

# Purdue Weed Science

## Fierce 64.06 - Xtend Soybean - Horsweed Burndown Trial

Trial ID: 17S-MGS-Soy-08      Location: Meigs      Trial Year: 2017  
 Protocol ID: 17S-MGS-Soy-08      Investigator: Dr. Bill Johnson  
 Project ID: Fierce 64.06 - Xtend Soy      Study Director: Taylor Campbell  
 Sponsor Contact: Erric Ott - Valent

### General Trial Information

**Study Director:** Taylor Campbell  
**Investigator:** Dr. Bill Johnson

**Discipline:** H      herbicide  
**Trial Status:** E      established  
**Initiation Date:** 4/17/2017

### Trial Location

**City:** Lafayette      **Country:** USA United States  
**State/Prov.:** Indiana  
**Postal Code:** 47909

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

### Contacts

**Study Director:** Taylor Campbell  
**Organization:** Purdue University  
**Address:** 915 W State Street  
**City+State/Prov:** West Lafayette, IN  
**Postal Code:** 47907  
**Country:** USA      United States

**Investigator:** Dr. Bill Johnson  
**Organization:** Purdue University  
**Address:** 915 W State Street  
**City+State/Prov:** West Lafayette, IN  
**Postal Code:** 47907  
**Country:** USA      United States

### Cooperator/Landowner

**Cooperator:** Jay Young      **Role:** Superintendent  
**Organization:** Purdue University  
**Address 1:** 8343 US 231 S  
**City:** Lafayette      **Phone No.:** 765-538-3422  
**State/Prov:** IN      **Fax No.:** 765-538-3423  
**Postal Code:** 47909  
**Country:** USA United States      **E-mail:** jayyoung@purdue.edu

### Crop Description

**Crop 1:** GLXMA      Glycine max  
**Variety:** AG30X6  
**Description:** Dicamba Tolerant

**Planting Rate, Unit:** 140000 S/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 30 IN  
**Planting Density, Unit:** 140000 S/A  
**Soil Temperature, Unit:** 58 F  
**Soil Moisture:** DAMP damp

**Planting Date:** 5/8/2017  
**Planting Method:** PLANTD planted  
**Planting Equipment:** PP      Plot Planter  
**Emergence Date:** 5/17/2017  
**Harvested Width, Unit:** 5 FT  
**Harvested Length, Unit:** 22 FT

**% Standard Moisture:** 13.3

### Pest Description

**Pest 1 Type:** W      **Code:** ERICA Erigeron canadensis  
**Common Name:** Canada horseweed

**Pest 2 Type:** W      **Code:** AMATA Amaranthus tamariscinus  
**Common Name:** Common waterhemp

<b>Treated Plot Width:</b> 6.67 FT	<b>Site and Design</b>	
<b>Treated Plot Length:</b> 25 FT	<b>Site Type:</b> FIELD field	
<b>Treated Plot Area:</b> 166.75 FT <sup>2</sup>	<b>Experimental Unit:</b> 1 PLOT plot	
<b>Treatments:</b> 10	<b>Tillage Type:</b> NOTILL no-till	
<b>Replications:</b> 4	<b>Study Design:</b> RACOB L Randomized Complete Block (RCB)	

<b>Soil Description</b>	
<b>Description Name:</b> MGS-S3	
<b>% Sand:</b> 40.7	<b>% OM:</b> 2.3 <b>Texture:</b> L loam
<b>% Silt:</b> 38.6	<b>pH:</b> 6.5 <b>Soil Name:</b> Starks-Fincastle complex
<b>% Clay:</b> 20.7	<b>CEC:</b> 14.3 <b>Fert. Level:</b> G good

<b>Application Description</b>		
	<b>A</b>	<b>B</b>
<b>Application Date:</b>	4/17/2017	5/31/2017
<b>Appl. Start Time:</b>	4:15 PM	1:23 PM
<b>Appl. Stop Time:</b>	4:35 PM	1:45 PM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PREPLA	POEMCR
<b>Application Placement:</b>	BROADC	BROADC
<b>Applied By:</b>	T. Campbell	T. Campbell
<b>Air Temperature, Unit:</b>	76 F	77 F
<b>% Relative Humidity:</b>	28	32
<b>Wind Velocity, Unit:</b>	3 MPH	6 MPH
<b>Wind Direction:</b>	E	NW
<b>Dew Presence (Y/N):</b>	N no	N no
<b>Soil Temperature, Unit:</b>	59 F	66 F
<b>Soil Moisture:</b>	DRY	SLIWET
<b>% Cloud Cover:</b>	60	0

<b>Crop Stage At Each Application</b>		
	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		BBCH
<b>Stage Majority, Percent:</b>		11
<b>Stage Minimum, Percent:</b>		10
<b>Stage Maximum, Percent:</b>		12
<b>Height, Unit:</b>		3 IN
<b>Height Minimum, Maximum:</b>		2 4

**Pest Stage At Each Application**

	<b>A</b>	<b>B</b>
<b>Pest 1 Code, Type, Scale:</b>	ERICA W	ERICA W
<b>Stage Majority, Percent:</b>	19	
<b>Stage Minimum, Percent:</b>	09	
<b>Stage Maximum, Percent:</b>	19	
<b>Diameter, Unit:</b>	4 IN	
<b>Height, Unit:</b>	2 IN	
<b>Density, Unit:</b>	3 FT2	
<b>Pest 2 Code, Type, Scale:</b>	AMATA W	AMATA W
<b>Stage Majority, Percent:</b>		14
<b>Stage Minimum, Percent:</b>		11
<b>Stage Maximum, Percent:</b>		15
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		1.5 3

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 Backpack	CO2 BACKPACK
<b>Equipment Type:</b>	BACCAI	BACCAI
<b>Operation Pressure, Unit:</b>	43 PSI	43 PSI
<b>Nozzle Type:</b>	TTI	TTI
<b>Nozzle Size:</b>	11015	11015
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Nozzles/Row:</b>	4	4
<b>Boom Length, Unit:</b>	6.7 FT	6.7 FT
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH
<b>Carrier:</b>	WATER	
<b>Spray Volume, Unit:</b>	15 GAL/AC	15 GAL/AC
<b>Mix Size, Unit:</b>	945 mL	945 mL
<b>Propellant:</b>	COMCO2	COMCO2

**Date By Notes**

10/23/2017 T. Campbell 507 was removed due to beans being laid over and not able to pickup with combine, yields were generally low due to lost residual herbicide activity and heavy weed pressure at end of season

# Purdue Weed Science

## Fierce 64.06 - Xtend Soybean - Horsweed Burndown Trial

Trial ID: 17S-MGS-Soy-08 Location: Meigs Trial Year: 2017  
 Protocol ID: 17S-MGS-Soy-08 Investigator: Dr. Bill Johnson  
 Project ID: Fierce 64.06 - Xtend Soy Study Director: Taylor Campbell  
 Sponsor Contact: Erric Ott - Valent

