

# University of Tennessee

## Preemergence Crop Tolerance and Efficacy of Pendimethalin and Fluometuron in Cotton

Trial ID:ADAMA1      Location:Jackson      Trial Year:2020  
 Protocol ID:ADAMA1      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:Bob Montgomery  
                                  Sponsor Contact:

Reps: 4		Plots: 12.7 by 30 feet												
Appl. Amount: 15 GAL/AC		Mix Size: 2 L (total for 4 plots; minimum=1.9814 L)												
Trt No.	Treatment Name	Form Type	Rate	Appl Unit	Appl Timing	Mix Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	PROWL H2O	SC	1.5pt/a	PRE	A	2.0L	25.0 mL/mx	101	205	308	401			
2	PROWL H2O	SC	2.5pt/a	PRE	A	2.0L	41.67 mL/mx	102	201	304	409			
3	PROWL H2O	SC	3.5pt/a	PRE	A	2.0L	58.33 mL/mx	103	202	309	403			
4	PROWL H2O	SC	4.5pt/a	PRE	A	2.0L	75.0 mL/mx	104	211	302	410			
5	COTORAN	L	2pt/a	PRE	A	2.0L	33.33 mL/mx	105	208	303	408			
6	COTORAN	L	3.2pt/a	PRE	A	2.0L	53.33 mL/mx	106	209	306	404			
7	COTORAN	L	4pt/a	PRE	A	2.0L	66.67 mL/mx	107	206	307	402			
8	COTORAN	L	5.5pt/a	PRE	A	2.0L	91.67 mL/mx	108	204	311	405			
9	PROWL H2O	SC	1.5pt/a	PRE	A	2.0L	25.0 mL/mx	109	207	301	411			
	COTORAN	L	2pt/a	PRE	A	2.0L	33.33 mL/mx							
10	PROWL H2O	SC	2.5pt/a	PRE	A	2.0L	41.67 mL/mx	110	203	310	407			
	COTORAN	L	3.2pt/a	PRE	A	2.0L	53.33 mL/mx							
11	PROWL H2O	SC	3.5pt/a	PRE	A	2.0L	58.33 mL/mx	111	210	305	406			
	COTORAN	L	4pt/a	PRE	A	2.0L	66.67 mL/mx							
12	CHECK							112	212	312	412			

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
406.250mL	PROWL H2O	3.8	LBA/GAL	SC		
497.916mL	COTORAN	4	LBA/GAL	L		

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.







# University of Tennessee

## Herbicide - Sales Support - 2021 US

Trial ID:USSG0H1022021	Location:University of Tennessee	Trial Year:2021
Protocol ID:HAISSUP4-2021US	Investigator (Creator):James Holloway	
Master Protocol ID:	Study Director:	
Official Trial ID:	Sponsor Contact:	
Conducted Under GEP:No	Trial Origin:P public institution trial	

		Plots: 5 by 30 feet				Mix Size: 2 L (total for 4 plots; minimum=0.782 L)							
Reps: 4	Appl. Amount: 15 GAL/AC	Rate	Appl	Appl	Mix	Mix	Amt	Product	Rep				
Trt	Treatment	Rate	Unit	Timing	Code	Size	Unit	to Measure	1	2	3	4	
No.	Name	Rate	Unit	Timing	Code	Size	Unit	to Measure	1	2	3	4	
1	UNTREATED CHECK								101	202	304	402	
2	ADDITIVE NON-IONIC SURFACTANTS	0.25% v/v		PRE	A	2.0L		5.0 mL/mx	102	201	303	404	
	BOUNDARY 6.5 EC	1360g ai/ha		PRE	A	2.0L		24.93 mL/mx					
	GRAMOXONE SL 3.0	840g ai/ha		PRE	A	2.0L		33.26 mL/mx					
	PREFIX [F]	1720g ai/ha		EPOST	B	2.0L		38.81 mL/mx					
	LIBERTY 2.34 SL	655g ai/ha		EPOST	B	2.0L		33.34 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	1260g ae/ha		EPOST	B	2.0L		33.26 mL/mx					
	LIBERTY 2.34 SL	655g ai/ha		MPOST	C	2.0L		33.34 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	1260g ae/ha		MPOST	C	2.0L		33.26 mL/mx					
3	ADDITIVE NON-IONIC SURFACTANTS	0.25% v/v		PRE	A	2.0L		5.0 mL/mx	103	204	301	403	
	BROADAXE XC 7 EC	1350g ai/ha		PRE	A	2.0L		22.91 mL/mx					
	GRAMOXONE SL 3.0	840g ai/ha		PRE	A	2.0L		33.26 mL/mx					
	PREFIX [F]	1720g ai/ha		EPOST	B	2.0L		38.81 mL/mx					
	LIBERTY 2.34 SL	655g ai/ha		EPOST	B	2.0L		33.34 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	1260g ae/ha		EPOST	B	2.0L		33.26 mL/mx					
	LIBERTY 2.34 SL	655g ai/ha		MPOST	C	2.0L		33.34 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	1260g ae/ha		MPOST	C	2.0L		33.26 mL/mx					
4	NIS	0.25% v/v		PRE	A	2.0L		5.0 mL/mx	104	203	302	401	
	PREFIX [F]	2030g ai/ha		PRE	A	2.0L		45.81 mL/mx					
	METRIBUZIN 75 DF	210g ai/ha		PRE	A	2.0L		3.991 g/mx					
	GRAMOXONE SL 3.0	840g ai/ha		PRE	A	2.0L		33.26 mL/mx					
	DUAL MAGNUM	1600g ai/ha		EPOST	B	2.0L		24.98 mL/mx					
	LIBERTY 2.34 SL	655g ai/ha		EPOST	B	2.0L		33.34 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	1260g ae/ha		EPOST	B	2.0L		33.26 mL/mx					
	LIBERTY 2.34 SL	655g ai/ha		MPOST	C	2.0L		33.34 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	1260g ae/ha		MPOST	C	2.0L		33.26 mL/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
12.500mL		ADDITIVE NON-IONIC SURFACTANTS				
31.167mL		BOUNDARY 6.5 EC	777.5	gA/L	EC	
124.725mL		GRAMOXONE SL 3.0	360	gA/L	SL	
154.293mL		PREFIX [F]	631.68	gA/L	EC	
250.086mL		LIBERTY 2.34 SL	280	gA/L	SL	
249.450mL		ROUNDUP POWERMAX 4.5 SL	540	gAE/L	SL	
28.636mL		BROADAXE XC 7 EC	840	gA/L	EC	
6.250mL		NIS			SL	
4.989g		METRIBUZIN 75 DF	75	%AW/W	DF	
31.225mL		DUAL MAGNUM	913	gA/L	EC	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).  
 \* Product amount calculations increased 25 % for overage adjustment.  
 \* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

# University of Tennessee

**MON 301286/Soybean/Grass Efficacy**

Trial ID:HN21USADHH  
 Protocol ID:HN21USADHH  
 Project ID:

Location:JACKSON  
 Investigator (Creator):Dr. Larry Steckel  
 Study Director:  
 Sponsor Contact:

