

The Ohio State University

USB/ BAREGROUND/ RESIDUAL HERBICIDES/2013

Trial ID: 14USBRESIDUAL Location: Western Branch G-8 Trial Year: 2014
 Protocol ID: Investigator: Dr. Mark M. Loux
 Project ID: USBRESIDUAL13 Study Director:
 Sponsor Contact:

Site and Design

Treated Plot Width: 6.67 FT
 Treated Plot Length: 25 FT
 Treated Plot Area: 166.75 FT² Treatments: 20
 Replications: 4

Study Design: RACOB L Randomized Complete Block (RCB)

Application Description

A

Application Date: May-28-2014
 Appl. Start Time: 11:00 AM
 Application Method: SPRAY
 Application Timing: PRE
 Application Placement: BROSOIL
 Air Temperature, Unit: 84.8 F
 % Relative Humidity: 60
 Wind Velocity, Unit: 3 MPH
 Wind Direction: SSW
 Dew Presence (Y/N): N no
 Soil Temperature, Unit: 70 F
 Soil Moisture: DRY
 % Cloud Cover: 10

Application Equipment

A

Appl. Equipment: 6 FOOT BOOM
 Equipment Type: SPRBAC
 Operation Pressure, Unit: 46 PSI
 Nozzle Type: AI XR
 Nozzle Size: 110015
 Nozzle Spacing, Unit: 18 IN
 Boom Length, Unit: 6.67 FT
 Boom Height, Unit: 20 IN
 Ground Speed, Unit: 3 MPH
 Carrier: WATER
 Spray Volume, Unit: 15 GPA
 Mix Size, Unit: 1 L
 Propellant: CO2

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	AMBTR	ECHCG	AMARE	ECHCG	AMBTR
Pest Scientific Name	Amaranthus ret>	Ambrosia trifi>	Echinochloa cr>	Amaranthus ret>	Echinochloa cr>	Ambrosia trifi>
Pest Name	Redroot pigweed	Giant ragweed	Common barnyar>	Redroot pigweed	Common barnyar>	Giant ragweed
Rating Date	Jun-16-2014	Jun-16-2014	Jun-16-2014	Jul-2-2014	Jul-2-2014	Jul-2-2014
Rating Type						
Rating Unit						
Number of Subsamples	1	1	1	1	1	1
SE Group No.	1	2	3	4	5	6
Days After First/Last Applic.	19 19	19 19	19 19	35 35	35 35	35 35
Trt-Eval Interval	19 DA-A	19 DA-A	19 DA-A	35 DA-A	35 DA-A	35 DA-A

Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6
1	CLARITY	16 oz/a	A		71.3	65.0	52.5	17.5	15.0	30.0
2	CLARITY	32 oz/a	A		78.1	75.0	68.8	51.2	30.0	41.0
3	DUAL MAGNUM	16 oz/a	A		78.1	61.3	86.3	52.9	53.8	30.0
4	METRIBUZIN	8 oz/a	A		54.8	50.0	62.5	37.9	32.5	40.0
5	CLARITY	32 oz/a	A		97.5	87.5	87.5	80.0	57.5	71.3
5	DUAL MAGNUM	16 oz/a	A							
6	CLARITY	32 oz/a	A		88.8	78.8	70.0	73.0	47.5	55.0
6	METRIBUZIN	8 oz/a	A							
7	CLARITY	32 oz/a	A		100.0	92.5	91.3	85.0	66.3	67.5
7	DUAL MAGNUM	16 oz/a	A							
7	METRIBUZIN	8 oz/a	A							
8	WEEDAR	16 oz/a	A		45.0	50.0	45.0	43.8	25.0	48.8
9	WEEDAR	32 oz/a	A		55.0	57.5	53.8	22.5	22.5	30.0
10	WEEDAR	32 oz/a	A		93.8	62.5	87.5	56.3	65.0	32.5
10	DUAL MAGNUM	16 oz/a	A							
11	WEEDAR	32 oz/a	A		67.5	67.5	60.0	42.5	17.5	30.0
11	METRIBUZIN	8 oz/a	A							
12	CLARITY	32 oz/a	A		100.0	72.5	93.8	96.3	78.8	65.0
12	DUAL MAGNUM	16 oz/a	A							
12	METRIBUZIN	8 oz/a	A							
13	BALANCE PRO	3 oz/a	A		65.0	75.0	76.3	32.5	55.0	67.5
14	BALANCE PRO	3 oz/a	A		91.5	71.3	90.0	73.0	83.8	51.3
14	DUAL MAGNUM	16 oz/a	A							
15	BALANCE PRO	3 oz/a	A		84.8	76.3	93.8	58.0	72.5	57.7
15	METRIBUZIN	8 oz/a	A							
16	BALANCE PRO	3 oz/a	A		101.5	65.0	97.5	93.0	83.8	52.5
16	DUAL MAGNUM	16 oz/a	A							
16	METRIBUZIN	8 oz/a	A							
17	ZIDUA	3 oz/a	A		90.0	46.7	83.8	91.3	70.0	35.0
18	FIERCE	3 oz/a	A		93.8	60.0	78.8	81.3	42.5	35.0