Reps: 4 Plots: 6.67 by 25 feet  
 Spray vol: 15 GAL/AC Mix Size: 945 mL (869.45 mL calculated mix size)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Growth Stage	Appl Code	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	UNTREATED CHECK									101	302	407	604
2	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		NTLL	A	15.75 ml/mx	102	304	402	506
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		NTLL	A	10.83 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		NTLL	A	2.362 ml/mx				
	INTACT	100 %	L		0.5 % v/v		NTLL	A	4.724 ml/mx				
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		POST	B	15.75 ml/mx				
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		POST	B	10.83 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		POST	B	2.362 ml/mx				
	INTACT	100 %	L		0.5 % v/v		POST	B	4.724 ml/mx				
3	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		NTLL	A	15.75 ml/mx	103	206	501	505
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		NTLL	A	10.83 ml/mx				
	ZIDUA PRO	4.09 LB/GAL	SC		6 fl oz/a		NTLL	A	2.953 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		NTLL	A	2.362 ml/mx				
	INTACT	100 %	L		0.5 % v/v		NTLL	A	4.724 ml/mx				
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		POST	B	15.75 ml/mx				
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		POST	B	10.83 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		POST	B	2.362 ml/mx				
INTACT	100 %	L		0.5 % v/v		POST	B	4.724 ml/mx					
4	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		NTLL	A	15.75 ml/mx	104	306	405	503
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		NTLL	A	10.83 ml/mx				
	VALOR EZ1	4 LB/GAL	SC		2.5 fl oz/a		NTLL	A	1.23 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		NTLL	A	2.362 ml/mx				
	INTACT	100 %	L		0.5 % v/v		NTLL	A	4.724 ml/mx				
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		POST	B	15.75 ml/mx				
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		POST	B	10.83 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		POST	B	2.362 ml/mx				
INTACT	100 %	L		0.5 % v/v		POST	B	4.724 ml/mx					
5	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		NTLL	A	15.75 ml/mx	105	303	307	605
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		NTLL	A	10.83 ml/mx				
	FIERCE	76 %W/W	WG		3 oz wt/a		NTLL	A	1.415 g/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		NTLL	A	2.362 ml/mx				
	INTACT	100 %	L		0.5 % v/v		NTLL	A	4.724 ml/mx				
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		POST	B	15.75 ml/mx				
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		POST	B	10.83 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		POST	B	2.362 ml/mx				
INTACT	100 %	L		0.5 % v/v		POST	B	4.724 ml/mx					
6	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		NTLL	A	15.75 ml/mx	106	305	404	601
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		NTLL	A	10.83 ml/mx				
	FIERCE MTZ SC (2030)	2.64 LB/GAL	SC		1 pt/a		NTLL	A	7.875 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		NTLL	A	2.362 ml/mx				
	INTACT	100 %	L		0.5 % v/v		NTLL	A	4.724 ml/mx				
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL		32 fl oz/a		POST	B	15.75 ml/mx				
	XTENDIMAX	2.9 LBAE/GAL	SL		22 fl oz/a		POST	B	10.83 ml/mx				
	NIS-HEFTY	100 %W/W	SF		0.25 % v/v		POST	B	2.362 ml/mx				
INTACT	100 %	L		0.5 % v/v		POST	B	4.724 ml/mx					

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Rate Unit	Growth Stage	Appl Code	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
7	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL	32 fl oz/a	NTLL	A	15.75 ml/mx	107	205	406	504			
	XTENDIMAX	2.9 LBAE/GAL	SL	22 fl oz/a	NTLL	A	10.83 ml/mx							
	VALOR EZ1	4 LB/GAL	SC	2.5 fl oz/a	NTLL	A	1.23 ml/mx							
	TRICOR	75 %	DF	4 oz/a	NTLL	A	1.887 g/mx							
	NIS-HEFTY	100 %W/W	SF	0.25 % v/v	NTLL	A	2.362 ml/mx							
	INTACT	100 %	L	0.5 % v/v	NTLL	A	4.724 ml/mx							
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL	32 fl oz/a	POST	B	15.75 ml/mx							
	XTENDIMAX	2.9 LBAE/GAL	SL	22 fl oz/a	POST	B	10.83 ml/mx							
	NIS-HEFTY	100 %W/W	SF	0.25 % v/v	POST	B	2.362 ml/mx							
	INTACT	100 %	L	0.5 % v/v	POST	B	4.724 ml/mx							
8	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL	32 fl oz/a	NTLL	A	15.75 ml/mx	201	204	403	603			
	XTENDIMAX	2.9 LBAE/GAL	SL	22 fl oz/a	NTLL	A	10.83 ml/mx							
	AUTHORITY MTZ	45 %W/W	WG	11 oz wt/a	NTLL	A	5.19 g/mx							
	NIS-HEFTY	100 %W/W	SF	0.25 % v/v	NTLL	A	2.362 ml/mx							
	INTACT	100 %	L	0.5 % v/v	NTLL	A	4.724 ml/mx							
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL	32 fl oz/a	POST	B	15.75 ml/mx							
	XTENDIMAX	2.9 LBAE/GAL	SL	22 fl oz/a	POST	B	10.83 ml/mx							
	NIS-HEFTY	100 %W/W	SF	0.25 % v/v	POST	B	2.362 ml/mx							
	INTACT	100 %	L	0.5 % v/v	POST	B	4.724 ml/mx							
	9	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL	32 fl oz/a	NTLL	A	15.75 ml/mx	202	301	502	507		
XTENDIMAX		2.9 LBAE/GAL	SL	22 fl oz/a	NTLL	A	10.83 ml/mx							
AUTHORITY ELITE		7 LB/GAL	EC	26 fl oz/a	NTLL	A	12.8 ml/mx							
NIS-HEFTY		100 %W/W	SF	0.25 % v/v	NTLL	A	2.362 ml/mx							
INTACT		100 %	L	0.5 % v/v	NTLL	A	4.724 ml/mx							
ROUNDUP PWR MAX(AE)		4.5 LBAE/GAL	SL	32 fl oz/a	POST	B	15.75 ml/mx							
XTENDIMAX		2.9 LBAE/GAL	SL	22 fl oz/a	POST	B	10.83 ml/mx							
NIS-HEFTY		100 %W/W	SF	0.25 % v/v	POST	B	2.362 ml/mx							
INTACT		100 %	L	0.5 % v/v	POST	B	4.724 ml/mx							
10		ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL	32 fl oz/a	NTLL	A	15.75 ml/mx	203	207	401	602		
	XTENDIMAX	2.9 LBAE/GAL	SL	22 fl oz/a	NTLL	A	10.83 ml/mx							
	VALOR EZ1	4 LB/GAL	SC	2 fl oz/a	NTLL	A	0.9844 ml/mx							
	NIS-HEFTY	100 %W/W	SF	0.25 % v/v	NTLL	A	2.362 ml/mx							
	INTACT	100 %	L	0.5 % v/v	NTLL	A	4.724 ml/mx							
	ROUNDUP PWR MAX(AE)	4.5 LBAE/GAL	SL	32 fl oz/a	POST	B	15.75 ml/mx							
	XTENDIMAX	2.9 LBAE/GAL	SL	22 fl oz/a	POST	B	10.83 ml/mx							
	NIS-HEFTY	100 %W/W	SF	0.25 % v/v	POST	B	2.362 ml/mx							
	INTACT	100 %	L	0.5 % v/v	POST	B	4.724 ml/mx							