Trial Year:2021

Reps: 4  
 Appl. Amount: 15 GAL/AC

Plots: 5 by 30 feet

Trt No.	Treatment Name	Rate	Appl Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep			
										1	2	3	4
1	UNTREATED									101	209	305	402
2	ROUNDUP POWER MAX	32oz/a		3-4" GRASS	A		2.0L	33.33 mL/mx		102	210	306	413
	MON 51817	20oz/a		3-4" GRASS	A		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		3-4" GRASS	A		2.0L	9.999 mL/mx					
3	ROUNDUP POWER MAX	28.4oz/a		3-4" GRASS	A		2.0L	29.58 mL/mx		103	202	303	407
	MON 51817	20oz/a		3-4" GRASS	A		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		3-4" GRASS	A		2.0L	9.999 mL/mx					
4	ROUNDUP POWER MAX	32oz/a		3-4" GRASS	A		2.0L	33.33 mL/mx		104	211	307	409
	XTENDIMAX VAPORGRIP	22oz/a		3-4" GRASS	A			22.92 mL/mx					
	MON 51817	20oz/a		3-4" GRASS	A		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		3-4" GRASS	A		2.0L	9.999 mL/mx					
5	MON 301286	48oz/a		3-4" GRASS	A		2.0L	50.0 mL/mx		105	212	313	405
	MON 51817	20oz/a		3-4" GRASS	A		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		3-4" GRASS	A		2.0L	9.999 mL/mx					
6	MON 301286	48oz/a		3-4" GRASS	A		2.0L	50.0 mL/mx		106	213	302	406
	ROUNDUP POWER MAX	3.5oz/a		3-4" GRASS	A		2.0L	3.646 mL/mx					
	MON 51817	20oz/a		3-4" GRASS	A		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		3-4" GRASS	A		2.0L	9.999 mL/mx					
7	MON 301286	54oz/a		3-4" GRASS	A		2.0L	56.25 mL/mx		107	201	304	411
	MON 51817	20oz/a		3-4" GRASS	A		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		3-4" GRASS	A		2.0L	9.999 mL/mx					
8	ROUNDUP POWER MAX	32oz/a		6-8" GRASS	B		2.0L	33.33 mL/mx		108	206	301	412
	MON 51817	20oz/a		6-8" GRASS	B		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		6-8" GRASS	B		2.0L	9.999 mL/mx					
9	ROUNDUP POWER MAX	28.4oz/a		6-8" GRASS	B		2.0L	29.58 mL/mx		109	207	312	403
	MON 51817	20oz/a		6-8" GRASS	B		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		6-8" GRASS	B		2.0L	9.999 mL/mx					
10	ROUNDUP POWER MAX	32oz/a		6-8" GRASS	B		2.0L	33.33 mL/mx		110	208	310	401
	XTENDIMAX VAPORGRIP	22oz/a		6-8" GRASS	B			22.92 mL/mx					
	MON 51817	20oz/a		6-8" GRASS	B		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		6-8" GRASS	B		2.0L	9.999 mL/mx					
11	MON 301286	48oz/a		6-8" GRASS	B		2.0L	50.0 mL/mx		111	203	311	404
	MON 51817	20oz/a		6-8" GRASS	B		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		6-8" GRASS	B		2.0L	9.999 mL/mx					
12	MON 301286	48oz/a		6-8" GRASS	B		2.0L	50.0 mL/mx		112	204	308	410
	ROUNDUP POWER MAX	3.5oz/a		6-8" GRASS	B		2.0L	3.646 mL/mx					
	MON 51817	20oz/a		6-8" GRASS	B		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		6-8" GRASS	B		2.0L	9.999 mL/mx					
13	MON 301286	54oz/a		6-8" GRASS	B		2.0L	56.25 mL/mx		113	205	309	408
	MON 51817	20oz/a		6-8" GRASS	B		2.0L	20.83 mL/mx					
	INTACT	0.5% v/v		6-8" GRASS	B		2.0L	9.999 mL/mx					

**University of Tennessee**

**DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto**

Trial ID:HN21USADHB

Location:JACKSON

Trial Year:2021

Protocol ID:HN21USADHB

Investigator (Creator):Dr. Larry Steckel

Reps: 4

Plots: 5 by 30 feet

Appl. Amount: 15 GAL/AC

Trt No.	Treatment Name	Lot Code	Rate Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx		101	202	310	403
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
2	2MON 301668 MAULER	553	30oz/a	PRE	A		2.0L	31.25 mL/mx		102	201	302	411
	MAULER	480	8oz/a	PRE	A		2.0L	8.333 mL/mx					
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
3	3MON 301668	553	30oz/a	PRE	A		2.0L	31.25 mL/mx		103	205	312	413
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
4	4WARRANT ULTRA HERBICIDE	413	50oz/a	PRE	A		2.0L	52.08 mL/mx		104	203	301	409
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
5	5FIERCE EZ	364.2	6oz/a	PRE	A		2.0L	6.25 mL/mx		105	210	303	410
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
6	6VALOR EZ	480	2oz/a	PRE	A		2.0L	2.083 mL/mx		106	204	311	401
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
7	7AUTHORITY MTZ	45	10oz/a	PRE	A		2.0L	9.986 g/mx		107	213	306	404
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
8	8MON 301668	553	30oz/a	PRE	A		2.0L	31.25 mL/mx		108	212	308	402
	MAULER	480	8oz/a	PRE	A		2.0L	8.333 mL/mx					
	XTENDIMAX VAPORGRIP	350	22oz/a	PRE	A		2.0L	22.92 mL/mx					
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
	INTACT DRIFT CONTROL & FOLIAR	43.2	0.5% v/v	PRE	A		2.0L	9.999 mL/mx					
	MON 51817	394	20oz/a	PRE	A		2.0L	20.83 mL/mx					
9	9MON 301668	553	30oz/a	PRE	A		2.0L	31.25 mL/mx		109	211	313	407
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
	XTENDIMAX VAPORGRIP	350	22oz/a	PRE	A		2.0L	22.92 mL/mx					
	INTACT DRIFT CONTROL & FOLIAR	43.2	0.5% v/v	PRE	A		2.0L	9.999 mL/mx					
	MON 51817	394	20oz/a	PRE	A		2.0L	20.83 mL/mx					
10	10WARRANT ULTRA HERBICIDE	413	50oz/a	PRE	A		2.0L	52.08 mL/mx		110	207	304	412
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
	XTENDIMAX VAPORGRIP	350	22oz/a	PRE	A		2.0L	22.92 mL/mx					
	INTACT DRIFT CONTROL & FOLIAR	43.2	0.5% v/v	PRE	A		2.0L	9.999 mL/mx					
	MON 51817	394	20oz/a	PRE	A		2.0L	20.83 mL/mx					
11	11FIERCE EZ	364.2	6oz/a	PRE	A		2.0L	6.25 mL/mx		111	208	305	408
	ROUNDUP POWERMAX 3	575	30oz/a	PRE	A		2.0L	31.25 mL/mx					
	CLASS ACT RIDION	100	1% v/v	PRE	A		2.0L	20.0 mL/mx					
	XTENDIMAX VAPORGRIP	350	22oz/a	PRE	A		2.0L	22.92 mL/mx					
	INTACT DRIFT CONTROL & FOLIAR	43.2	0.5% v/v	PRE	A		2.0L	9.999 mL/mx					
	MON 51817	394	20oz/a	PRE	A		2.0L	20.83 mL/mx					

# University of Tennessee

## DIC Paired Soil Residual/ Soybean No-Till/PRE/Efficacy and Phyto

Trial ID:HN21USADHB  
 Protocol ID:HN21USADHB  
 Project ID:

Location:JACKSON  
 Investigator (Creator):Dr. Larry Steckel  
 Study Director:  
 Sponsor Contact:

Trial Year:2021

Reps: 4

Plots: 5 by 30 feet

Appl. Amount: 15 GAL/AC

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code	Rate	Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
12	VALOR EZ			SC	480	2oz/a		PRE	A	2.0L		2.083 mL/mx		112	209	307	405
	ROUNDUP POWERMAX 3			SL	575	30oz/a		PRE	A	2.0L		31.25 mL/mx					
	CLASS ACT RIDION			XL	100	1% v/v		PRE	A	2.0L		20.0 mL/mx					
	XTENDIMAX VAPORGRIP			LF	350	22oz/a		PRE	A	2.0L		22.92 mL/mx					
	INTACT DRIFT CONTROL & FOLIAR			XL	43.2	0.5% v/v		PRE	A	2.0L		9.999 mL/mx					
	MON 51817			SL	394	20oz/a		PRE	A	2.0L		20.83 mL/mx					
13	AUTHORITY MTZ			WG	45	10oz/a		PRE	A	2.0L		9.986 g/mx		113	206	309	406
	ROUNDUP POWERMAX 3			SL	575	30oz/a		PRE	A	2.0L		31.25 mL/mx					
	CLASS ACT RIDION			XL	100	1% v/v		PRE	A	2.0L		20.0 mL/mx					
	XTENDIMAX VAPORGRIP			LF	350	22oz/a		PRE	A	2.0L		22.92 mL/mx					
	INTACT DRIFT CONTROL & FOLIAR			XL	43.2	0.5% v/v		PRE	A	2.0L		9.999 mL/mx					
	MON 51817			SL	394	20oz/a		PRE	A	2.0L		20.83 mL/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
507.812	mL	ROUNDUP POWERMAX 3			SL	575
324.965	mL	CLASS ACT RIDION			XL	100
156.250	mL	MON 301668			CS	553
20.833	mL	MAULER			SL	480
130.208	mL	WARRANT ULTRA HERBICIDE			CS	413
15.625	mL	FIERCE EZ			SC	364.2
5.208	mL	VALOR EZ			SC	480
24.964	g	AUTHORITY MTZ			WG	45
67.213	mL	XTENDIMAX VAPORGRIP			LF	350
74.992	mL	INTACT DRIFT CONTROL & FOLIAR			XL	43.2
156.250	mL	MON 51817			SL	394

- \* 'Per area' calculations based on 4 replicates of 5 by 30 feet 'Plot' experimental units (area of one treatment).
- \* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).
- \* Product amount calculations increased 25 % for overage adjustment.
- \* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.





