

Ohio State University Horticulture and Crop Science

Jungle Mix Trial

Title No. 2:
Trial ID: 10Jungle Protocol ID: 10Jungle
Location: Study Director:
Project ID: Investigator: Dr. Mark M. Loux
Sponsor Contact:

General Trial Information

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Trial Location

Latitude of LL Corner °: 39.86021 N
Longitude of LL Corner °: 83.67217 W
Altitude of LL Corner, Unit: 1085.00 FT

Personnel

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Pioneer 93Y20 **Description:** RR
BBCH Scale: BSOY **Planting Date:** May-6-2010
Planting Method: SEEDED seeded **Rate, Unit:** 196000 S/A
Depth, Unit: 0.75 IN
Row Spacing, Unit: 15 IN
Seed Bed: MEDIUM medium
Soil Moisture: GOOD good **Emergence Date:** May-18-2010

Pest Description

- Pest 1 Type:** W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail
- Pest 2 Type:** W **Code:** AMBEL *Ambrosia artemisiifolia*
Common Name: Common ragweed
- Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters
- Pest 4 Type:** W **Code:** ABUTH *Abutilon theophrasti*
Common Name: Velvetleaf
- Pest 5 Type:** W **Code:** SIDSP *Sida spinosa*
Common Name: Prickly sida
- Pest 6 Type:** W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory
- Pest 7 Type:** W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Site and Design

Plot Width, Unit: 10 FT
Plot Length, Unit: 30 FT
Plot Area, Unit: 300 FT²
Replications: 3 **Study Design:** RAOBL Randomized Complete Block (RCB)

Soil Description

Description Name: F-8 West
% OM: 3.1 **Texture:** SICL silty clay loam
pH: 6.3 **Soil Name:** Kokomo
CEC: 20 **Fert. Level:** G good
Soil Drainage: G good

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Application Description

A
Application Date: Jun-17-2010
Time of Day: 8:30 AM
Application Method: SPRAY
Application Timing: POST
Application Placement: BROFO
Applied By: Berry
Air Temperature, Unit: 75 F
% Relative Humidity: 72
Wind Velocity, Unit: 1 MPH
Wind Direction: NW
Dew Presence (Y/N): Y yes
Soil Temperature, Unit: 70 F
Soil Moisture: WET
% Cloud Cover: 0
Next Rain Occurred On: Jun-18-2010

Crop Stage At Each Application

A
Crop 1 Code, BBCH Scale: GLXMA BSOY
Stage Scale Used: BBCH
Stage Majority, Percent: 16 100
Height, Unit: 10 IN
Height Minimum, Maximum: 9 10

Pest Stage At Each Application

A
Pest 1 Code, Type, Scale: SETFA W
Stage Majority, Percent: 13 100
Height, Unit: 10 IN
Height Minimum, Maximum: 8 15
Pest 2 Code, Type, Scale: AMBEL W
Stage Majority, Percent: 15 100
Height, Unit: 8 IN
Height Minimum, Maximum: 7 10
Pest 3 Code, Type, Scale: CHEAL W
Stage Majority, Percent: 16 100
Height, Unit: 2 IN
Height Minimum, Maximum: 1 2
Pest 4 Code, Type, Scale: ABUTH W
Stage Majority, Percent: 16 100
Height, Unit: 3 IN
Height Minimum, Maximum: 2 4
Pest 5 Code, Type, Scale: SIDSP W
Stage Majority, Percent: 14 100
Pest 6 Code, Type, Scale: IPOSS W
Stage Majority, Percent: 12 100
Height, Unit: 3 IN
Height Minimum, Maximum: 2 4
Pest 7 Code, Type, Scale: AMBTR W
Stage Majority, Percent: 16 100
Height, Unit: 15 IN
Height Minimum, Maximum: 7 26

Application Equipment

A
Appl. Equipment: BACKPACK
Equipment Type: SPRBAC
Operating Pressure, Unit: 53 PSI
Nozzle Type: TEEJET DG
Nozzle Size: 11002
Nozzle Spacing, Unit: 18 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 20 GPA
Mix Size, Unit: 3 Liters
Propellant: CO2