Sort Order: Replicate 1

# Purdue Weed Science

## Fierce 64.06 - Xtend Soybean - Horsweed Burndown Trial

Trial ID: 17S-MGS-Soy-08 Location: Meigs Trial Year: 2017  
 Protocol ID: 17S-MGS-Soy-08 Investigator: Dr. Bill Johnson  
 Project ID: Fierce 64.06 - Xtend Soy Study Director: Taylor Campbell  
 Sponsor Contact: Erric Ott - Valent

Pest Type				W Weed	W Weed	W Weed
Pest Code				ERICA	ERICA	AMATA
Pest Name				Canada horsewe>	Canada horsewe>	Common waterhe>
Crop Code						
Crop Name						
Part Rated						
Rating Date				5/8/2017	5/22/2017	5/22/2017
Rating Type				CONTRO	CONTRO	CONTRO
Rating Unit				%	%	%
Number of Subsamples				1	1	1
Assessed By				T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.				21 21	35 35	35 35
Trt-Eval Interval				21 DA-A	35 DA-A	35 DA-A
Days After Emergence				-9 DE-1	5 DE-1	5 DE-1
ARM Action Codes				P	P	P
Number of Decimals				0	0	0
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot		1	2	3
1 UNTREATED CHECK		101		0	0	0
		302		0	0	0
		407		0	0	0
		604		0	0	0
		Mean =		0	0	0
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 102		100	100	30
XTENDIMAX	22 fl oz/a	A 304		90	100	30
NIS-HEFTY	0.25 % v/v	A 402		85	100	40
INTACT	0.5 % v/v	A 506		95	100	20
ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
XTENDIMAX	22 fl oz/a	B				
NIS-HEFTY	0.25 % v/v	B				
INTACT	0.5 % v/v	B				
		Mean =		93	100	30
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 103		100	100	90
XTENDIMAX	22 fl oz/a	A 206		100	100	95
ZIDUA PRO	6 fl oz/a	A 501		100	100	95
NIS-HEFTY	0.25 % v/v	A 505		100	100	50
INTACT	0.5 % v/v	A				
ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
XTENDIMAX	22 fl oz/a	B				
NIS-HEFTY	0.25 % v/v	B				
INTACT	0.5 % v/v	B				
		Mean =		100	100	83
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 104		100	100	95
XTENDIMAX	22 fl oz/a	A 306		90	100	90
VALOR EZ1	2.5 fl oz/a	A 405		90	100	100
NIS-HEFTY	0.25 % v/v	A 503		95	100	90
INTACT	0.5 % v/v	A				
ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
XTENDIMAX	22 fl oz/a	B				
NIS-HEFTY	0.25 % v/v	B				
INTACT	0.5 % v/v	B				
		Mean =		94	100	94

Pest Type	W Weed	W Weed	W Weed
Pest Code	ERICA	ERICA	AMATA
Pest Name	Canada horsewe>	Canada horsewe>	Common waterhe>
Crop Code			
Crop Name			
Part Rated			
Rating Date	5/8/2017	5/22/2017	5/22/2017
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	21 21	35 35	35 35
Trt-Eval Interval	21 DA-A	35 DA-A	35 DA-A
Days After Emergence	-9 DE-1	5 DE-1	5 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	
			1
			2
			3
5 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 105	98
XTENDIMAX	22 fl oz/a	A 303	90
FIERCE	3 oz wt/a	A 307	85
NIS-HEFTY	0.25 % v/v	A 605	98
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
	Mean =		93
6 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 106	100
XTENDIMAX	22 fl oz/a	A 305	100
FIERCE MTZ SC (2030)	1 pt/a	A 404	100
NIS-HEFTY	0.25 % v/v	A 601	100
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
	Mean =		100
7 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 107	100
XTENDIMAX	22 fl oz/a	A 205	85
VALOR EZ1	2.5 fl oz/a	A 406	90
TRICOR	4 oz/a	A 504	95
NIS-HEFTY	0.25 % v/v	A	
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
	Mean =		93
8 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 201	100
XTENDIMAX	22 fl oz/a	A 204	98
AUTHORITY MTZ	11 oz wt/a	A 403	95
NIS-HEFTY	0.25 % v/v	A 603	100
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
	Mean =		98

				W Weed ERICA	W Weed ERICA	W Weed AMATA	
Pest Type				Canada horsewe>	Canada horsewe>	Common waterhe>	
Pest Code							
Pest Name							
Crop Code							
Crop Name							
Part Rated							
Rating Date				5/8/2017	5/22/2017	5/22/2017	
Rating Type				CONTRO	CONTRO	CONTRO	
Rating Unit				%	%	%	
Number of Subsamples				1	1	1	
Assessed By				T. Campbell	T. Campbell	T. Campbell	
Days After First/Last Applic.				21 21	35 35	35 35	
Trt-Eval Interval				21 DA-A	35 DA-A	35 DA-A	
Days After Emergence				-9 DE-1	5 DE-1	5 DE-1	
ARM Action Codes				P	P	P	
Number of Decimals				0	0	0	
Trt No.	Treatment Name	Rate	Appl Code	Plot	1	2	3
		Rate Unit					
9	ROUNDUP PWR MAX(AE)	32 fl oz/a	A	202	98	100	100
	XTENDIMAX	22 fl oz/a	A	301	100	100	100
	AUTHORITY ELITE	26 fl oz/a	A	502	95	100	100
	NIS-HEFTY	0.25 % v/v	A	507	98	100	90
	INTACT	0.5 % v/v	A				
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
	XTENDIMAX	22 fl oz/a	B				
	NIS-HEFTY	0.25 % v/v	B				
	INTACT	0.5 % v/v	B				
				Mean =	98	100	98
10	ROUNDUP PWR MAX(AE)	32 fl oz/a	A	203	98	100	85
	XTENDIMAX	22 fl oz/a	A	207	70	100	90
	VALOR EZ1	2 fl oz/a	A	401	100	100	95
	NIS-HEFTY	0.25 % v/v	A	602	100	100	95
	INTACT	0.5 % v/v	A				
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
	XTENDIMAX	22 fl oz/a	B				
	NIS-HEFTY	0.25 % v/v	B				
	INTACT	0.5 % v/v	B				
				Mean =	92	100	91