# University of Tennessee

## COTTON

Trial ID:SHULTZ COTTON      Location:JACKSON      Trial Year:2021  
 Protocol ID:SHULTZ COTTON      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:  
    Sponsor Contact:

Reps: 4      Plots: 9.5 by 30 feet  
 Appl. Amount: 15 GAL/AC      Mix Size: 2 L (total for 4 plots; minimum=1.486 L)

Trt No.	Treatment Name	Rate	Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	WARRANT	24oz/a		PRE	A	2.0L		25.0 mL/mx		101	207	305	403
2	WARRANT	24oz/a		PRE	A	2.0L		25.0 mL/mx		102	205	302	406
	XTENDIMAX	22oz/a		4-5 LEAF	B	2.0L		22.92 mL/mx					
	WARRANT	24oz/a		4-5 LEAF	B	2.0L		25.0 mL/mx					
	ROUNDUP PMAX3	20oz/a		4-5 LEAF	B	2.0L		20.83 mL/mx					
	VAPORGRIP XTRA	20oz/a		4-5 LEAF	B	2.0L		20.83 mL/mx					
	INTACT	0.5% v/v		4-5 LEAF	B	2.0L		9.999 mL/mx					
3	WARRANT	24oz/a		PRE	A	2.0L		25.0 mL/mx		103	202	303	401
	ENGENIA	12.8oz/a		4-5 LEAF	B	2.0L		13.33 mL/mx					
	OUTLOOK	12.8oz/a		4-5 LEAF	B	2.0L		13.33 mL/mx					
	ROUNDUP PMAX3	20oz/a		4-5 LEAF	B	2.0L		20.83 mL/mx					
	SENTRIS	8oz/a		4-5 LEAF	B	2.0L		8.333 mL/mx					
	INTACT	0.5% v/v		4-5 LEAF	B	2.0L		9.999 mL/mx					
4	WARRANT	24oz/a		PRE	A	2.0L		25.0 mL/mx		104	201	304	407
	ENGENIA	12.8oz/a		4-5 LEAF	B	2.0L		13.33 mL/mx					
	PROWL H2O	32oz/a		4-5 LEAF	B	2.0L		33.33 mL/mx					
	ROUNDUP PMAX3	20oz/a		4-5 LEAF	B	2.0L		20.83 mL/mx					
	SENTRIS	8oz/a		4-5 LEAF	B	2.0L		8.333 mL/mx					
	INTACT	0.5% v/v		4-5 LEAF	B	2.0L		9.999 mL/mx					
5	WARRANT	24oz/a		PRE	A	2.0L		25.0 mL/mx		105	206	307	405
	ENGENIA	12.8oz/a		4-5 LEAF	B	2.0L		13.33 mL/mx					
	OUTLOOK	12.8oz/a		4-5 LEAF	B	2.0L		13.33 mL/mx					
	PROWL H2O	32oz/a		4-5 LEAF	B	2.0L		33.33 mL/mx					
	ROUNDUP PMAX3	20oz/a		4-5 LEAF	B	2.0L		20.83 mL/mx					
	SENTRIS	8oz/a		4-5 LEAF	B	2.0L		8.333 mL/mx					
	INTACT	0.5% v/v		4-5 LEAF	B	2.0L		9.999 mL/mx					
6	WARRANT	24oz/a		PRE	A	2.0L		25.0 mL/mx		106	204	306	402
	ENGENIA	12.8oz/a		4-5 LEAF	B	2.0L		13.33 mL/mx					
	DUAL MAGNUM	16oz/a		4-5 LEAF	B	2.0L		16.67 mL/mx					
	ROUNDUP PMAX3	20oz/a		4-5 LEAF	B	2.0L		20.83 mL/mx					
	SENTRIS	8oz/a		4-5 LEAF	B	2.0L		8.333 mL/mx					
	INTACT	0.5% v/v		4-5 LEAF	B	2.0L		9.999 mL/mx					
7	PROWL H2O	32oz/a		PRE	A	2.0L		33.33 mL/mx		107	203	301	404
	ENGENIA	12.8oz/a		4-5 LEAF	B	2.0L		13.33 mL/mx					
	ROUNDUP PMAX3	20oz/a		4-5 LEAF	B	2.0L		20.83 mL/mx					
	SENTRIS	8oz/a		4-5 LEAF	B	2.0L		8.333 mL/mx					
	INTACT	0.5% v/v		4-5 LEAF	B	2.0L		9.999 mL/mx					
	ZIDUA SC	3.2oz/a		4-5 LEAF	B	2.0L		3.333 mL/mx					
	AMS	250lb/a		4-5 LEAF	B	2.0L		3994.2 g/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

# University of Tennessee

## DIC Paired Soil Residual/Cotton Conventional Tillage/PRE/Efficacy and Phyto

Trial ID:HN21USADHC  
 Protocol ID:HN21USADHC  
 Project ID:

Location:JACKSON  
 Investigator (Creator):Dr. Larry Steckel  
 Study Director:  
 Sponsor Contact:

Trial Year:2021

Reps: 4		Plots: 6.33 by 30 feet		Mix Size: 2 L (total for 4 plots; minimum=0.99 L)									
Appl. Amount: 15 GAL/AC		Rate		Appl	Appl	Mix	Mix	Amt	Product	Rep			
Trt	Treatment	Rate	Unit	Timing	Code	Size	Unit	to Measure		1	2	3	4
No.	Name												
1	UNTREATED			CHECK						101	203	308	401
2	WARRANT	48oz/a		PRE	A	2.0L		50.0 mL/mx		102	209	311	402
3	COTORAN	24oz/a		PRE	A	2.0L		25.0 mL/mx		103	206	301	405
4	CAPAROL 4L	24oz/a		PRE	A	2.0L		25.0 mL/mx		104	207	304	403
5	DIREX L	24oz/a		PRE	A	2.0L		25.0 mL/mx		105	204	309	408
6	MON 51817	20oz/a		PRE	A	2.0L		20.83 mL/mx		106	205	302	404
	XTENDIMAX VAPORGRIP	22oz/a		PRE	A	2.0L		22.92 mL/mx					
	WARRANT	48oz/a		PRE	A	2.0L		50.0 mL/mx					
7	COTORAN	24oz/a		PRE	A	2.0L		25.0 mL/mx		107	202	305	411
	XTENDIMAX VAPORGRIP	22oz/a		PRE	A	2.0L		22.92 mL/mx					
	MON 51817	20oz/a		PRE	A	2.0L		20.83 mL/mx					
8	CAPAROL 4L	24oz/a		PRE	A	2.0L		25.0 mL/mx		108	211	307	409
	XTENDIMAX VAPORGRIP	22oz/a		PRE	A	2.0L		22.92 mL/mx					
	MON 51817	20oz/a		PRE	A	2.0L		20.83 mL/mx					
	INTACT	0.5% v/v		PRE	A	2.0L		9.999 mL/mx					
9	DIREX L	24oz/a		PRE	A	2.0L		25.0 mL/mx		109	201	306	407
	XTENDIMAX VAPORGRIP	22oz/a		PRE	A	2.0L		22.92 mL/mx					
	MON 51817	20oz/a		PRE	A	2.0L		20.83 mL/mx					
10	WARRANT ULTRA	50oz/a		PRE	A	2.0L		52.08 mL/mx		110	208	310	406
11	WARRANT ULTRA	50oz/a		PRE	A	2.0L		52.08 mL/mx		111	210	303	410
	XTENDIMAX VAPORGRIP	22oz/a		PRE	A	2.0L		22.92 mL/mx					
	MON 51817	20oz/a		PRE	A	2.0L		20.83 mL/mx					
	INTACT	0.5% v/v		PRE	A	2.0L		9.999 mL/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc.	Form Unit	Form Type	Lot Code
125.000	mL	WARRANT			CS	359
62.500	mL	COTORAN			SL	480
62.500	mL	CAPAROL 4L			SL	480
62.500	mL	DIREX L			SL	480
130.208	mL	MON 51817			SL	394
143.229	mL	XTENDIMAX VAPORGRIP			SL	350
24.997	mL	INTACT			XL	43.2
130.208	mL	WARRANT ULTRA			CS	413

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.

\* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

# University of Tennessee

**DIC+GLU tankmix/Bareground/Efficacy**

Trial ID:hn21usadhe      Location:JACKSON      Trial Year:2021  
 Protocol ID:hn21usadhe      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:  
    Sponsor Contact:

Reps: 4      Plots: 10 by 30 feet  
 Appl. Amount: 15 GAL/AC      Mix Size: 2 L (total for 4 plots; minimum=1.564 L)

Trt	Treatment	Rate	Appl	Appl	Mix	Mix	Amt	Product	Rep	1	2	3	4
No.	Name	Rate	Unit	Timing	Code	Size	Unit	to Measure					
	1UNTREATED									101	209	312	405
	2XTENDIMAX VAPORGRIP	22oz/a		POST	A	2.0L		22.92 mL/mx		102	208	306	404
	MON 51817	20oz/a		POST	A	2.0L		20.83 mL/mx					
	INTACT	0.5% v/v		POST	A	2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v		POST	A	2.0L		20.0 mL/mx					
	3LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx		103	204	305	407
	N-PAK AMS LIQUID			POST	A								
	4ROUNDUP POWERMAX 3	30oz/a		POST	A	2.0L		31.25 mL/mx		104	210	309	415
	XTENDIMAX VAPORGRIP	22oz/a		POST	A	2.0L		22.92 mL/mx					
	MON 51817	20oz/a		POST	A	2.0L		20.83 mL/mx					
	INTACT	0.5% v/v		POST	A	2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v		POST	A	2.0L		20.0 mL/mx					
	5XTENDIMAX VAPORGRIP	22oz/a		POST	A	2.0L		22.92 mL/mx		105	215	308	411
	MON 51817	20oz/a		POST	A	2.0L		20.83 mL/mx					
	INTACT	0.5% v/v		POST	A	2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v		POST	A	2.0L		20.0 mL/mx					
	LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx					
	6ROUNDUP POWERMAX 3	30oz/a		POST	A	2.0L		31.25 mL/mx		106	202	301	409
	XTENDIMAX VAPORGRIP	22oz/a		POST	A	2.0L		22.92 mL/mx					
	MON 51817	20oz/a		POST	A	2.0L		20.83 mL/mx					
	INTACT	0.5% v/v		POST	A	2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v		POST	A	2.0L		20.0 mL/mx					
	LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx					
	7												
	8LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx		108	212	314	406
	MON 301668	30oz/a		POST	A	2.0L		31.25 mL/mx					
	N-PAK AMS LIQUID	2% v/v		POST	A	2.0L		40.0 mL/mx					
	9ROUNDUP POWERMAX 3	30oz/a		POST	A	2.0L		31.25 mL/mx		109	211	303	410
	LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx					
	MON 301668	30oz/a		POST	A	2.0L		31.25 mL/mx					
	N-PAK AMS LIQUID	2% v/v		POST	A	2.0L		40.0 mL/mx					
	10LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx		110	206	304	401
	WARRANT ULTRA HERBICIDE	50oz/a		POST	A	2.0L		52.08 mL/mx					
	N-PAK AMS LIQUID	2% v/v		POST	A	2.0L		40.0 mL/mx					

# University of Tennessee

**DIC+GLU tankmix/Bareground/Efficacy**

Trial ID:hn21usadhe      Location:JACKSON      Trial Year:2021  
 Protocol ID:hn21usadhe      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:  
    Sponsor Contact:

Reps: 4		Plots: 10 by 30 feet				Mix Size: 2 L (total for 4 plots; minimum=1.564 L)						
Appl. Amount: 15 GAL/AC		Trt Treatment				Rep						
No.	Name	Rate	Unit	Timing	Code	Mix Size	Mix Unit	Amt to Measure	1	2	3	4
12	DURANGO DMA	36oz/a		POST	A	2.0L		37.5 mL/mx	112	213	310	414
	ENLIST ONE	32oz/a		POST	A	2.0L		33.33 mL/mx				
	N-PAK AMS LIQUID	2% v/v		POST	A	2.0L		40.0 mL/mx				
13	LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx	113	203	313	412
	ENLIST ONE	32oz/a		POST	A	2.0L		33.33 mL/mx				
	N-PAK AMS LIQUID	2% v/v		POST	A	2.0L		40.0 mL/mx				
14	DURANGO DMA	36oz/a		POST	A	2.0L		37.5 mL/mx	114	205	315	413
	LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx				
	ENLIST ONE	32oz/a		POST	A	2.0L		33.33 mL/mx				
	N-PAK AMS LIQUID	2% v/v		POST	A	2.0L		40.0 mL/mx				
15	DURANGO DMA	36oz/a		POST	A	2.0L		37.5 mL/mx	115	214	311	402
	OUTLOOK	14oz/a		POST	A	2.0L		14.58 mL/mx				
	LIBERTY 280	32oz/a		POST	A	2.0L		33.33 mL/mx				
	ENLIST ONE	32oz/a		POST	A	2.0L		33.33 mL/mx				
	N-PAK AMS LIQUID	2% v/v		POST	A	2.0L		40.0 mL/mx				

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
171.875mL		XTENDIMAX VAPORGRIP			L	350
156.250mL		MON 51817			SL	394
74.992mL		INTACT			L	43.2
149.984mL		CLASS ACT RIDION			L	100
458.333mL		LIBERTY 280			SL	280
349.962mL		N-PAK AMS LIQUID			L	34
156.250mL		ROUNDUP POWERMAX 3			SL	575
156.250mL		MON 301668			CS	553
65.104mL		WARRANT ULTRA HERBICIDE			CS	413
140.625mL		DURANGO DMA			L	646.92
166.667mL		ENLIST ONE			L	455.24
18.229mL		OUTLOOK			EC	719

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).  
 \* Product amount calculations increased 25 % for overage adjustment.  
 \* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

# University of Tennessee

## A23372A: Crop Tolerance and Efficacy in No-Till Soybean (University)

Trial ID:USSG0H1012021	Location:University of Tennessee	Trial Year:2021
Protocol ID:HSM051A4-2021US	Investigator (Creator):James Holloway	
Master Protocol ID:	Study Director:Brett Miller	
Official Trial ID:	Sponsor Contact:Pete Eure	
Conducted Under GEP:No	Trial Origin:P public institution trial	

Reps: 4		Plots: 5 by 30 feet		Mix Size: 2 L (total for 4 plots; minimum=0.782 L)								
Appl. Amount: 15 GAL/AC		Rate		Appl	Mix	Mix	Amt	Product	Rep			
Trt	Treatment	Rate	Unit	Timing	Code	Size	Unit	to Measure	1	2	3	4
No.	Name	Rate	Unit	Timing	Code	Size	Unit	to Measure	1	2	3	4
1	CHECK								101	208	309	404
2	NIS	0.25%	v/v	PREPLANT	A	2.0L		5.0 mL/mx	102	204	301	410
	A23372 [A]	2430g	ai/ha	PREPLANT	A	2.0L		69.88 mL/mx				
	GRAMOXONE SL 3.0	842g	ai/ha	PREPLANT	A	2.0L		33.34 mL/mx				
3	AMSOL	2.5%	v/v	PREPLANT	A	2.0L		50.0 mL/mx	103	211	310	402
	A23372 [A]	2430g	ai/ha	PREPLANT	A	2.0L		69.88 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	1260g	ae/ha	PREPLANT	A	2.0L		33.26 mL/mx				
4	VOLT-EDGE	1.46l/ha		PREPLANT	A	2.0L		20.81 mL/mx	104	207	311	403
	INTACT	0.5%	v/v	PREPLANT	A	2.0L		10.0 mL/mx				
	CLASS ACT RIDION	1%	v/v	PREPLANT	A	2.0L		20.0 mL/mx				
	A23372 [A]	2430g	ai/ha	PREPLANT	A	2.0L		69.88 mL/mx				
	XTENDIMAX 2.9 SL	563g	ae/ha	PREPLANT	A	2.0L		22.92 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	1260g	ae/ha	PREPLANT	A	2.0L		33.26 mL/mx				
5	NIS	0.25%	v/v	PREPLANT	A	2.0L		5.0 mL/mx	105	209	307	408
	BOUNDARY 6.5 EC	1820g	ai/ha	PREPLANT	A	2.0L		33.37 mL/mx				
	GRAMOXONE SL 3.0	842g	ai/ha	PREPLANT	A	2.0L		33.34 mL/mx				
6	AMSOL	2.5%	v/v	PREPLANT	A	2.0L		50.0 mL/mx	106	205	308	409
	BOUNDARY 6.5 EC	1820g	ai/ha	PREPLANT	A	2.0L		33.37 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	1260g	ae/ha	PREPLANT	A	2.0L		33.26 mL/mx				
7	VOLT-EDGE	1.46l/ha		PREPLANT	A	2.0L		20.81 mL/mx	107	202	305	406
	INTACT	0.5%	v/v	PREPLANT	A	2.0L		10.0 mL/mx				
	CLASS ACT RIDION	1%	v/v	PREPLANT	A	2.0L		20.0 mL/mx				
	BOUNDARY 6.5 EC	1820g	ai/ha	PREPLANT	A	2.0L		33.37 mL/mx				
	XTENDIMAX 2.9 SL	563g	ae/ha	PREPLANT	A	2.0L		22.92 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	1260g	ae/ha	PREPLANT	A	2.0L		33.26 mL/mx				
8	AMSOL	2.5%	v/v	PREPLANT	A	2.0L		50.0 mL/mx	108	210	303	401
	PREMIUM MSO	1%	v/v	PREPLANT	A	2.0L		20.0 mL/mx				
	ZIDUA PRO 4.09 SC	161g	ai/ha	PREPLANT	A	2.0L		4.683 mL/mx				
	GRAMOXONE SL 3.0	842g	ai/ha	PREPLANT	A	2.0L		33.34 mL/mx				
9	AMSOL	2.5%	v/v	PREPLANT	A	2.0L		50.0 mL/mx	109	203	304	411
	ZIDUA PRO 4.09 SC	161g	ai/ha	PREPLANT	A	2.0L		4.683 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	1260g	ae/ha	PREPLANT	A	2.0L		33.26 mL/mx				
	PREMIUM MSO	1%	v/v	PREPLANT	A	2.0L		20.0 mL/mx				
10	VOLT-EDGE	1.46l/ha		PREPLANT	A	2.0L		20.81 mL/mx	110	206	302	407
	INTACT	0.5%	v/v	PREPLANT	A	2.0L		10.0 mL/mx				
	CLASS ACT RIDION	1%	v/v	PREPLANT	A	2.0L		20.0 mL/mx				
	ZIDUA PRO 4.09 SC	161g	ai/ha	PREPLANT	A	2.0L		4.683 mL/mx				
	XTENDIMAX 2.9 SL	563g	ae/ha	PREPLANT	A	2.0L		22.92 mL/mx				
	ROUNDUP POWERMAX 4.5 SL	1260g	ae/ha	PREPLANT	A	2.0L		33.26 mL/mx				
	PREMIUM MSO	1%	v/v	PREPLANT	A	2.0L		20.0 mL/mx				
	VOLT-EDGE	1.46l/ha		PREPLANT	A	2.0L		20.81 mL/mx				

