

The Ohio State University

Flumioxazin HPPD combinations in Balance soybeans

Trial ID: 18 BALANCEPRE Location: Trial Year: 2018  
 Protocol ID: 18 BALANCEPRE Investigator: Dr. Mark M. Loux  
 Project ID: VUSA2018VALORSXMD64.02 Study Director: Bryan Reeb  
 Sponsor Contact: Eric Ott, Valent

**General Trial Information**

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

**Discipline:** H herbicide  
**Initiation Date:** May-11-2018

**Trial Location**

**City:** South Charleston **Country:** USA United States  
**State/Prov.:** Ohio  
**Postal Code:** 45368 **Climate Zone:** USWARM US Warm Continental

**Latitude of LL Corner °:** 39.85937 N  
**Longitude of LL Corner °:** 83.67026 W  
**Altitude of LL Corner, Unit:** 1087.00 FT

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

**Contacts**

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

**Crop Description**

**Crop 1:** GLXMXA  
**Variety:** Stine 34BA20  
**Description:** Stine

**Planting Rate, Unit:** 170000 S/A  
**Depth, Unit:** 1.25 IN  
**Row Spacing, Unit:** 15 IN  
**Soil Temperature, Unit:** 62 F  
**Soil Moisture:** NORMAL normal, adequate  
**Seed Bed:** MEDIUM medium

**Planting Date:** May-11-2018  
**Planting Method:** PLANTD planted  
**Planting Equipment:** FE field equipment  
**Emergence Date:** May-17-2018

**Pest Description**

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Common barnyard grass

**Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 4 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** common lambsquarters

**Pest 5 Type:** W **Code:** AMARE *Amaranthus retroflexus*  
**Common Name:** Redroot pigweed

**Pest 6 Type:** W **Code:** POLPY *Persicaria pensylvanica*  
**Common Name:** annual smartweed

**Pest 7 Type:** W **Code:** HIBTR *Hibiscus trionum*  
**Common Name:** Venice mallow

**Pest 8 Type:** W **Code:** ABUTH *Abutilon theophrasti*  
**Common Name:** velvetleaf

**Pest 9 Type:** W **Code:** IPOHE *Ipomoea hederacea*  
**Common Name:** ivy-leaf morning glory

**Pest10 Type:** W **Code:** SIDSP *Sida spinosa*  
**Common Name:** Prickly sida

**Site and Design**

**Treated Plot Width:** 6.67 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 200.1 FT<sup>2</sup> **Treatments:** 16  
**Replications:** 3

**Site Type:** FIELD field  
**Experimental Unit:** 1 PLOT plot  
**Tillage Type:** CONTIL conventional-till  
**Study Design:** RACOB� Randomized Complete Block (RCB)

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**No. Previous Crop Year**

1. Corn 2017

**Soil Description**

Description Name: F-8 East  
 % Sand: 37 % OM: 2.7 Texture: L loam  
 % Silt: 49 pH: 6 Soil Name: Kokomo  
 % Clay: 15 CEC: 16.9 Fert. Level: G good  
 Soil Drainage: G good

**Application Description**

**A**  
 Application Date: May-11-2018  
 Appl. Start Time: 12:50 PM  
 Appl. Stop Time: 1:00 PM  
 Application Method: SPRAY  
 Application Timing: PRE  
 Application Placement: BROSOI  
 Applied By: Tony  
 Air Temperature, Unit: 72 F  
 % Relative Humidity: 57  
 Wind Velocity, Unit: 10 MPH  
 Wind Direction: SE  
 Dew Presence (Y/N): N no  
 Soil Temperature, Unit: 62 F  
 Soil Moisture: NORMAL  
 % Cloud Cover: 15  
 Next Moisture Occurred On: May-15-2018  
 Time to Next Moisture, Unit: 4 DAY  
 Moisture 1 Week after Appl.: 0.93 IN

**Crop Stage At Each Application**

**A**  
 Crop 1 Code, BBCH Scale: GLXXM

**Pest Stage At Each Application**

**A**  
 Pest 1 Code, Type, Scale: SETFA W  
 Density, Unit: 220 PLA/m2  
 Pest 2 Code, Type, Scale: ECHCG W  
 Density, Unit: 72 PLA/m2  
 Pest 3 Code, Type, Scale: AMBTR W  
 Density, Unit: 9 PLA/m2  
 Pest 4 Code, Type, Scale: CHEAL W  
 Density, Unit: 24 PLA/m2  
 Pest 5 Code, Type, Scale: AMARE W  
 Density, Unit: 29 PLA/m2  
 Pest 6 Code, Type, Scale: POLPY W  
 Density, Unit: 1 PLA/m2  
 Pest 7 Code, Type, Scale: HIBTR W  
 Density, Unit: 1 PLA/m2  
 Pest 8 Code, Type, Scale: ABUTH W  
 Density, Unit: 3 PLA/m2  
 Pest 9 Code, Type, Scale: IPOHE W  
 Density, Unit: 4 PLA/m2  
 Pest10 Code, Type, Scale: SIDSP W  
 Density, Unit: 16 PLA/m2