Pest Type								
Pest Code								
Pest Name					W Weed ERICA		W Weed AMATA	
Crop Code	GLXMA				Canada horsewe>		Common waterhe>	
Crop Name	Soybean							GLXMA Soybean
Part Rated								
Rating Date	5/22/2017				6/5/2017		6/5/2017	6/5/2017
Rating Type	PHYGEN				CONTRO		CONTRO	PHYGEN
Rating Unit	%				%		%	%
Number of Subsamples	1				1		1	1
Assessed By	T. Campbell				T. Campbell		T. Campbell	T. Campbell
Days After First/Last Applic.	35 35				49 5		49 5	49 5
Trt-Eval Interval	35 DA-A							
Days After Emergence	5 DE-1				19 DE-1		19 DE-1	19 DE-1
ARM Action Codes	P				P		P	P
Number of Decimals	0				0		0	0
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	4	5	6	7		
1 UNTREATED CHECK		101	0	0	0	0		
		302	0	0	0	0		
		407	0	0	0	0		
		604	0	0	0	0		
		Mean =	0	0	0	0		
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 102	0	100	50	5		
XTENDIMAX	22 fl oz/a	A 304	0	100	50	5		
NIS-HEFTY	0.25 % v/v	A 402	0	100	60	5		
INTACT	0.5 % v/v	A 506	0	100	50	5		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B						
XTENDIMAX	22 fl oz/a	B						
NIS-HEFTY	0.25 % v/v	B						
INTACT	0.5 % v/v	B						
		Mean =	0	100	53	5		
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 103	0	100	85	5		
XTENDIMAX	22 fl oz/a	A 206	0	100	80	5		
ZIDUA PRO	6 fl oz/a	A 501	0	100	85	5		
NIS-HEFTY	0.25 % v/v	A 505	0	100	65	5		
INTACT	0.5 % v/v	A						
ROUNDUP PWR MAX(AE)	32 fl oz/a	B						
XTENDIMAX	22 fl oz/a	B						
NIS-HEFTY	0.25 % v/v	B						
INTACT	0.5 % v/v	B						
		Mean =	0	100	79	5		
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 104	0	100	95	10		
XTENDIMAX	22 fl oz/a	A 306	0	100	85	5		
VALOR EZ1	2.5 fl oz/a	A 405	0	100	85	5		
NIS-HEFTY	0.25 % v/v	A 503	0	100	80	5		
INTACT	0.5 % v/v	A						
ROUNDUP PWR MAX(AE)	32 fl oz/a	B						
XTENDIMAX	22 fl oz/a	B						
NIS-HEFTY	0.25 % v/v	B						
INTACT	0.5 % v/v	B						
		Mean =	0	100	86	6		

Pest Type				W Weed	W Weed		
Pest Code				ERICA	AMATA		
Pest Name				Canada horsewe>	Common waterhe>		
Crop Code				GLXMA		GLXMA	
Crop Name				Soybean		Soybean	
Part Rated							
Rating Date				5/22/2017	6/5/2017	6/5/2017	
Rating Type				PHYGEN	CONTRO	CONTRO	
Rating Unit				%	%	%	
Number of Subsamples				1	1	1	
Assessed By				T. Campbell	T. Campbell	T. Campbell	
Days After First/Last Applic.				35 35	49 5	49 5	
Trt-Eval Interval				35 DA-A			
Days After Emergence				5 DE-1	19 DE-1	19 DE-1	
ARM Action Codes				P	P	P	
Number of Decimals				0	0	0	
Trt No.	Treatment Name	Rate	Appl Code	4	5	6	7
		Rate Unit	Plot				
5	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 105	0	100	98	5
	XTENDIMAX	22 fl oz/a	A 303	0	100	98	5
	FIERCE	3 oz wt/a	A 307	0	100	90	5
	NIS-HEFTY	0.25 % v/v	A 605	0	100	90	5
	INTACT	0.5 % v/v	A				
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
	XTENDIMAX	22 fl oz/a	B				
	NIS-HEFTY	0.25 % v/v	B				
	INTACT	0.5 % v/v	B				
	Mean =			0	100	94	5
6	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 106	0	100	90	5
	XTENDIMAX	22 fl oz/a	A 305	0	100	95	5
	FIERCE MTZ SC (2030)	1 pt/a	A 404	0	100	90	5
	NIS-HEFTY	0.25 % v/v	A 601	0	100	95	5
	INTACT	0.5 % v/v	A				
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
	XTENDIMAX	22 fl oz/a	B				
	NIS-HEFTY	0.25 % v/v	B				
	INTACT	0.5 % v/v	B				
	Mean =			0	100	93	5
7	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 107	0	100	80	5
	XTENDIMAX	22 fl oz/a	A 205	0	100	90	5
	VALOR EZ1	2.5 fl oz/a	A 406	0	100	85	5
	TRICOR	4 oz/a	A 504	0	100	85	5
	NIS-HEFTY	0.25 % v/v	A				
	INTACT	0.5 % v/v	A				
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
	XTENDIMAX	22 fl oz/a	B				
	NIS-HEFTY	0.25 % v/v	B				
	INTACT	0.5 % v/v	B				
	Mean =			0	100	85	5
8	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 201	0	100	85	5
	XTENDIMAX	22 fl oz/a	A 204	0	100	75	5
	AUTHORITY MTZ	11 oz wt/a	A 403	0	100	65	5
	NIS-HEFTY	0.25 % v/v	A 603	0	100	90	5
	INTACT	0.5 % v/v	A				
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
	XTENDIMAX	22 fl oz/a	B				
	NIS-HEFTY	0.25 % v/v	B				
	INTACT	0.5 % v/v	B				
	Mean =			0	100	79	5

Pest Type			W Weed	W Weed	
Pest Code			ERICA	AMATA	
Pest Name			Canada horsewe>	Common waterhe>	
Crop Code	GLXMA				GLXMA
Crop Name	Soybean				Soybean
Part Rated					
Rating Date	5/22/2017		6/5/2017	6/5/2017	6/5/2017
Rating Type	PHYGEN		CONTRO	CONTRO	PHYGEN
Rating Unit	%		%	%	%
Number of Subsamples	1		1	1	1
Assessed By	T. Campbell		T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	35 35		49 5	49 5	49 5
Trt-Eval Interval	35 DA-A				
Days After Emergence	5 DE-1		19 DE-1	19 DE-1	19 DE-1
ARM Action Codes	P		P	P	P
Number of Decimals	0		0	0	0
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	4	5	6
9 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 202	0	100	98
XTENDIMAX	22 fl oz/a	A 301	0	100	95
AUTHORITY ELITE	26 fl oz/a	A 502	0	100	90
NIS-HEFTY	0.25 % v/v	A 507	0	100	70
INTACT	0.5 % v/v	A			
ROUNDUP PWR MAX(AE)	32 fl oz/a	B			
XTENDIMAX	22 fl oz/a	B			
NIS-HEFTY	0.25 % v/v	B			
INTACT	0.5 % v/v	B			
	Mean =		0	100	88
10 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 203	0	100	85
XTENDIMAX	22 fl oz/a	A 207	0	100	90
VALOR EZ1	2 fl oz/a	A 401	0	100	90
NIS-HEFTY	0.25 % v/v	A 602	0	100	80
INTACT	0.5 % v/v	A			
ROUNDUP PWR MAX(AE)	32 fl oz/a	B			
XTENDIMAX	22 fl oz/a	B			
NIS-HEFTY	0.25 % v/v	B			
INTACT	0.5 % v/v	B			
	Mean =		0	100	86