11INTACT	0.5% v/v	PREPLANT A	2.0L	10.0 mL/mx	111 201 306 405
CLASS ACT RIDION	1% v/v	PREPLANT A	2.0L	20.0 mL/mx	
AUTHORITY ELITE 7.0 SL	1530g ai/ha	PREPLANT A	2.0L	26.0 mL/mx	
XTENDIMAX 2.9 SL	563g ae/ha	PREPLANT A	2.0L	22.92 mL/mx	
ROUNDUP POWERMAX 4.5 SL	1260g ae/ha	PREPLANT A	2.0L	33.26 mL/mx	
PREMIUM MSO	1% v/v	PREPLANT A	2.0L	20.0 mL/mx	

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
12.500	mL	NIS			SL	
262.038	mL	A23372 [A]	495.700000	gA/L	ZC	
125.022	mL	GRAMOXONE SL 3.0	360.000000	gA/L	SL	
250.000	mL	AMSOL			SL	
291.025	mL	ROUNDUP POWERMAX 4.5 SL	540.000000	gAE/L	SL	
104.056	mL	VOLT-EDGE			L	
50.000	mL	INTACT			SL	
100.000	mL	CLASS ACT RIDION			SL	
114.580	mL	XTENDIMAX 2.9 SL	350.200000	gAE/L	SL	
125.126	mL	BOUNDARY 6.5 EC	777.500000	gA/L	EC	
100.000	mL	PREMIUM MSO			SL	
17.560	mL	ZIDUA PRO 4.09 SC	490.090000	gA/L	SC	
32.501	mL	AUTHORITY ELITE 7.0 SL	838.78	gA/L	SL	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.

\* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.





# University of Tennessee

## BASF Alite 27 Bareground

Trial ID:Alite 27 Bareground      Location:JACKSON      Trial Year:2021  
 Protocol ID:Alite 27 Bareground      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:  
    Sponsor Contact:

Reps: 4      Plots: 5 by 30 feet  
 Appl. Amount: 15 GAL/AC      Mix Size: 2 L (total for 4 plots; minimum=0.782 L)

Trt No.	Treatment Name	Rate	Rate Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	CHECK									101	207	314	408
2	ALITE 27	2	fl oz/a	PRE	A	2.0L		2.083 mL/mx		102	206	313	404
3	ALITE 27	3	fl oz/a	PRE	A	2.0L		3.125 mL/mx		103	211	306	402
4	PROWL H20	32	fl oz/a	PRE	A	2.0L		33.33 mL/mx		104	201	307	414
5	WARRANT	48	fl oz/a	PRE	A	2.0L		50.0 mL/mx		105	203	311	413
6	FLEXSTAR	17	fl oz/a	PRE	A	2.0L		17.71 mL/mx		106	215	305	409
7	DIREX	24	fl oz/a	PRE	A	2.0L		25.0 mL/mx		107	213	301	403
8	ALITE 27	2	fl oz/a	PRE	A	2.0L		2.083 mL/mx		108	204	310	415
	PROWL H20	32	fl oz/a	PRE	A	2.0L		33.33 mL/mx					
9	ALITE 27	3	fl oz/a	PRE	A	2.0L		2.083 mL/mx		109	205	309	407
	WARRANT	48	fl oz/a	PRE	A	2.0L		50.0 mL/mx					
10	ALITE 27	2	fl oz/a	PRE	A	2.0L		2.083 mL/mx		110	212	304	406
	FLEXSTAR	17	fl oz/a	PRE	A	2.0L		17.71 mL/mx					
11	ALITE 27	2	fl oz/a	PRE	A	2.0L		2.083 mL/mx		111	214	315	401
	DIREX	24	fl oz/a	PRE	A	2.0L		25.0 mL/mx					
12	ALITE 27	3	fl oz/a	PRE	A	2.0L		3.125 mL/mx		112	202	303	405
	PROWL H20	32	fl oz/a	PRE	A	2.0L		33.33 mL/mx					
13	ALITE 27	3	fl oz/a	PRE	A	2.0L		3.125 mL/mx		113	208	312	410
	WARRANT	48	fl oz/a	PRE	A	2.0L		50.0 mL/mx					
14	ALITE 27	3	fl oz/a	PRE	A	2.0L		3.125 mL/mx		114	210	308	411
	FLEXSTAR	17	fl oz/a	PRE	A	2.0L		17.71 mL/mx					
15	ALITE 27	3	fl oz/a	PRE	A	2.0L		3.125 mL/mx		115	209	302	412
	DIREX	24	fl oz/a	PRE	A	2.0L		25.0 mL/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
32.552mL		ALITE 27	4	lb/gal	SL	
125.000mL		PROWL H20	3.8	lb/gal	CS	
187.500mL		WARRANT	359	gA/L	CS	
66.406mL		FLEXSTAR	1.88	lb/gal	SL	
93.750mL		DIREX	4	lb/gal	CS	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.

# University of Tennessee

## XtendFlex Soybean Herbicide Recommendations

Trial ID:HP21USAMG1<sup>†</sup>  
 Protocol ID:HP21USAMG1<sup>†</sup>  
 Project ID:

Location:JACKSON  
 Investigator (Creator):Dr. Larry Steckel  
 Study Director:  
 Sponsor Contact:

Trial Year:2021

Reps: 4

Plots: 5 by 30 feet

Appl. Amount: 15 GAL/AC

Mix Size: 2 L (total for 4 plots; minimum=0.782 L)