**Application Equipment**

**A**  
 Appl. Equipment: 6' BACKPACK  
 Equipment Type: BACCAI  
 Operation Pressure, Unit: 44 PSI  
 Nozzle Type: TTI  
 Nozzle Size: 11015  
 Nozzle Spacing, Unit: 18 IN  
 Nozzles/Row: 4  
 Boom Length, Unit: 6.67 FT  
 Boom Height, Unit: 20 IN  
 Ground Speed, Unit: 3 MPH  
 Carrier: WATER  
 Spray Volume, Unit: 15 gal/ac  
 Mix Size, Unit: 1 L  
 Propellant: COMCO2

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Pest Type	O Other	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code		SETFA	ECHCG	AMBTR	CHEAL	AMARE
Pest Scientific Name		Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
Pest Name		Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed
Rating Date	Jun-7-2018	Jun-7-2018	Jun-7-2018	Jun-7-2018	Jun-7-2018	Jun-7-2018
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	27 27	27 27	27 27	27 27	27 27	27 27
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1	27 DP-1	27 DP-1
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*
1	UTC				0.0 c	0.0 f	0.0 f	0.0 h	0.0 b	0.0 b
2	Fierce	3.75 oz/a		A	2.3 abc	83.2 bc	74.6 bc	33.3 efg	100.0 a	100.0 a
3	Fierce MTZ	16.2 oz/a		A	0.8 abc	84.4 bc	77.5 bc	53.3 a-e	100.0 a	100.0 a
4	Valor SX	2.43 oz/a		A	0.0 c	0.0 f	0.0 f	0.0 h	100.0 a	96.7 a
5	Zidua WG	1.51 oz/a		A	0.0 c	73.8 bc	68.5 bc	13.3 fgh	92.7 a	83.3 a
6	Callisto	3 oz/a		A	0.0 c	0.0 f	0.0 f	53.3 a-e	100.0 a	88.3 a
7	Balance Bean	3 oz/a		A	0.6 abc	65.8 cd	60.6 bcd	87.8 a	100.0 a	76.7 a
8	Tricor 4F	8 oz/a		A	0.0 c	0.0 f	0.0 f	6.7 gh	100.0 a	83.3 a
9	Valor SX	2.43 oz/a		A	0.4 bc	23.2 e	11.6 e	36.7 d-g	100.0 a	100.0 a
9	Callisto	3 oz/a		A						
10	Valor SX	2.43 oz/a		A	3.2 abc	85.2 bc	71.4 bc	73.3 abc	100.0 a	100.0 a
10	Balance Bean	3 oz/a		A						
11	Valor SX	2.43 oz/a		A	1.5 abc	46.5 d	43.2 d	56.7 a-e	100.0 a	100.0 a
11	Callisto	3 oz/a		A						
11	Tricor 4F	8 oz/a		A						
12	Valor SX	2.43 oz/a		A	5.0 ab	85.9 bc	85.9 b	76.7 ab	100.0 a	100.0 a
12	Balance Bean	3 oz/a		A						
12	Tricor 4F	8 oz/a		A						
13	Valor SX	2.43 oz/a		A	5.0 ab	94.8 ab	85.9 b	70.0 a-d	100.0 a	100.0 a
13	Balance Bean	3 oz/a		A						
13	Zidua WG	1.51 oz/a		A						
14	Valor SX	2.43 oz/a		A	1.9 abc	63.4 cd	56.7 cd	40.0 c-f	98.3 a	100.0 a
14	Callisto	3 oz/a		A						
14	Zidua WG	1.51 oz/a		A						
15	Valor SX	2.43 oz/a		A	6.3 a	99.4 a	98.0 a	81.7 ab	100.0 a	100.0 a
15	Balance Bean	3 oz/a		A						
15	Zidua WG	1.51 oz/a		A						
15	Tricor 4F	8 oz/a		A						

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Due to missing data, the effective replicates used for mean comparisons are: col. 1-3,5,6,8,9,11,12,14,16,17=3; 4,10,15=2.9

\* Adjusted means

Excluded replicate 1 in column 7; 2 in 13

Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.