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	SETFA	AMBTR	AMBTR
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Ambrosia trifi>
Pest Name	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed	Giant ragweed
Rating Date	Jul-1-2010	Jul-1-2010	Jul-16-2010	Jul-16-2010	Aug-26-2010
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	14 14	14 14	29 29	29 29	70 70
Trt-Eval Interval	14 DA-A	14 DA-A	29 DA-A	29 DA-A	70 DA-A
Plant-Eval Interval	56 DP-1	56 DP-1	71 DP-1	71 DP-1	112 DP-1
Days After Emergence	44 DE-	44 DE-	59 DE-	59 DE-	100 DE
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	1	2	3	4	5
1	Select Max	1 LBA/GAL		12 oz/a		A	53	75	47	77	85
	1 Firstrate	84 %AW/W		0.2 oz/a		A					
	1 Cobra	2 LBA/GAL		8 oz/a		A					
	1 Harmony GT	50 %AW/W		0.0625 oz/a		A					
	1 NIS	100 %		0.2 qt/a		A					
	1 N-PAK AMS	100 %		2 qt/a		A					
2	Select Max	1 LBA/GAL		12 oz/a		A	43	50	27	27	40
	2 Classic	25 %AW/W		0.34 oz/a		A					
	2 Harmony	75 %AW/W		0.03 oz/a		A					
	2 Cobra	2 LBA/GAL		8 oz/a		A					
	2 NIS	100 %		2 qt/a		A					
3	Select Max	1 LBA/GAL		12 oz/a		A	62	77	33	43	60
	3 Cobra	2 LBA/GAL		8 oz/a		A					
	3 Basagran	4 LBA/GAL		1.25 pt/a		A					
	3 Harmony GT	50 %AW/W		0.0625 oz/a		A					
	3 COC	100 %		0.8 qt/a		A					
4	Raptor	1 LBA/GAL		5 oz/a		A	40	47	47	43	47
	4 Cobra	2 LBA/GAL		8 oz/a		A					
	4 COC	100 %		0.8 qt/a		A					
	4 28%	100 %		2 qt/a		A					
5	Raptor	1 LBA/GAL		5 oz/a		A	37	20	50	37	47
	5 Destiny HC	100 %		0.8 qt/a		A					
	5 28%	100 %		2 qt/a		A					
6	Select Max	1 LBA/GAL		12 oz/a		A	40	67	63	50	63
	6 Firstrate	84 %AW/W		0.3 oz/a		A					
	6 Harmony GT	50 %AW/W		0.0625 oz/a		A					
	6 NIS	100 %		0.2 qt/a		A					
	6 28%	100 %		2 qt/a		A					
7	Select Max	1 LBA/GAL		12 oz/a		A	75	80	70	68	68
	7 Flexstar	1.88 LBA/GAL		1.33 pt/a		A					
	7 Basagran	4 LBA/GAL		1.25 pt/a		A					
	7 Destiny HC	100 %		0.8 qt/a		A					
	7 28%	100 %		2 qt/a		A					
8	Fusion	2.66 LBA/GAL		9 oz/a		A	70	68	70	53	55
	8 Flexstar	1.88 LBA/GAL		1.33 pt/a		A					
	8 Harmony	75 %AW/W		0.0625 oz/a		A					
	8 Destiny HC	100 %		0.8 qt/a		A					
	8 28%	100 %		2 qt/a		A					
9	Select Max	1 LBA/GAL		12 oz/a		A	77	82	68	70	75
	9 Flexstar	1.88 LBA/GAL		1 pt/a		A					
	9 Basagran	4 LBA/GAL		1 pt/a		A					
	9 Destiny HC	100 %		0.8 qt/a		A					
	9 28%	100 %		2 qt/a		A					

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Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	14 14	14 14	29 29	29 29	70 70
Trt-Eval Interval	14 DA-A	14 DA-A	29 DA-A	29 DA-A	70 DA-A
Plant-Eval Interval	56 DP-1	56 DP-1	71 DP-1	71 DP-1	112 DP-1
Days After Emergence	44 DE-	44 DE-	59 DE-	59 DE-	100 DE
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	1	2	3	4	5
10	Poast Plus	1 LBA/GAL		20 oz/a		A	67	50	37	23	27
10	Ultra Blazer	2 LBA/GAL		1.5 pt/a		A					
10	Basagran	4 LBA/GAL		1.25 pt/a		A					
10	Destiny HC	100 %		0.8 qt/a		A					
10	28%	100 %		2 qt/a		A					
11	Fusion	2.66 LBA/GAL		9 oz/a		A	78	77	43	63	80
11	Reflex	2 LBA/GAL		1.5 pt/a		A					
11	Basagran	4 LBA/GAL		1 pt/a		A					
11	Destiny HC	100 %		0.8 qt/a		A					
11	28%	100 %		2 qt/a		A					
12	Pursuit	2 LBA/GAL		4 oz/a		A	50	50	33	43	43
12	Cobra	2 LBA/GAL		8 oz/a		A					
12	Harmony	75 %AW/W		0.0625 oz/a		A					
12	MSO	100 %		0.8 qt/a		A					
12	28%	100 %		2 qt/a		A					
13	Select Max	1 LBA/GAL		12 oz/a		A	33	10	30	0	20
13	Scepter	70 %		2.1 oz/a		A					
13	MSO	100 %		0.8 qt/a		A					
13	28%	100 %		2 qt/a		A					
14	Poast Plus	1 LBA/GAL		20 oz/a		A	65	27	90	0	17
14	Storm	2 LBA/GAL		1.5 pt/a		A					
14	Destiny HC	100 %		0.8 qt/a		A					
14	28%	100 %		2 qt/a		A					
15	Assure	0.8 LBA/GAL		8 oz/a		A	0	0	0	0	13
15	Classic	25 %AW/W		0.32 oz/a		A					
15	Harmony	75 %AW/W		0.034 oz/a		A					
15	NIS	100 %		0.2 qt/a		A					
15	28%	100 %		2 qt/a		A					
16	Select Max	1 LBA/GAL		12 oz/a		A	67	75	65	58	57
16	Cobra	2 LBA/GAL		12.5 oz/a		A					
16	COC	100 %		0.8 qt/a		A					
16	28%	100 %		2 qt/a		A					
LSD (P=.05)							10.6	10.9	18.5	20.1	27.7
Standard Deviation							6.4	6.5	11.1	12.1	16.6
CV							11.9	12.21	22.93	29.43	33.39
Bartlett's X2							7.109	7.375	8.613	12.646	10.624
P(Bartlett's X2)							0.896	0.69	0.736	0.395	0.779
Replicate F							2.246	1.118	3.717	0.882	0.013
Replicate Prob(F)							0.1234	0.3402	0.0361	0.4244	0.9869
Treatment F							31.860	49.848	11.945	13.009	5.426
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001

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

Pest Code
SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US

Rating Type
CONTRO = control / burndown or knockdown

Rating Unit

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% = percent

Plant-Eval Interval

56 DP-1 = 1 May-6-2010

71 DP-1 = 1 May-6-2010

112 DP-1 = 1 May-6-2010