Trt	Treatment	Rate	Appl	Appl	Mix	Mix	Amt	Product	Rep	1	2	3	4
No.	Name	Rate	Unit	Timing	Code	Size	Unit	to Measure					
	1Untreated Check									101	211	315	403
	2XTENDIMAX VAPORGRIP	22oz/a	PRE	A		2.0L		22.92 mL/mx		102	215	310	415
	MON 51817	20oz/a	PRE	A		2.0L		20.83 mL/mx					
	MON 301668	30oz/a	PRE	A		2.0L		31.25 mL/mx					
	MAULER	8oz/a	PRE	A		2.0L		8.333 mL/mx					
	XTENDIMAX VAPORGRIP	22oz/a	EARLY POST	B		2.0L		22.92 mL/mx					
	MON 51817	20oz/a	EARLY POST	B		2.0L		20.83 mL/mx					
	ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					
	MON 301668	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					
	CLASS ACT RIDION	1% v/v	EARLY POST	B		2.0L		20.0 mL/mx					
	INTACT	0.5% v/v	EARLY POST	B		2.0L		9.999 mL/mx					
	3XTENDIMAX VAPORGRIP	22oz/a	PRE	A		2.0L		22.92 mL/mx		103	212	304	402
	MON 51817	20oz/a	PRE	A		2.0L		20.83 mL/mx					
	MON 301668	30oz/a	PRE	A		2.0L		31.25 mL/mx					
	MAULER	8oz/a	PRE	A		2.0L		8.333 mL/mx					
	LIBERTY 280 SL	32oz/a	EARLY POST	B		2.0L		33.33 mL/mx					
	ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					
	MON 301668	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					
	N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B		2.0L		49.99 mL/mx					
	4XTENDIMAX VAPORGRIP	22oz/a	PRE	A		2.0L		22.92 mL/mx		104	207	306	411
	MON 51817	20oz/a	PRE	A		2.0L		20.83 mL/mx					
	MON 301668	30oz/a	PRE	A		2.0L		31.25 mL/mx					
	MAULER	8oz/a	PRE	A		2.0L		8.333 mL/mx					
	LIBERTY 280 SL	32oz/a	EARLY POST	B		2.0L		33.33 mL/mx					
	ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					
	N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B		2.0L		49.99 mL/mx					
	5XTENDIMAX VAPORGRIP	22oz/a	PRE	A		2.0L		22.92 mL/mx		105	208	311	416
	MON 51817	20oz/a	PRE	A		2.0L		20.83 mL/mx					
	MON 301668	30oz/a	PRE	A		2.0L		31.25 mL/mx					
	MAULER	8oz/a	PRE	A		2.0L		8.333 mL/mx					
	LIBERTY 280 SL	32oz/a	EARLY POST	B		2.0L		33.33 mL/mx					
	SELECT MAX	12oz/a	EARLY POST	B		2.0L		12.5 mL/mx					
	N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B		2.0L		49.99 mL/mx					
	6XTENDIMAX VAPORGRIP	22oz/a	PRE	A		2.0L		22.92 mL/mx		106	204	309	407
	MON 51817	20oz/a	PRE	A		2.0L		20.83 mL/mx					
	FIERCE	3oz/a	PRE	A		2.0L		2.996 g/mx					
	LIBERTY 280 SL	32oz/a	EARLY POST	B		2.0L		33.33 mL/mx					
	ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					
	MON 301668	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					
	N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B		2.0L		49.99 mL/mx					
	7XTENDIMAX VAPORGRIP	22oz/a	PRE	A		2.0L		22.92 mL/mx		107	209	313	412
	MON 51817	20oz/a	PRE	A		2.0L		20.83 mL/mx					
	FIERCE	3oz/a	PRE	A		2.0L		2.996 g/mx					
	XTENDIMAX VAPORGRIP	22oz/a	EARLY POST	B		2.0L		22.92 mL/mx					
	MON 51817	20oz/a	EARLY POST	B		2.0L		20.83 mL/mx					
	ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B		2.0L		31.25 mL/mx					

MON 301668	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
CLASS ACT RIDION	1% v/v	EARLY POST	B	2.0L	20.0 mL/mx				
INTACT	0.5% v/v	EARLY POST	B	2.0L	9.999 mL/mx				
8MON 301668	30oz/a	PRE	A	2.0L	31.25 mL/mx	108	210	316	406
MAULER	8oz/a	PRE	A	2.0L	8.333 mL/mx				
XTENDIMAX VAPORGRIP	22oz/a	EARLY POST	B	2.0L	22.92 mL/mx				
MON 51817	20oz/a	EARLY POST	B	2.0L	20.83 mL/mx				
ROUNDUP POWERMAX 3	30.06oz/a	EARLY POST	B	2.0L	31.31 mL/mx				
MON 301668	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
CLASS ACT RIDION	1% v/v	EARLY POST	B	2.0L	20.0 mL/mx				
INTACT	0.5% v/v	EARLY POST	B	2.0L	9.999 mL/mx				
9MON 301668	30oz/a	PRE	A	2.0L	31.25 mL/mx	109	205	307	409
MAULER	8oz/a	PRE	A	2.0L	8.333 mL/mx				
LIBERTY 280 SL	32oz/a	EARLY POST	B	2.0L	33.33 mL/mx				
ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
MON 301668	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B	2.0L	49.99 mL/mx				
10MON 301668	30oz/a	PRE	A	2.0L	31.25 mL/mx	110	201	303	413
MAULER	8oz/a	PRE	A	2.0L	8.333 mL/mx				
ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
LIBERTY 280 SL	32oz/a	EARLY POST	B	2.0L	33.33 mL/mx				
N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B	2.0L	49.99 mL/mx				
11MON 301668	30oz/a	PRE	A	2.0L	31.25 mL/mx	111	203	302	401
MAULER	8oz/a	PRE	A	2.0L	8.333 mL/mx				
LIBERTY 280 SL	32oz/a	EARLY POST	B	2.0L	33.33 mL/mx				
SELECT MAX	12oz/a	EARLY POST	B	2.0L	12.5 mL/mx				
N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B	2.0L	49.99 mL/mx				
12MON 301668	30oz/a	PRE	A	2.0L	31.25 mL/mx	112	216	305	414
MAULER	8oz/a	PRE	A	2.0L	8.333 mL/mx				
LIBERTY 280 SL	32oz/a	EARLY POST	B	2.0L	33.33 mL/mx				
MON 301668	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
XTENDIMAX VAPORGRIP	22oz/a	EARLY POST	B	2.0L	22.92 mL/mx				
MON 51817	20oz/a	EARLY POST	B	2.0L	20.83 mL/mx				
CLASS ACT RIDION	1% v/v	EARLY POST	B	2.0L	20.0 mL/mx				
INTACT	0.5% v/v	EARLY POST	B	2.0L	9.999 mL/mx				
13MON 301668	30oz/a	PRE	A	2.0L	31.25 mL/mx	113	202	301	408
MAULER	8oz/a	PRE	A	2.0L	8.333 mL/mx				
LIBERTY 280 SL	32oz/a	EARLY POST	B	2.0L	33.33 mL/mx				
MON 301668	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
XTENDIMAX VAPORGRIP	22oz/a	EARLY POST	B	2.0L	22.92 mL/mx				
MON 51817	20oz/a	EARLY POST	B	2.0L	20.83 mL/mx				
CLASS ACT RIDION	1% v/v	EARLY POST	B	2.0L	20.0 mL/mx				
ROUNDUP POWERMAX 3	30oz/a	EARLY POST	B	2.0L	31.25 mL/mx				
INTACT	0.5% v/v	EARLY POST	B	2.0L	9.999 mL/mx				
14MON 301668	30oz/a	PRE	A	2.0L	31.25 mL/mx	114	213	308	404
MAULER	8oz/a	PRE	A	2.0L	8.333 mL/mx				
WARRANT ULTRA	48oz/a	EARLY POST	B	2.0L	50.0 mL/mx				
LIBERTY 280 SL	32oz/a	EARLY POST	B	2.0L	33.33 mL/mx				
N-PAK AMS LIQUID	2.5% v/v	EARLY POST	B	2.0L	49.99 mL/mx				

# University of Tennessee

## XtendFlex Soybean Herbicide Recommendations

Trial ID:HP21USAMG1<sup>†</sup>      Location:JACKSON      Trial Year:2021  
 Protocol ID:HP21USAMG1<sup>†</sup>      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:  
    Sponsor Contact:

Reps: 4		Plots: 5 by 30 feet													
Appl. Amount: 15 GAL/AC		Mix Size: 2 L (total for 4 plots; minimum=0.782 L)													
Trt	Treatment	Rate	Unit	Appl	Code	Mix	Mix	Mix	Amt	Product	Rep	1	2	3	4
No.	Name	Rate	Unit	Timing		Size	Unit	to	Measure						
15	XTENDIMAX VAPORGRIP	22oz/a		PRE	A	2.0L			22.92 mL/mx		115	206	314	410	
	MON 51817	20oz/a		PRE	A	2.0L			20.83 mL/mx						
	WARRANT ULTRA	48oz/a		PRE	A	2.0L			50.0 mL/mx						
	CLASS ACT RIDION	1% v/v		PRE	A	2.0L			20.0 mL/mx						
	INTACT	0.5% v/v		PRE	A	2.0L			9.999 mL/mx						
	XTENDIMAX VAPORGRIP	22oz/a		EARLY POST	B	2.0L			22.92 mL/mx						
	MON 51817	20oz/a		EARLY POST	B	2.0L			20.83 mL/mx						
	ROUNDUP POWERMAX 3	30oz/a		EARLY POST	B	2.0L			31.25 mL/mx						
	MON 301668	30oz/a		EARLY POST	B	2.0L			31.25 mL/mx						
	CLASS ACT RIDION	1% v/v		EARLY POST	B	2.0L			20.0 mL/mx						
	INTACT	0.5% v/v		EARLY POST	B	2.0L			9.999 mL/mx						
16	XTENDIMAX VAPORGRIP	22oz/a		PRE	A	2.0L			22.92 mL/mx		116	214	312	405	
	MON 51817	20oz/a		PRE	A	2.0L			20.83 mL/mx						
	WARRANT ULTRA	48oz/a		PRE	A	2.0L			50.0 mL/mx						
	CLASS ACT RIDION	1% v/v		PRE	A	2.0L			20.0 mL/mx						
	INTACT	0.5% v/v		PRE	A	2.0L			9.999 mL/mx						
	LIBERTY 280 SL	32oz/a		EARLY POST	B	2.0L			33.33 mL/mx						
	ROUNDUP POWERMAX 3	30oz/a		EARLY POST	B	2.0L			31.25 mL/mx						
	MON 301668	30oz/a		EARLY POST	B	2.0L			31.25 mL/mx						
	N-PAK AMS LIQUID	2.5% v/v		EARLY POST	B	2.0L			49.99 mL/mx						

