

Ohio State University Horticulture and Crop Science

Flexstar/adjuvant study

Trial ID: 10FLEXADJ Study Dir.:
Location: WESTERN BRANCH E-1 Investigator: Dr. Mark M. Loux

GENERAL TRIAL INFORMATION

Investigator: Dr. Mark M. Loux

TRIAL LOCATION

City: South Charleston
State/Prov.: Ohio
Postal Code: 45368
Country: USA
E-Longitude of LL Corner °: -83.669170 N-Latitude of LL Corner °: 39.859390
Altitude of LL Corner: 1085.00 Unit: FT

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

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. SETFA Gi	ant foxtail	Setaria faberi
2. AMBTR Gi	ant ragweed	Ambrosia trifida
3. AMARE Re	droot pigweed	Amaranthus retroflexus
4. SOLPT Ea	stern black nightshade	Solanum ptycanthum
5. HIBTR Ve	nice mallow	Hibiscus trionum
6. CHEAL Co	mmon lambsquarters	Chenopodium album

Crop 1: GLXMA SOYBEAN Variety: Seed Consultants SC9349
Planting Date: May-6-2010 Planting Method: SEEDED
Rate: 196000 S/A Depth: 0.75 IN
Row Spacing: 15 IN Seed Bed: MEDIUM
Soil Temperature: 58 F Soil Moisture: NORMAL Emergence Date: May-18-2010

SITE AND DESIGN

Plot Width, Unit: 10 FT Plot Length, Unit: 40 FT Reps: 4
Site Type: FIELD
Tillage Type: CONVENTIONAL-TILL Study Design: RACOBL

SOIL DESCRIPTION

% OM: 3.1 Texture: SILTY CLAY LOAM
pH: 5.9 Soil Name: Kokomo
CEC: 23 Fert. Level: GOOD

APPLICATION DESCRIPTION

A
Application Date: Jun-8-2010
Time of Day: 9:30 A.M.
Application Method: SPRAY
Application Timing: POST
Applic. Placement: BROFO
Air Temp., Unit: 60 F
% Relative Humidity: 62
Wind Velocity, Unit: 5 MPH
Dew Presence (Y/N): N
Soil Temp., Unit: 62 F
Soil Moisture: NORMAL
% Cloud Cover: 10

CROP STAGE AT EACH APPLICATION

A
Crop 1 Code, Stage: GLXMA
Stage Scale: V3
Height, Unit: 8 IN

WEED STAGE AT EACH APPLICATION

A
Weed 1 Code, Stage: SETFA 3 LVS
Stage Scale: 6-8"
Weed 2 Code, Stage: AMBTR 6 LVS
Stage Scale: 7-10"
Weed 3 Code, Stage: AMARE 6 LVS
Stage Scale: 3-4"
Weed 4 Code, Stage: SOLPT 2 LVS
Stage Scale: 2"
Weed 5 Code, Stage: HIBTR 1 LV
Stage Scale: 2"
Weed 6 Code, Stage: CHEAL 2 LVS
Stage Scale: 2-4"

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APPLICATION EQUIPMENT

A

Appl. Equipment: BACKPACK
Operating Pressure: 53
Nozzle Type: DG
Nozzle Size: 11002
Nozzle Spacing, Unit: 18 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 20 GPA
Propellant: CO2

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Flexstar/adjuvant study

Trial ID: 10FLEXADJ Study Dir.:
Location: WESTERN BRANCH E-1 Investigator: Dr. Mark M. Loux

Weed Code	AMBTR	AMBTR
Rating Date	Jun-24-2010	Jul-6-2010
Trt-Eval Interval	16 DA-A	28 DA-A
# Subsamples, Dec.	- 0	- 0