Pest Type	W Weed	W Weed	W Weed
Pest Code	ERICA	AMATA	AMATA
Pest Name	Canada horsewe>	Common waterhe>	Common waterhe>
Crop Code			
Crop Name			
Part Rated			
Rating Date	6/20/2017	6/20/2017	7/3/2017
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	64 20	64 20	77 33
Trt-Eval Interval			
Days After Emergence	34 DE-1	34 DE-1	47 DE-1
ARM Action Codes	P	P	P
Number of Decimals	0	0	0
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	
			8
			9
			10
1 UNTREATED CHECK		101	0
		302	0
		407	0
		604	0
		Mean =	0
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 102	100
XTENDIMAX	22 fl oz/a	A 304	100
NIS-HEFTY	0.25 % v/v	A 402	100
INTACT	0.5 % v/v	A 506	100
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
		Mean =	100
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 103	100
XTENDIMAX	22 fl oz/a	A 206	100
ZIDUA PRO	6 fl oz/a	A 501	100
NIS-HEFTY	0.25 % v/v	A 505	100
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
		Mean =	100
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 104	100
XTENDIMAX	22 fl oz/a	A 306	100
VALOR EZ1	2.5 fl oz/a	A 405	100
NIS-HEFTY	0.25 % v/v	A 503	100
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
		Mean =	100

				W Weed ERICA	W Weed AMATA	W Weed AMATA
Pest Type				Canada horsewe>	Common waterhe>	Common waterhe>
Pest Code						
Pest Name						
Crop Code						
Crop Name						
Part Rated						
Rating Date				6/20/2017	6/20/2017	7/3/2017
Rating Type				CONTRO	CONTRO	CONTRO
Rating Unit				%	%	%
Number of Subsamples				1	1	1
Assessed By				T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.				64 20	64 20	77 33
Trt-Eval Interval						
Days After Emergence				34 DE-1	34 DE-1	47 DE-1
ARM Action Codes				P	P	P
Number of Decimals				0	0	0
Trt No.	Treatment Name	Rate	Appl Code	8	9	10
		Rate Unit <td>Code Plot <td></td> <td></td> <td></td> </td>	Code Plot <td></td> <td></td> <td></td>			
5	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 105	100	85	75
	XTENDIMAX	22 fl oz/a	A 303	100	80	70
	FIERCE	3 oz wt/a	A 307	100	90	60
	NIS-HEFTY	0.25 % v/v	A 605	100	85	60
	INTACT	0.5 % v/v	A			
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B			
	XTENDIMAX	22 fl oz/a	B			
	NIS-HEFTY	0.25 % v/v	B			
	INTACT	0.5 % v/v	B			
			Mean =	100	85	66
6	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 106	100	80	80
	XTENDIMAX	22 fl oz/a	A 305	100	80	75
	FIERCE MTZ SC (2030)	1 pt/a	A 404	100	80	70
	NIS-HEFTY	0.25 % v/v	A 601	100	80	50
	INTACT	0.5 % v/v	A			
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B			
	XTENDIMAX	22 fl oz/a	B			
	NIS-HEFTY	0.25 % v/v	B			
	INTACT	0.5 % v/v	B			
			Mean =	100	80	69
7	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 107	100	80	60
	XTENDIMAX	22 fl oz/a	A 205	100	85	70
	VALOR EZ1	2.5 fl oz/a	A 406	100	75	65
	TRICOR	4 oz/a	A 504	100	85	65
	NIS-HEFTY	0.25 % v/v	A			
	INTACT	0.5 % v/v	A			
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B			
	XTENDIMAX	22 fl oz/a	B			
	NIS-HEFTY	0.25 % v/v	B			
	INTACT	0.5 % v/v	B			
			Mean =	100	81	65
8	ROUNDUP PWR MAX(AE)	32 fl oz/a	A 201	100	85	65
	XTENDIMAX	22 fl oz/a	A 204	100	60	50
	AUTHORITY MTZ	11 oz wt/a	A 403	100	60	50
	NIS-HEFTY	0.25 % v/v	A 603	100	75	60
	INTACT	0.5 % v/v	A			
	ROUNDUP PWR MAX(AE)	32 fl oz/a	B			
	XTENDIMAX	22 fl oz/a	B			
	NIS-HEFTY	0.25 % v/v	B			
	INTACT	0.5 % v/v	B			
			Mean =	100	70	56

Pest Type		W Weed	W Weed	W Weed
Pest Code		ERICA	AMATA	AMATA
Pest Name		Canada horsewe>	Common waterhe>	Common waterhe>
Crop Code				
Crop Name				
Part Rated				
Rating Date		6/20/2017	6/20/2017	7/3/2017
Rating Type		CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%
Number of Subsamples		1	1	1
Assessed By		T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.		64 20	64 20	77 33
Trt-Eval Interval				
Days After Emergence		34 DE-1	34 DE-1	47 DE-1
ARM Action Codes		P	P	P
Number of Decimals		0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	8	9
				10
9 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 202	100	60
XTENDIMAX	22 fl oz/a	A 301	100	60
AUTHORITY ELITE	26 fl oz/a	A 502	100	65
NIS-HEFTY	0.25 % v/v	A 507	100	50
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
		Mean =	100	59
10 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 203	100	60
XTENDIMAX	22 fl oz/a	A 207	100	65
VALOR EZ1	2 fl oz/a	A 401	100	50
NIS-HEFTY	0.25 % v/v	A 602	100	50
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
		Mean =	100	56

Pest Type	W Weed			
Pest Code	ERICA			
Pest Name	Canada horsewe>			
Crop Code		GLXMA	GLXMA	GLXMA
Crop Name		Soybean	Soybean	Soybean
Part Rated		PLOT C	PLOT C	PLOT C
Rating Date	7/3/2017	10/18/2017	10/18/2017	10/18/2017
Rating Type	CONTRO	YIELD	MOICON	YIELD
Rating Unit	%	lb/plot	%	BU
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	77 33	184 140	184 140	184 140
Trt-Eval Interval				
Days After Emergence	47 DE-1	154 DE-1	154 DE-1	154 DE-1
ARM Action Codes	P			TY1
Number of Decimals	0	1	1	1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	11	12
			13	14
1 UNTREATED CHECK		101	0	1.6
		302	0	0.9
		407	0	1.4
		604	0	2.4
		Mean =	0	1.6
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 102	100	3.9
XTENDIMAX	22 fl oz/a	A 304	100	3.3
NIS-HEFTY	0.25 % v/v	A 402	100	4.2
INTACT	0.5 % v/v	A 506	100	2.1
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
		Mean =	100	3.4
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 103	100	4.7
XTENDIMAX	22 fl oz/a	A 206	100	3.2
ZIDUA PRO	6 fl oz/a	A 501	100	6.1
NIS-HEFTY	0.25 % v/v	A 505	100	6.6
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
		Mean =	100	5.2
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 104	100	6.0
XTENDIMAX	22 fl oz/a	A 306	100	2.6
VALOR EZ1	2.5 fl oz/a	A 405	100	5.1
NIS-HEFTY	0.25 % v/v	A 503	100	2.9
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
		Mean =	100	4.1
				14.4
				17.1
				7.5
				14.6
				8.3
				11.9