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Pest Type	O Other	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code		SETFA	ECHCG	AMBTR	CHEAL	AMARE					
Pest Scientific Name		Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>					
Pest Name		Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed					
Rating Date	Jun-7-2018	Jun-7-2018	Jun-7-2018	Jun-7-2018	Jun-7-2018	Jun-7-2018					
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1	1					
Days After First/Last Applic.	27 27	27 27	27 27	27 27	27 27	27 27					
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A					
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1	27 DP-1	27 DP-1					
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1					
Trt Treatment	Other	Other	Appl								
No. Name	Rate	Rate	Unit Code	1*	2*	3*	4*	5*	6*		
16 Valor SX	2.43 oz/a		A	1.6 abc	78.4 bc	75.1 bc	46.7 b-e	100.0 a	100.0 a		
16 Callisto	3 oz/a		A								
16 Zidua WG	1.51 oz/a		A								
16 Tricor 4F	8 oz/a		A								
LSD P=.05		2.27 - 4.49		7.04 - 18.97		8.69 - 14.73		22.38		4.79	13.62
Standard Deviation		0.25t		7.02t		6.57t		13.40		2.87	8.17
CV		72.15t		15.37t		15.6t		29.93		3.08	9.15
Levene's F		0.683		0.842		0.776		0.651		1.299	1.823
Levene's Prob(F)		0.782		0.628		0.693		0.81		0.259	0.076
Skewness		0.2672		-0.4938		-0.5125		-0.1659		-3.6503*	-2.8673*
Kurtosis		-1.7803*		-1.1046		-1.1781		-1.3041		11.9974*	7.7212*
Replicate F		2.948		6.304		8.202		2.706		0.704	3.615
Replicate Prob(F)		0.0678		0.0052		0.0014		0.0836		0.5026	0.0392
Treatment F		4.724		55.274		55.986		13.529		225.604	28.201
Treatment Prob(F)		0.0001		0.0001		0.0001		0.0001		0.0001	0.0001

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Pest Code		SETFA	ECHCG	AMBTR	CHEAL	AMARE
Pest Scientific Name		Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
Pest Name		Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed
Rating Date	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018
Rating Type	PHYGEN					
Rating Unit	%					
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	41 41	41 41	41 41	41 41	41 41	41 41
Trt-Eval Interval	41 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	41 DP-1	41 DP-1	41 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	7*	8*	9*	10*	11*	12*
1	UTC				0.0 -	0.0 d	0.0 c	0.0 b	0.0 c	0.0 c
2	Fierce	3.75 oz/a		A	0.0 -	63.3 bc	60.0 ab	6.7 b	100.0 a	100.0 a
3	Fierce MTZ	16.2 oz/a		A	0.0 -	73.3 abc	63.3 ab	16.7 b	100.0 a	100.0 a
4	Valor SX	2.43 oz/a		A	0.0 -	0.0 d	0.0 c	0.0 b	100.0 a	100.0 a
5	Zidua WG	1.51 oz/a		A	0.0 -	70.0 abc	63.3 ab	0.0 b	73.3 b	80.0 a
6	Callisto	3 oz/a		A	0.0 -	0.0 d	0.0 c	33.3 ab	93.3 a	100.0 a
7	Balance Bean	3 oz/a		A	0.0 -	56.7 bc	40.0 b	67.6 a	100.0 a	56.0 b
8	Tricor 4F	8 oz/a		A	0.0 -	0.0 d	0.0 c	0.0 b	93.3 a	73.3 ab
9	Valor SX	2.43 oz/a		A	0.0 -	0.0 d	0.0 c	13.3 b	100.0 a	100.0 a
9	Callisto	3 oz/a		A						
10	Valor SX	2.43 oz/a		A	0.0 -	70.0 abc	46.7 b	53.3 a	100.0 a	100.0 a
10	Balance Bean	3 oz/a		A						
11	Valor SX	2.43 oz/a		A	0.0 -	0.0 d	0.0 c	10.0 b	100.0 a	100.0 a
11	Callisto	3 oz/a		A						
11	Tricor 4F	8 oz/a		A						
12	Valor SX	2.43 oz/a		A	0.0 -	70.0 abc	63.3 ab	63.3 a	100.0 a	90.0 a
12	Balance Bean	3 oz/a		A						
12	Tricor 4F	8 oz/a		A						
13	Valor SX	2.43 oz/a		A	0.0 -	73.3 abc	66.7 ab	53.3 a	100.0 a	100.0 a
13	Balance Bean	3 oz/a		A						
13	Zidua WG	1.51 oz/a		A						
14	Valor SX	2.43 oz/a		A	0.0 -	50.0 c	40.0 b	16.7 b	100.0 a	100.0 a
14	Callisto	3 oz/a		A						
14	Zidua WG	1.51 oz/a		A						
15	Valor SX	2.43 oz/a		A	0.0 -	97.7 a	81.7 a	68.3 a	100.0 a	100.0 a
15	Balance Bean	3 oz/a		A						
15	Zidua WG	1.51 oz/a		A						
15	Tricor 4F	8 oz/a		A						

