.0 LB/1000 FT2			Dry B	25.0 c-f	25.0 cde
51	AND1038 (Turf Builder+II)	G		3.45 LB/1000 FT2			Dry B	91.7 a	83.3 ab
52	Nontreated						Dry B	0.0 f	0.0 e
LSD (P=.05)							50.01	53.80	
Standard Deviation							30.94	33.28	
CV							88.07	146.25	
Bartlett's X2							31.691	30.189	
P(Bartlett's X2)							0.946	0.87	
Replicate F							8.225	3.323	
Replicate Prob(F)							0.0005	0.0400	
Treatment F							1.561	1.111	
Treatment Prob(F)							0.0290	0.3227	

Means followed by same letter do not significantly differ (P=.05, LSD)

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Trial Comments