Pest Type	W Weed			
Pest Code	ERICA			
Pest Name	Canada horsewe>			
Crop Code		GLXMA	GLXMA	GLXMA
Crop Name		Soybean	Soybean	Soybean
Part Rated		PLOT C	PLOT C	PLOT C
Rating Date	7/3/2017	10/18/2017	10/18/2017	10/18/2017
Rating Type	CONTRO	YIELD	MOICON	YIELD
Rating Unit	%	lb/plot	%	BU
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	77 33	184 140	184 140	184 140
Trt-Eval Interval				
Days After Emergence	47 DE-1	154 DE-1	154 DE-1	154 DE-1
ARM Action Codes	P			TY1
Number of Decimals	0	1	1	1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	11	12
			13	14
5 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 105	100	8.8
XTENDIMAX	22 fl oz/a	A 303	100	4.1
FIERCE	3 oz wt/a	A 307	100	3.6
NIS-HEFTY	0.25 % v/v	A 605	100	8.6
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
	Mean =		100	6.3
6 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 106	100	9.8
XTENDIMAX	22 fl oz/a	A 305	100	5.1
FIERCE MTZ SC (2030)	1 pt/a	A 404	100	4.0
NIS-HEFTY	0.25 % v/v	A 601	100	6.8
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
	Mean =		100	6.4
7 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 107	100	4.5
XTENDIMAX	22 fl oz/a	A 205	100	6.3
VALOR EZ1	2.5 fl oz/a	A 406	100	4.0
TRICOR	4 oz/a	A 504	100	4.7
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
	Mean =		100	4.9
8 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 201	100	3.6
XTENDIMAX	22 fl oz/a	A 204	100	3.0
AUTHORITY MTZ	11 oz wt/a	A 403	100	5.1
NIS-HEFTY	0.25 % v/v	A 603	100	4.5
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
	Mean =		100	4.1

Pest Type	W Weed			
Pest Code	ERICA			
Pest Name	Canada horsewe>			
Crop Code		GLXMA	GLXMA	GLXMA
Crop Name		Soybean	Soybean	Soybean
Part Rated		PLOT C	PLOT C	PLOT C
Rating Date	7/3/2017	10/18/2017	10/18/2017	10/18/2017
Rating Type	CONTRO	YIELD	MOICON	YIELD
Rating Unit	%	lb/plot	%	BU
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	77 33	184 140	184 140	184 140
Trt-Eval Interval				
Days After Emergence	47 DE-1	154 DE-1	154 DE-1	154 DE-1
ARM Action Codes	P			TY1
Number of Decimals	0	1	1	1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	11	12
9 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 202	100	3.2
XTENDIMAX	22 fl oz/a	A 301	100	5.1
AUTHORITY ELITE	26 fl oz/a	A 502	100	3.6
NIS-HEFTY	0.25 % v/v	A 507	100	4.2*
INTACT	0.5 % v/v	A		14.4
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		14.4
XTENDIMAX	22 fl oz/a	B		9.1
NIS-HEFTY	0.25 % v/v	B		14.5
INTACT	0.5 % v/v	B		10.2
		Mean =	100	4.0
10 ROUNDUP PWR MAX(AE)	32 fl oz/a	A 203	100	6.6*
XTENDIMAX	22 fl oz/a	A 207	100	4.4
VALOR EZ1	2 fl oz/a	A 401	100	7.5
NIS-HEFTY	0.25 % v/v	A 602	100	5.3
INTACT	0.5 % v/v	A		14.4
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		14.4
XTENDIMAX	22 fl oz/a	B		19.0*
NIS-HEFTY	0.25 % v/v	B		12.6
INTACT	0.5 % v/v	B		21.5
		Mean =	100	5.9
				14.4
				17.0

# Purdue Weed Science

## Fierce 64.06 - Xtend Soybean - Horsweed Burndown Trial

Trial ID: 17S-MGS-Soy-08	Location: Meigs	Trial Year: 2017
Protocol ID: 17S-MGS-Soy-08	Investigator: Dr. Bill Johnson	
Project ID: Fierce 64.06 - Xtend Soy	Study Director: Taylor Campbell	
Sponsor Contact: Erric Ott - Valent		

Pest Type

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

Pest Code

ERICA, Erigeron canadensis, Canada horseweed = US

AMATA, Amaranthus tamariscinus, Common waterhemp = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLOT = plot

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

YIELD = yield

MOICON = moisture content

Rating Unit

% = percent

lb/plot = pounds per plot

BU = bushel

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)

TY1 =  $2.904 * [12] * (100 - [13]) / 86.7$

# Purdue Weed Science

## Fierce 64.06 - Xtend Soybean - Horsweed Burndown Trial

Trial ID: 17S-MGS-Soy-08 Location: Meigs Trial Year: 2017  
 Protocol ID: 17S-MGS-Soy-08 Investigator: Dr. Bill Johnson  
 Project ID: Fierce 64.06 - Xtend Soy Study Director: Taylor Campbell  
 Sponsor Contact: Erric Ott - Valent

Pest Type	W Weed	W Weed	W Weed	
Pest Code	ERICA	ERICA	AMATA	
Pest Name	Canada horsewe>	Canada horsewe>	Common waterhe>	
Crop Code				GLXMA
Crop Name				Soybean
Part Rated				
Rating Date	5/8/2017	5/22/2017	5/22/2017	5/22/2017
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	21 21	35 35	35 35	35 35
Trt-Eval Interval	21 DA-A	35 DA-A	35 DA-A	35 DA-A
Days After Emergence	-9 DE-1	5 DE-1	5 DE-1	5 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	1	2
1 UNTREATED CHECK			0 b	0 b
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	93 a	100 a
XTENDIMAX	22 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	100 a
XTENDIMAX	22 fl oz/a	A		
ZIDUA PRO	6 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	94 a	100 a
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2.5 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Missing data estimates are included in columns: Yates=12,13,14  
 Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type	W Weed	W Weed	W Weed	
Pest Code	ERICA	ERICA	AMATA	
Pest Name	Canada horsewe>	Canada horsewe>	Common waterhe>	
Crop Code				GLXMA
Crop Name				Soybean
Part Rated				
Rating Date	5/8/2017	5/22/2017	5/22/2017	5/22/2017
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	21 21	35 35	35 35	35 35
Trt-Eval Interval	21 DA-A	35 DA-A	35 DA-A	35 DA-A
Days After Emergence	-9 DE-1	5 DE-1	5 DE-1	5 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	1	2
5 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	93 a	100 a
XTENDIMAX	22 fl oz/a	A		
FIERCE	3 oz wt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
6 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	100 a
XTENDIMAX	22 fl oz/a	A		
FIERCE MTZ SC (2030)	1 pt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
7 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	93 a	100 a
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2.5 fl oz/a	A		
TRICOR	4 oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
8 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	98 a	100 a
XTENDIMAX	22 fl oz/a	A		
AUTHORITY MTZ	11 oz wt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type	W Weed	W Weed	W Weed	
Pest Code	ERICA	ERICA	AMATA	
Pest Name	Canada horsewe>	Canada horsewe>	Common waterhe>	
Crop Code				GLXMA
Crop Name				Soybean
Part Rated				
Rating Date	5/8/2017	5/22/2017	5/22/2017	5/22/2017
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	21 21	35 35	35 35	35 35
Trt-Eval Interval	21 DA-A	35 DA-A	35 DA-A	35 DA-A
Days After Emergence	-9 DE-1	5 DE-1	5 DE-1	5 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	1	2
9 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	98 a	100 a
XTENDIMAX	22 fl oz/a	A		
AUTHORITY ELITE	26 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
10 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	92 a	100 a
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
LSD P=.05			7.8	.
Standard Deviation			5.4	0.0
CV			6.26	0.0
Bartlett's X2			13.896	0.0
P(Bartlett's X2)			0.031*	.
Skewness			-2.5683*	-2.7717*
Kurtosis			5.2144*	5.9791*
Replicate F			3.870	0.000
Replicate Prob(F)			0.0201	1.0000
Treatment F			127.318	0.000
Treatment Prob(F)			0.0001	1.0000
				10.8
				7.5
				9.64
				24.486
				0.002*
				-1.5652*
				0.8763
				0.000
				1.0000
				0.000
				1.0000