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Pest Scientific Name		Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>			
Pest Name		Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed			
Rating Date	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018			
Rating Type	PHYGEN								
Rating Unit	%								
Number of Subsamples	1	1	1	1	1	1			
Days After First/Last Applic.	41 41	41 41	41 41	41 41	41 41	41 41			
Trt-Eval Interval	41 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A			
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	41 DP-1	41 DP-1	41 DP-1			
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1			
Trt Treatment	Other	Other	Appl						
No. Name	Rate	Rate	Unit Code	7*	8*	9*	10*	11*	12*
16 Valor SX	2.43 oz/a		A	0.0 -	80.0 ab	63.3 ab	36.7 ab	100.0 a	100.0 a
16 Callisto	3 oz/a		A						
16 Zidua WG	1.51 oz/a		A						
16 Tricor 4F	8 oz/a		A						
LSD P=.05				.	18.30	18.24	22.31	7.22	18.96
Standard Deviation				0.00	10.97	10.94	13.36	4.33	11.37
CV				0.0	24.93	29.75	50.04	4.75	13.0
Levene's F					0.92	0.786	0.57	0.881	1.756
Levene's Prob(F)					0.553	0.683	0.875	0.589	0.089
Skewness				.	-0.1978	-0.0552	0.4955	-3.2423*	-2.3473*
Kurtosis				.	-1.687*	-1.6889*	-1.2537	9.7578*	4.6544*
Replicate F				0.000	0.278	3.451	2.071	1.000	1.247
Replicate Prob(F)				1.0000	0.7589	0.0448	0.1443	0.3798	0.3017
Treatment F				0.000	33.405	24.234	10.978	102.133	16.439
Treatment Prob(F)				1.0000	0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Code	SETFA	ECHCG	AMBTR	CHEAL	AMARE
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed
Rating Date	Jul-9-2018	Jul-9-2018	Jul-9-2018	Jul-9-2018	Jul-9-2018
Rating Type					
Rating Unit					
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	59 59	59 59	59 59	59 59	59 59
Trt-Eval Interval	59 DA-A	59 DA-A	59 DA-A	59 DA-A	59 DA-A
Plant-Eval Interval	59 DP-1	59 DP-1	59 DP-1	59 DP-1	59 DP-1
Days After Emergence	53 DE-1	53 DE-1	53 DE-1	53 DE-1	53 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*
1	UTC				0.0 c	0.0 c	0.0 b	0.0 b	0.0 c
2	Fierce	3.75 oz/a		A	70.0 ab	63.5 ab	0.0 b	100.0 a	100.0 a
3	Fierce MTZ	16.2 oz/a		A	60.0 ab	56.8 b	6.7 b	100.0 a	100.0 a
4	Valor SX	2.43 oz/a		A	0.0 c	0.0 c	0.0 b	100.0 a	100.0 a
5	Zidua WG	1.51 oz/a		A	65.0 ab	63.9 ab	0.0 b	90.0 a	100.0 a
6	Callisto	3 oz/a		A	0.0 c	0.0 c	66.7 a	100.0 a	100.0 a
7	Balance Bean	3 oz/a		A	55.0 ab	46.5 b	43.4 ab	100.0 a	66.7 b
8	Tricor 4F	8 oz/a		A	0.0 c	0.0 c	10.0 b	100.0 a	93.3 a
9	Valor SX	2.43 oz/a		A	0.0 c	0.0 c	10.0 b	100.0 a	100.0 a
9	Callisto	3 oz/a		A					
10	Valor SX	2.43 oz/a		A	65.0 ab	46.5 b	40.0 ab	100.0 a	90.0 a
10	Balance Bean	3 oz/a		A					
11	Valor SX	2.43 oz/a		A	15.0 c	3.7 c	20.0 ab	100.0 a	100.0 a
11	Callisto	3 oz/a		A					
11	Tricor 4F	8 oz/a		A					
12	Valor SX	2.43 oz/a		A	80.0 ab	71.6 ab	43.3 ab	100.0 a	100.0 a
12	Balance Bean	3 oz/a		A					
12	Tricor 4F	8 oz/a		A					
13	Valor SX	2.43 oz/a		A	75.0 ab	70.3 ab	33.3 ab	100.0 a	100.0 a
13	Balance Bean	3 oz/a		A					
13	Zidua WG	1.51 oz/a		A					
14	Valor SX	2.43 oz/a		A	40.0 bc	50.0 b	20.0 ab	100.0 a	100.0 a
14	Callisto	3 oz/a		A					
14	Zidua WG	1.51 oz/a		A					
15	Valor SX	2.43 oz/a		A	90.0 a	90.7 a	50.0 ab	100.0 a	100.0 a
15	Balance Bean	3 oz/a		A					
15	Zidua WG	1.51 oz/a		A					
15	Tricor 4F	8 oz/a		A					