Trt No.	Treatment Name	Form Conc	Product Rate	Product Unit	Appl Code	1	2
1	FLEXSTAR	1.88	1.33 pt/a		A	91	90
1	AMS	100	3 qt/a		A		
1	DESTINY HC	100	0.3 qt/a		A		
2	FLEXSTAR	1.88	1.33 pt/a		A	78	85
2	AMS	100	3 qt/a		A		
2	DESTINY HC	100	0.6 qt/a		A		
3	FLEXSTAR	1.88	1.33 pt/a		A	83	83
3	AMS	100	3 qt/a		A		
3	LOVELAND MSO	100	0.3 qt/a		A		
4	FLEXSTAR	1.88	1.33 pt/a		A	92	96
4	AMS	100	3 qt/a		A		
4	LOVELAND MSO	100	0.6 qt/a		A		
5	FLEXSTAR	1.88	1.33 pt/a		A	90	92
5	AMS	100	3 qt/a		A		
5	SUPERB HC	100	0.3 qt/a		A		
6	FLEXSTAR	1.88	1.33 pt/a		A	87	95
6	AMS	100	3 qt/a		A		
6	SUPERB HC	100	0.6 qt/a		A		
7	FLEXSTAR	1.88	1.33 pt/a		A	90	95
7	AMS	100	3 qt/a		A		
7	PRIME OIL	100	0.3 qt/a		A		
8	FLEXSTAR	1.88	1.33 pt/a		A	85	89
8	AMS	100	3 qt/a		A		
8	PRIME OIL	100	0.6 qt/a		A		
9	FLEXSTAR	1.88	1.33 pt/a		A	90	92
9	AMS	100	3 qt/a		A		
9	DESTINY HC	100	0.3 qt/a		A		
9	NIS	100	0.3 qt/a		A		
10	FLEXSTAR	1.88	1.33 pt/a		A	89	92
10	AMS	100	3 qt/a		A		
10	DESTINY HC	100	0.6 qt/a		A		
10	NIS	100	0.3 qt/a		A		
11	FLEXSTAR	1.88	1.33 pt/a		A	92	98
11	AMS	100	3 qt/a		A		
11	LOVELAND MSO	100	0.3 qt/a		A		
11	NIS	100	0.3 qt/a		A		
12	FLEXSTAR	1.88	1.33 pt/a		A	94	100
12	AMS	100	3 qt/a		A		
12	LOVELAND MSO	100	0.6 qt/a		A		
12	NIS	100	0.3 qt/a		A		
13	FLEXSTAR	1.88	1.33 pt/a		A	88	94
13	AMS	100	3 qt/a		A		
13	SUPERB HC	100	0.3 qt/a		A		
13	NIS	100	0.3 qt/a		A		
14	FLEXSTAR	1.88	1.33 pt/a		A	93	100
14	AMS	100	3 qt/a		A		
14	SUPERB HC	100	0.6 qt/a		A		
14	NIS	100	0.3 qt/a		A		

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Trt-Eval Interval	16 DA-A	28 DA-A
# Subsamples, Dec.	- 0	- 0

Trt No.	Treatment Name	Form Conc	Product Rate	Product Unit	Appl Code	1	2
15	FLEXSTAR	1.88	1.33 pt/a		A	90	93
15	AMS	100	3 qt/a		A		
15	PRIME OIL	100	0.3 qt/a		A		
15	NIS	100	0.3 qt/a		A		
16	FLEXSTAR	1.88	1.33 pt/a		A	84	88
16	AMS	100	3 qt/a		A		
16	PRIME OIL	100	0.6 qt/a		A		
16	NIS	100	0.3 qt/a		A		
17	FLEXSTAR	1.88	1.33 pt/a		A	96	95
17	AMS	100	3 qt/a		A		
17	DESTINY HC	100	0.3 qt/a		A		
17	NIS	100	0.6 qt/a		A		
18	FLEXSTAR	1.88	1.33 pt/a		A	88	87
18	AMS	100	3 qt/a		A		
18	DESTINY HC	100	0.6 qt/a		A		
18	NIS	100	0.6 qt/a		A		
19	FLEXSTAR	1.88	1.33 pt/a		A	95	98
19	AMS	100	3 qt/a		A		
19	LOVELAND MSO	100	0.3 qt/a		A		
19	NIS	100	0.6 qt/a		A		
20	FLEXSTAR	1.88	1.33 pt/a		A	90	91
20	AMS	100	3 qt/a		A		
20	LOVELAND MSO	100	0.6 qt/a		A		
20	NIS	100	0.6 qt/a		A		
21	FLEXSTAR	1.88	1.33 pt/a		A	86	88
21	AMS	100	3 qt/a		A		
21	SUPERB HC	100	0.3 qt/a		A		
21	NIS	100	0.6 qt/a		A		
22	FLEXSTAR	1.88	1.33 pt/a		A	100	99
22	AMS	100	3 qt/a		A		
22	SUPERB HC	100	0.6 qt/a		A		
22	NIS	100	0.6 qt/a		A		
23	FLEXSTAR	1.88	1.33 pt/a		A	82	84
23	AMS	100	3 qt/a		A		
23	PRIME OIL	100	0.3 qt/a		A		
23	NIS	100	0.6 qt/a		A		
24	FLEXSTAR	1.88	1.33 pt/a		A	96	100
24	AMS	100	3 qt/a		A		
24	PRIME OIL	100	0.6 qt/a		A		
24	NIS	100	0.6 qt/a		A		
LSD (P=.05)						15.3	14.6
Standard Deviation						10.8	10.3
CV						12.06	11.14
Bartlett's X2						22.82	42.509
P(Bartlett's X2)						0.471	0.004*
Replicate F						20.590	2.413
Replicate Prob(F)						0.0001	0.0742
Treatment F						0.861	0.985
Treatment Prob(F)						0.6464	0.4953

Weed Code
AMBTR = Ambrosia trifida