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Missing data estimates are included in columns: Yates=12,13,14  
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Pest Type				
Pest Code				
Pest Name				
Crop Code				
Crop Name				
Part Rated				
Rating Date				
Rating Type				
Rating Unit				
Number of Subsamples				
Assessed By				
Days After First/Last Applic.				
Trt-Eval Interval				
Days After Emergence				
ARM Action Codes				
Number of Decimals				
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code		
			5	6
			7	8
1 UNTREATED CHECK			0 b	0 c
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	53 b
XTENDIMAX	22 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	79 a
XTENDIMAX	22 fl oz/a	A		
ZIDUA PRO	6 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	86 a
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2.5 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type	W Weed	W Weed		W Weed
Pest Code	ERICA	AMATA		ERICA
Pest Name	Canada horsewe>	Common waterhe>		Canada horsewe>
Crop Code			GLXMA	
Crop Name			Soybean	
Part Rated				
Rating Date	6/5/2017	6/5/2017	6/5/2017	6/20/2017
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	49 5	49 5	49 5	64 20
Trt-Eval Interval				
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	34 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	5	6
5 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	94 a
XTENDIMAX	22 fl oz/a	A		
FIERCE	3 oz wt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
6 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	93 a
XTENDIMAX	22 fl oz/a	A		
FIERCE MTZ SC (2030)	1 pt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
7 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	85 a
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2.5 fl oz/a	A		
TRICOR	4 oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
8 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	79 a
XTENDIMAX	22 fl oz/a	A		
AUTHORITY MTZ	11 oz wt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type	W Weed	W Weed		W Weed
Pest Code	ERICA	AMATA		ERICA
Pest Name	Canada horsewe>	Common waterhe>		Canada horsewe>
Crop Code			GLXMA	
Crop Name			Soybean	
Part Rated				
Rating Date	6/5/2017	6/5/2017	6/5/2017	6/20/2017
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	49 5	49 5	49 5	64 20
Trt-Eval Interval				
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	34 DE-1
ARM Action Codes	P	P	P	P
Number of Decimals	0	0	0	0
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	5	6
9 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	88 a
XTENDIMAX	22 fl oz/a	A		
AUTHORITY ELITE	26 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
10 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	100 a	86 a
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
LSD P=.05				10.0
Standard Deviation	0.0			6.9
CV	0.0			9.33
Bartlett's X2	0.0			10.518
P(Bartlett's X2)				0.231
Skewness	-2.7717*			-1.8875*
Kurtosis	5.9791*			2.6991*
Replicate F	0.000			1.532
Replicate Prob(F)	1.0000			0.2289
Treatment F	0.000			68.087
Treatment Prob(F)	1.0000			0.0001
				0.643
				0.5941
				9.429
				0.0001
				0.000
				1.0000
				0.000
				1.0000

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Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type			W Weed AMATA	W Weed AMATA	W Weed ERICA	
Pest Code			Common waterhe>	Common waterhe>	Canada horsewe>	
Pest Name						
Crop Code						GLXMA
Crop Name						Soybean
Part Rated						PLOT C
Rating Date		6/20/2017	7/3/2017	7/3/2017		10/18/2017
Rating Type		CONTRO	CONTRO	CONTRO		YIELD
Rating Unit		%	%	%		lb/plot
Number of Subsamples		1	1	1		1
Assessed By		T. Campbell	T. Campbell	T. Campbell		T. Campbell
Days After First/Last Applic.		64 20	77 33	77 33		184 140
Trt-Eval Interval						
Days After Emergence		34 DE-1	47 DE-1	47 DE-1		154 DE-1
ARM Action Codes		P	P	P		
Number of Decimals		0	0	0		1
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code	9	10	11	12
1 UNTREATED CHECK			0 c	0 c	0 b	1.6 b
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	48 b	49 b	100 a	3.4 ab
XTENDIMAX	22 fl oz/a	A				
NIS-HEFTY	0.25 % v/v	A				
INTACT	0.5 % v/v	A				
ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
XTENDIMAX	22 fl oz/a	B				
NIS-HEFTY	0.25 % v/v	B				
INTACT	0.5 % v/v	B				
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	71 a	68 a	100 a	5.2 ab
XTENDIMAX	22 fl oz/a	A				
ZIDUA PRO	6 fl oz/a	A				
NIS-HEFTY	0.25 % v/v	A				
INTACT	0.5 % v/v	A				
ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
XTENDIMAX	22 fl oz/a	B				
NIS-HEFTY	0.25 % v/v	B				
INTACT	0.5 % v/v	B				
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	66 a	66 a	100 a	4.1 ab
XTENDIMAX	22 fl oz/a	A				
VALOR EZ1	2.5 fl oz/a	A				
NIS-HEFTY	0.25 % v/v	A				
INTACT	0.5 % v/v	A				
ROUNDUP PWR MAX(AE)	32 fl oz/a	B				
XTENDIMAX	22 fl oz/a	B				
NIS-HEFTY	0.25 % v/v	B				
INTACT	0.5 % v/v	B				