Missing data estimates are included in columns: Yates=1,4,6; Average=2,7

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Pest Type	W Weed	W Weed
Pest Code	CHEAL	AMARE
Pest Scientific Name	Chenopodium al>	Amaranthus ret>
Pest Name	Common lambsqu>	Redroot pigweed
Rating Date	Jul-2-2014	Jul-2-2014
Rating Type		COUPLA
Rating Unit		1/2 M2
Number of Subsamples	1	1
SE Group No.	7	8
Days After First/Last Applic.	35 35	35 35
Trt-Eval Interval	35 DA-A	35 DA-A

Trt No.	Treatment Name	Rate	Appl Unit	Code	7	8
1	CLARITY	16 oz/a	A		30.0	39.3
2	CLARITY	32 oz/a	A		45.0	11.0
3	DUAL MAGNUM	16 oz/a	A		45.0	18.8
4	METRIBUZIN	8 oz/a	A		40.0	21.0
5	CLARITY	32 oz/a	A		68.8	4.3
5	DUAL MAGNUM	16 oz/a	A			
6	CLARITY	32 oz/a	A		80.0	3.8
6	METRIBUZIN	8 oz/a	A			
7	CLARITY	32 oz/a	A		77.5	1.5
7	DUAL MAGNUM	16 oz/a	A			
7	METRIBUZIN	8 oz/a	A			
8	WEEDAR	16 oz/a	A		51.3	52.0
9	WEEDAR	32 oz/a	A		37.5	42.3
10	WEEDAR	32 oz/a	A		37.5	16.0
10	DUAL MAGNUM	16 oz/a	A			
11	WEEDAR	32 oz/a	A		30.0	10.5
11	METRIBUZIN	8 oz/a	A			
12	CLARITY	32 oz/a	A		85.0	0.5
12	DUAL MAGNUM	16 oz/a	A			
12	METRIBUZIN	8 oz/a	A			
13	BALANCE PRO	3 oz/a	A		77.5	42.8
14	BALANCE PRO	3 oz/a	A		90.0	5.3
14	DUAL MAGNUM	16 oz/a	A			
15	BALANCE PRO	3 oz/a	A		70.0	2.8
15	METRIBUZIN	8 oz/a	A			
16	BALANCE PRO	3 oz/a	A		100.0	0.8
16	DUAL MAGNUM	16 oz/a	A			
16	METRIBUZIN	8 oz/a	A			
17	ZIDUA	3 oz/a	A		27.5	1.0
18	FIERCE	3 oz/a	A		85.0	1.8

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Pest Code		CHEAL	AMARE
Pest Scientific Name		Chenopodium al>	Amaranthus ret>
Pest Name		Common lambsqu>	Redroot pigweed
Rating Date		Jul-2-2014	Jul-2-2014
Rating Type			COUPLA
Rating Unit			1/2 M2
Number of Subsamples		1	1
SE Group No.		7	8
Days After First/Last Applic.		35 35	35 35
Trt-Eval Interval		35 DA-A	35 DA-A
Trt Treatment	Rate Appl		
No. Name	Rate Unit Code	7	8
19 ZEMAX	64 oz/a A	93.3	1.8
20 UNTREATED CHECK		0.0	69.5
LSD (P=.05)		28.91	30.87
Standard Deviation		20.23	21.83
CV		34.56	126.07
Bartlett's X2		11.773	121.899
P(Bartlett's X2)		0.759	0.001*
Skewness		-0.0831	2.6253*
Kurtosis		-1.3509*	7.8294*
Replicate F		0.273	6.773
Replicate Prob(F)		0.8443	0.0006
Treatment F		7.408	3.558
Treatment Prob(F)		0.0001	0.0001

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Sponsor Contact:

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

AMARE, Amaranthus retroflexus, = US

AMBTR, Ambrosia trifida, = US

ECHCG, Echinochloa crus-galli, = US

CHEAL, Chenopodium album, = US

Rating Type

COUPLA = count - plant / emergence - objective