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Due to missing data, the effective replicates used for mean comparisons are: col. 1-3,5,6,8,9,11,12,14,16,17=3; 4,10,15=2.9

\* Adjusted means

Excluded replicate 1 in column 7; 2 in 13

Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.

## The Ohio State University

Flumioxazin HPPD combinations in Balance soybeans

Trial ID: 18 BALANCEPRE Location: Trial Year: 2018  
 Protocol ID: 18 BALANCEPRE Investigator: Dr. Mark M. Loux  
 Project ID: VUSA2018VALORSXMD64.02 Study Director: Bryan Reeb  
 Sponsor Contact: Eric Ott, Valent

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	ECHCG	AMBTR	CHEAL	AMARE				
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>				
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed				
Rating Date	Jul-9-2018	Jul-9-2018	Jul-9-2018	Jul-9-2018	Jul-9-2018				
Rating Type									
Rating Unit									
Number of Subsamples	1	1	1	1	1				
Days After First/Last Applic.	59 59	59 59	59 59	59 59	59 59				
Trt-Eval Interval	59 DA-A	59 DA-A	59 DA-A	59 DA-A	59 DA-A				
Plant-Eval Interval	59 DP-1	59 DP-1	59 DP-1	59 DP-1	59 DP-1				
Days After Emergence	53 DE-1	53 DE-1	53 DE-1	53 DE-1	53 DE-1				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*
16	Valor SX	2.43 oz/a		A	60.0 ab	56.8 b	16.7 b	100.0 a	100.0 a
16	Callisto	3 oz/a		A					
16	Zidua WG	1.51 oz/a		A					
16	Tricor 4F	8 oz/a		A					
LSD P=.05					28.71	14.47 - 18.61	29.07	7.22	14.59
Standard Deviation					13.47	8.49t	17.41	4.33	8.75
CV					31.93	25.48t	78.67	4.65	9.65
Levene's F						0.661	0.52	1.00	0.891
Levene's Prob(F)						0.801	0.91	0.479	0.58
Skewness					-0.1271	-0.1772	0.6696	-3.5748*	-2.9171*
Kurtosis					-1.593	-1.3404	-0.8881	11.522*	7.6074*
Replicate F					2.910	3.713	0.983	1.000	1.552
Replicate Prob(F)					0.1086	0.0362	0.3862	0.3798	0.2284
Treatment F					12.527	28.631	4.313	99.667	25.740
Treatment Prob(F)					0.0001	0.0001	0.0004	0.0001	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)

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\* Adjusted means

Excluded replicate 1 in column 7; 2 in 13

Could not calculate LSD (% mean diff) for columns 7 because error mean square = 0.



## The Ohio State University

Flumioxazin HPPD combinations in Balance soybeans  
Trial ID: 18 BALANCEPRE Location: Trial Year: 2018  
Protocol ID: 18 BALANCEPRE Investigator: Dr. Mark M. Loux  
Project ID: VUSA2018VALORSXMD64.02 Study Director: Bryan Reeb  
Sponsor Contact: Eric Ott, Valent

Pest Type

O, Other, G-BYRO7, G-OthStg = Other animal or nematode  
W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, Giant foxtail = US  
ECHCG, Echinochloa crus-galli, Common barnyard grass = US  
AMBTR, Ambrosia trifida, Giant ragweed = US  
CHEAL, Chenopodium album, common lambsquarters = US  
AMARE, Amaranthus retroflexus, Redroot pigweed = US

Rating Type

PHYGEN = phytotoxicity - general / injury  
CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

27 DP-1 = 1 GLXMXA May-11-2018  
41 DP-1 = 1 GLXMXA May-11-2018  
59 DP-1 = 1 GLXMXA May-11-2018