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMATA	AMATA	ERICA	
Pest Name	Common waterhe>	Common waterhe>	Canada horsewe>	
Crop Code				GLXMA
Crop Name				Soybean
Part Rated				PLOT C
Rating Date	6/20/2017	7/3/2017	7/3/2017	10/18/2017
Rating Type	CONTRO	CONTRO	CONTRO	YIELD
Rating Unit	%	%	%	lb/plot
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	64 20	77 33	77 33	184 140
Trt-Eval Interval				
Days After Emergence	34 DE-1	47 DE-1	47 DE-1	154 DE-1
ARM Action Codes	P	P	P	
Number of Decimals	0	0	0	1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	9	10
5 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	85 a	66 a
XTENDIMAX	22 fl oz/a	A		
FIERCE	3 oz wt/a	A		100 a
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
6 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	80 a	69 a
XTENDIMAX	22 fl oz/a	A		
FIERCE MTZ SC (2030)	1 pt/a	A		100 a
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
7 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	81 a	65 a
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2.5 fl oz/a	A		100 a
TRICOR	4 oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
8 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	70 a	56 ab
XTENDIMAX	22 fl oz/a	A		
AUTHORITY MTZ	11 oz wt/a	A		100 a
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMATA	AMATA	ERICA	
Pest Name	Common waterhe>	Common waterhe>	Canada horsewe>	
Crop Code				GLXMA
Crop Name				Soybean
Part Rated				PLOT C
Rating Date	6/20/2017	7/3/2017	7/3/2017	10/18/2017
Rating Type	CONTRO	CONTRO	CONTRO	YIELD
Rating Unit	%	%	%	lb/plot
Number of Subsamples	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	64 20	77 33	77 33	184 140
Trt-Eval Interval				
Days After Emergence	34 DE-1	47 DE-1	47 DE-1	154 DE-1
ARM Action Codes	P	P	P	
Number of Decimals	0	0	0	1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	9	10
9 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	76 a	59 ab
XTENDIMAX	22 fl oz/a	A		
AUTHORITY ELITE	26 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
10 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	68 a	56 ab
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2 fl oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
LSD P=.05			13.2	9.7
Standard Deviation			9.1	6.7
CV			14.15	12.06
Bartlett's X2			5.936	9.259
P(Bartlett's X2)			0.547	0.321
Skewness			-1.6456*	-1.889*
Kurtosis			1.9844*	2.993*
Replicate F			1.500	3.750
Replicate Prob(F)			0.2370	0.0226
Treatment F			29.953	37.646
Treatment Prob(F)			0.0001	0.0001
				0.000
				1.0000
				0.000
				3.435
				0.0070

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Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type			
Pest Code			
Pest Name			
Crop Code	GLXMA	GLXMA	
Crop Name	Soybean	Soybean	
Part Rated	PLOT C	PLOT C	
Rating Date	10/18/2017	10/18/2017	
Rating Type	MOICON	YIELD	
Rating Unit	%	BU	
Number of Subsamples	1	1	
Assessed By	T. Campbell	T. Campbell	
Days After First/Last Applic.	184 140	184 140	
Trt-Eval Interval			
Days After Emergence	154 DE-1	154 DE-1	
ARM Action Codes		TY1	
Number of Decimals	1	1	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			13 14
1 UNTREATED CHECK			14.4 a 4.5 b
2 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a 9.6 ab
XTENDIMAX	22 fl oz/a	A	
NIS-HEFTY	0.25 % v/v	A	
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
3 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a 14.8 ab
XTENDIMAX	22 fl oz/a	A	
ZIDUA PRO	6 fl oz/a	A	
NIS-HEFTY	0.25 % v/v	A	
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
4 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a 11.9 ab
XTENDIMAX	22 fl oz/a	A	
VALOR EZ1	2.5 fl oz/a	A	
NIS-HEFTY	0.25 % v/v	A	
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type				
Pest Code				
Pest Name				
Crop Code		GLXMA	GLXMA	
Crop Name		Soybean	Soybean	
Part Rated		PLOT C	PLOT C	
Rating Date		10/18/2017	10/18/2017	
Rating Type		MOICON	YIELD	
Rating Unit		%	BU	
Number of Subsamples		1	1	
Assessed By		T. Campbell	T. Campbell	
Days After First/Last Applic.		184 140	184 140	
Trt-Eval Interval				
Days After Emergence		154 DE-1	154 DE-1	
ARM Action Codes			TY1	
Number of Decimals		1	1	
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code	13	14
5 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a	18.0 a
XTENDIMAX	22 fl oz/a	A		
FIERCE	3 oz wt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
6 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a	18.4 a
XTENDIMAX	22 fl oz/a	A		
FIERCE MTZ SC (2030)	1 pt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
7 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a	13.9 ab
XTENDIMAX	22 fl oz/a	A		
VALOR EZ1	2.5 fl oz/a	A		
TRICOR	4 oz/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		
8 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a	11.6 ab
XTENDIMAX	22 fl oz/a	A		
AUTHORITY MTZ	11 oz wt/a	A		
NIS-HEFTY	0.25 % v/v	A		
INTACT	0.5 % v/v	A		
ROUNDUP PWR MAX(AE)	32 fl oz/a	B		
XTENDIMAX	22 fl oz/a	B		
NIS-HEFTY	0.25 % v/v	B		
INTACT	0.5 % v/v	B		

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Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

Pest Type			
Pest Code			
Pest Name			
Crop Code	GLXMA	GLXMA	
Crop Name	Soybean	Soybean	
Part Rated	PLOT C	PLOT C	
Rating Date	10/18/2017	10/18/2017	
Rating Type	MOICON	YIELD	
Rating Unit	%	BU	
Number of Subsamples	1	1	
Assessed By	T. Campbell	T. Campbell	
Days After First/Last Applic.	184 140	184 140	
Trt-Eval Interval			
Days After Emergence	154 DE-1	154 DE-1	
ARM Action Codes		TY1	
Number of Decimals	1	1	
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
			13 14
9 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a
XTENDIMAX	22 fl oz/a	A	11.5 ab
AUTHORITY ELITE	26 fl oz/a	A	
NIS-HEFTY	0.25 % v/v	A	
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
10 ROUNDUP PWR MAX(AE)	32 fl oz/a	A	14.4 a
XTENDIMAX	22 fl oz/a	A	17.0 a
VALOR EZ1	2 fl oz/a	A	
NIS-HEFTY	0.25 % v/v	A	
INTACT	0.5 % v/v	A	
ROUNDUP PWR MAX(AE)	32 fl oz/a	B	
XTENDIMAX	22 fl oz/a	B	
NIS-HEFTY	0.25 % v/v	B	
INTACT	0.5 % v/v	B	
LSD P=.05			6.68
Standard Deviation	0.00		4.59
CV	0.0		34.96
Bartlett's X2	0.0		11.098
P(Bartlett's X2)	.		0.269
Skewness	1.0405*		0.697
Kurtosis	-2.1111*		0.5187
Replicate F	0.000		1.508
Replicate Prob(F)	1.0000		0.2367
Treatment F	0.000		3.435
Treatment Prob(F)	1.0000		0.0070

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Missing data estimates are included in columns: Yates=12,13,14  
Could not calculate LSD (% mean diff) for columns 2,4,5,8,11,13 because error mean square = 0.

# Purdue Weed Science

## Fierce 64.06 - Xtend Soybean - Horsweed Burndown Trial

Trial ID: 17S-MGS-Soy-08	Location: Meigs	Trial Year: 2017
Protocol ID: 17S-MGS-Soy-08	Investigator: Dr. Bill Johnson	
Project ID: Fierce 64.06 - Xtend Soy	Study Director: Taylor Campbell	
Sponsor Contact: Erric Ott - Valent		

Pest Type

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

Pest Code

ERICA, Erigeron canadensis, Canada horseweed = US

AMATA, Amaranthus tamariscinus, Common waterhemp = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLOT = plot

C = Crop is Part Rated

Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

YIELD = yield

MOICON = moisture content

Rating Unit

% = percent

lb/plot = pounds per plot

BU = bushel

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)

TY1 =  $2.904 * [12] * (100 - [13]) / 86.7$