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
401.041	mL	XTENDIMAX VAPORGRIP			SL	
364.583	mL	MON 51817			SL	
820.312	mL	MON 301668			CS	
114.583	mL	MAULER			SL	
429.765	mL	ROUNDUP POWERMAX 3			SL	
199.978	mL	CLASS ACT RIDION			L	
99.989	mL	INTACT			L	
458.333	mL	LIBERTY 280 SL			SL	
562.439	mL	N-PAK AMS LIQUID			L	
31.250	mL	SELECT MAX			EC	
7.489	g	FIERCE			WG	
187.500	mL	WARRANT ULTRA			CS	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.

\* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

# University of Tennessee

Trial ID:SYN VAL                      Location:                      Trial Year:2021  
 Protocol ID:                      Investigator (Creator):Dr. Larry Steckel  
 Project ID:                      Study Director:  
    Sponsor Contact:

Reps: 4		Plots: 5 by 30 feet											
Appl. Amount: 15 GAL/AC		Mix Size: 2 L (total for 4 plots; minimum=0.782 L)											
Trt	Treatment	Rate	Appl	Appl	Mix	Mix	Amt	Product	Rep				
No.	Name	Rate	Unit	Timing	Code	Size	Unit	to Measure		1	2	3	4
1	UNTREATED CHECK									101	202	307	403
2	NIS	0.25% v/v	PRE	A		2.0L		4.999 mL/mx		102	204	308	404
	PREFIX [F]	2.75pt/a	PRE	A		2.0L		45.83 mL/mx					
	METRIBUZIN 75 DF	4oz wt/a	PRE	A		2.0L		3.994 g/mx					
	GRAMOXONE SL 3.0	2pt/a	PRE	A		2.0L		33.33 mL/mx					
	INTACT	0.5% v/v	POST	B		2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v	POST	B		2.0L		20.0 mL/mx					
	TAVIUM PLUS VAPORGRIP TECH	56.4oz/a	POST	B		2.0L		58.75 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	32oz/a	POST	B		2.0L		33.33 mL/mx					
3	NIS	0.25% v/v	PRE	A		2.0L		4.999 mL/mx		103	201	303	401
	BROADAXE 7 SC	22fl oz/a	PRE	A		2.0L		22.92 mL/mx					
	METRIBUZIN 75 DF	4oz wt/a	PRE	A		2.0L		3.994 g/mx					
	GRAMOXONE SL 3.0	2pt/a	PRE	A		2.0L		33.33 mL/mx					
	INTACT	0.5% v/v	POST	B		2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v	POST	B		2.0L		20.0 mL/mx					
	TAVIUM PLUS VAPORGRIP TECH	56.4fl oz/a	POST	B		2.0L		58.75 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	32fl oz/a	POST	B		2.0L		33.33 mL/mx					
4	NIS	0.25% v/v	PRE	A		2.0L		4.999 mL/mx		104	205	306	408
	BOUNDARY 6.5 EC	24fl oz/a	PRE	A		2.0L		25.0 mL/mx					
	GRAMOXONE SL 3.0	2pt/a	PRE	A		2.0L		33.33 mL/mx					
	INTACT	0.5% v/v	POST	B		2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v	POST	B		2.0L		20.0 mL/mx					
	PREFIX [F]	2.33pt/a	POST	B		2.0L		38.83 mL/mx					
	TAVIUM PLUS VAPORGRIP TECH	56.4fl oz/a	POST	B		2.0L		58.75 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	32fl oz/a	POST	B		2.0L		33.33 mL/mx					
5	NIS	0.25% v/v	PRE	A		2.0L		4.999 mL/mx		105	203	301	405
	BROADAXE 7 SC	22fl oz/a	PRE	A		2.0L		22.92 mL/mx					
	METRIBUZIN 75 DF	4oz wt/a	PRE	A		2.0L		3.994 g/mx					
	GRAMOXONE SL 3.0	2pt/a	PRE	A		2.0L		33.33 mL/mx					
	INTACT	0.5% v/v	POST	B		2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v	POST	B		2.0L		20.0 mL/mx					
	PREFIX [F]	2.33pt/a	POST	B		2.0L		38.83 mL/mx					
	XTENDIMAX WITH VAPOR GRIP TECH	22fl oz/a	POST	B		2.0L		22.92 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	32fl oz/a	POST	B		2.0L		33.33 mL/mx					
6	NIS	0.25% v/v	PRE	A		2.0L		4.999 mL/mx		106	208	302	407
	BOUNDARY 6.5 EC	24fl oz/a	PRE	A		2.0L		25.0 mL/mx					
	GRAMOXONE SL 3.0	2pt/a	PRE	A		2.0L		33.33 mL/mx					
	INTACT	0.5% v/v	POST	B		2.0L		9.999 mL/mx					
	CLASS ACT RIDION	1% v/v	POST	B		2.0L		20.0 mL/mx					
	PREFIX [F]	2.33pt/a	POST	B		2.0L		38.83 mL/mx					
	XTENDIMAX WITH VAPOR GRIP TECH	22fl oz/a	POST	B		2.0L		22.92 mL/mx					
	ROUNDUP POWERMAX 4.5 SL	32fl oz/a	POST	B		2.0L		33.33 mL/mx					

# University of Tennessee

Trial ID:SYN VAL                      Location:                      Trial Year:2021  
 Protocol ID:                      Investigator (Creator):Dr. Larry Steckel  
 Project ID:                      Study Director:  
    Sponsor Contact:

Reps: 4                                      Plots: 5 by 30 feet  
 Appl. Amount: 15 GAL/AC                      Mix Size: 2 L (total for 4 plots; minimum=0.782 L)

Trt	Treatment	Rate	Appl	Appl	Mix	Mix	Amt Product	Rep	1	2	3	4
No.	Name	Rate Unit	Timing	Code	Size	Unit	to Measure					
7	ROUNDUP POWERMAX II	32oz/a	PRE	A	2.0L		33.33 mL/mx	107	206	305	406	
	XTENDIMAX	22oz/a	PRE	A	2.0L		22.92 mL/mx					
	FIERCE EZ	6oz/a	PRE	A	2.0L		6.25 mL/mx					
	INDUCE	0.25% v/v	PRE	A	2.0L		4.999 g/mx					
	IN-PLACE	0.5% v/v	PRE	A	2.0L		9.999 mL/mx					
	ROUNDUP POWERMAX II	32oz/a	POST	B	2.0L		33.33 mL/mx					
	XTENDIMAX	22oz/a	POST	B	2.0L		22.92 mL/mx					
	PERPETUO	6oz/a	POST	B	2.0L		6.25 mL/mx					
	INDUCE	0.25% v/v	POST	B	2.0L		4.999 g/mx					
	IN-PLACE	0.5% v/v	POST	B	2.0L		9.999 mL/mx					
8	ROUNDUP POWERMAX II	32oz/a	PRE	A	2.0L		33.33 mL/mx	108	207	304	402	
	XTENDIMAX	22oz/a	PRE	A	2.0L		22.92 mL/mx					
	FIERCE MTZ	1pt/a	PRE	A	2.0L		16.67 mL/mx					
	INDUCE	0.25% v/v	PRE	A	2.0L		4.999 g/mx					
	IN-PLACE	0.5% v/v	PRE	A	2.0L		9.999 mL/mx					
	ROUNDUP POWERMAX II	32oz/a	POST	B	2.0L		33.33 mL/mx					
	XTENDIMAX	22oz/a	POST	B	2.0L		22.92 mL/mx					
	PERPETUO	6oz/a	POST	B	2.0L		6.25 mL/mx					
	INDUCE	0.25% v/v	POST	B	2.0L		4.999 g/mx					
	IN-PLACE	0.5% v/v	POST	B	2.0L		9.999 mL/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
31.247mL		NIS			SL	
202.916mL		PREFIX [F]	631.68	gA/L	EC	
14.978g		METRIBUZIN 75 DF	75	%AW/W	DF	
208.333mL		GRAMOXONE SL 3.0	360	gA/L	SL	
62.493mL		INTACT			SL	
124.986mL		CLASS ACT RIDION			SL	
220.312mL		TAVIUM PLUS VAPORGRIP TECH	406.8	gAE/L	CS	
208.333mL		ROUNDUP POWERMAX 4.5 SL	540	gAE/L	SL	
57.292mL		BROADAXE 7 SC	840	gA/L	SC	
62.500mL		BOUNDARY 6.5 EC	777.5	gA/L	EC	
57.292mL		XTENDIMAX WITH VAPOR GRIP TECH	350	gAE/L	SL	
166.667mL		ROUNDUP POWERMAX II	4.5	LBA/GAL	SL	
114.583mL		XTENDIMAX	2.9	LBAE/GAL	L	
7.812mL		FIERCE EZ	3.04	LB/GAL	SC	
24.997g		INDUCE	100	%	SF	
49.995mL		IN-PLACE			AJ	
15.625mL		PERPETUO			EC	
20.833mL		FIERCE MTZ	2.64	LB/GAL	SC	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.

\* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.

## University of Tennessee

## Evaluate efficacy of AMVAC soybean herbicides when used in a soybean herbicide program (Post)

Trial ID:soy v4		Location:JACKSON		Trial Year:2021									
Protocol ID:soy v4		Investigator (Creator):Dr. Larry Steckel											
Reps: 4		Plots: 7.5 by 30 feet											
Appl. Amount: 15 GAL/AC		Mix Size: 2 L (total for 4 plots; minimum=1.173 L)											
Trt	Treatment	Rate	Appl	Appl	Mix	Mix	Amt	Product	Rep	1	2	3	4
No.	Name	Rate	Unit	Timing	Code	Size	Unit	to Measure					
	1CHECK									101	209	307	403
	2DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		102	208	309	408
	LIBERTY	32oz/a		4" WEEDS	B	2.0L		33.33 mL/mx					
	DUAL II MAGNUM	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	AMS	3lb/a		4" WEEDS	B	2.0L		47.93 g/mx					
	3DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		103	204	302	407
	LIBERTY	32oz/a		4" WEEDS	B	2.0L		33.33 mL/mx					
	CLASSIC	0.5oz/a		4" WEEDS	B	2.0L		0.4993 g/mx					
	DUAL II MAGNUM	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	AMS	3lb/a		4" WEEDS	B	2.0L		47.93 g/mx					
	4DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		104	210	306	404
	LIBERTY	32oz/a		4" WEEDS	B	2.0L		33.33 mL/mx					
	FIRSTRATE	0.4oz/a		4" WEEDS	B	2.0L		0.3994 g/mx					
	DUAL II MAGNUM	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	AMS	3lb/a		4" WEEDS	B	2.0L		47.93 g/mx					
	5DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		105	202	301	406
	ENGENIA	12.8oz/a		4" WEEDS	B	2.0L		13.33 mL/mx					
	ROUNDUP POWERMAX	32oz/a		4" WEEDS	B	2.0L		33.33 mL/mx					
	DUAL II MAGNUM	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	INTACT	0.5% v/v		4" WEEDS	B	2.0L		9.999 mL/mx					
	SENTRIS	8oz/a		4" WEEDS	B	2.0L		8.333 mL/mx					
	6DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		106	203	308	409
	ENGENIA	12.8oz/a		4" WEEDS	B	2.0L		13.33 mL/mx					
	FIRSTRATE	0.4oz/a		4" WEEDS	B	2.0L		0.3994 g/mx					
	ROUNDUP POWERMAX	32oz/a		4" WEEDS	B	2.0L		33.33 mL/mx					
	DUAL II MAGNUM	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	INTACT	0.5% v/v		4" WEEDS	B	2.0L		9.999 mL/mx					
	SENTRIS	8oz/a		4" WEEDS	B	2.0L		8.333 mL/mx					
	7DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		107	201	304	402
	ENGENIA	12.8oz/a		4" WEEDS	B	2.0L		13.33 mL/mx					
	CLASSIC	0.5oz/a		4" WEEDS	B	2.0L		0.4993 g/mx					
	ROUNDUP POWERMAX	32oz/a		4" WEEDS	B	2.0L		33.33 mL/mx					
	DUAL II MAGNUM	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	INTACT	0.5% v/v		4" WEEDS	B	2.0L		9.999 mL/mx					
	SENTRIS	8oz/a		4" WEEDS	B	2.0L		8.333 mL/mx					
	8DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		108	205	303	401
	ENGENIA	12.8oz/a		4" WEEDS	B	2.0L		13.33 mL/mx					
	PYTHON	0.125oz/a		4" WEEDS	B	2.0L		0.1248 g/mx					
	ROUNDUP POWERMAX	32oz/a		4" WEEDS	B	2.0L		33.33 mL/mx					
	DUAL II MAGNUM	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	INTACT	0.5% v/v		4" WEEDS	B	2.0L		9.999 mL/mx					
	SENTRIS	8oz/a		4" WEEDS	B	2.0L		8.333 mL/mx					
	9DUAL II MAGNUM	16oz/a		PRE	A	2.0L		16.67 mL/mx		109	206	310	405
	CLASSIC	0.5oz/a		4" WEEDS	B	2.0L		0.4993 g/mx					
	ASSURE II	12oz/a		4" WEEDS	B	2.0L		12.5 mL/mx					
	REFLEX	16oz/a		4" WEEDS	B	2.0L		16.67 mL/mx					
	AMS	2lb/a		4" WEEDS	B	2.0L		31.95 g/mx					
	COC	1% v/v		4" WEEDS	B	2.0L		20.0 mL/mx					







# University of Tennessee

## Evaluation of improved performance of Callisto on resistant & larger weeds with adding pyridate

Trial ID:21-111                      Location:JACKSON                      Trial Year:2021  
 Protocol ID:21-111                  Investigator (Creator):Dr. Larry Steckel  
 Project ID:                              Study Director:  
    Sponsor Contact:

Reps: 4    Plots: 5 by 30 feet  
 Appl. Amount: 15 GAL/AC                      Mix Size: 2 L (total for 4 plots; minimum=0.782 L)

Trt No.	Treatment Name	Rate	Appl Unit	Appl Timing	Mix Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	DUAL II MAGNUM	1pt/a		PRE	A	2.0L		16.67 mL/mx		101	203	304	402
	ROUNDUP POWERMAX II	32oz/a		POST	B	2.0L		33.33 mL/mx					
2	DUAL II MAGNUM	1pt/a		PRE	A	2.0L		16.67 mL/mx		102	205	303	404
	CALLISTO	3oz/a		POST	B	2.0L		3.125 mL/mx					
	ROUNDUP POWERMAX II	32oz/a		POST	B	2.0L		33.33 mL/mx					
	AMS	2.5% v/v		POST	B	2.0L		49.99 g/mx					
3	DUAL II MAGNUM	1pt/a		PRE	A	2.0L		16.67 mL/mx		103	201	306	405
	CALLISTO	3oz/a		POST	B	2.0L		3.125 mL/mx					
	TOUGH 5EC	8oz/a		POST	B	2.0L		8.333 mL/mx					
	ROUNDUP POWERMAX II	32oz/a		POST	B	2.0L		33.33 mL/mx					
	AMS	2.5% v/v		POST	B	2.0L		49.99 g/mx					
4	DUAL II MAGNUM	1pt/a		PRE	A	2.0L		16.67 mL/mx		104	206	301	406
	BCP1016H	16oz/a		POST	B	2.0L		16.67 mL/mx					
	ROUNDUP POWERMAX II	32oz/a		POST	B	2.0L		33.33 mL/mx					
	AMS	2.5% v/v		POST	B	2.0L		49.99 g/mx					
5	DUAL II MAGNUM	1pt/a		PRE	A	2.0L		16.67 mL/mx		105	204	302	401
	CALLISTO	3oz/a		POST	B	2.0L		3.125 mL/mx					
	TOUGH 5EC	8oz/a		POST	B	2.0L		8.333 mL/mx					
	ATRAZINE 4F	1pt/a		POST	B	2.0L		16.67 mL/mx					
	ROUNDUP POWERMAX II	32oz/a		POST	B	2.0L		33.33 mL/mx					
	AMS	2.5% v/v		POST	B	2.0L		49.99 g/mx					
6	DUAL II MAGNUM	1pt/a		PRE	A	2.0L		16.67 mL/mx		106	202	305	403
	BCP1016H	16oz/a		POST	B	2.0L		16.67 mL/mx					
	ATRAZINE 4F	1pt/a		POST	B	2.0L		16.67 mL/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
125.000mL		DUAL II MAGNUM	7.64	LBA/GAL	EC	
208.333mL		ROUNDUP POWERMAX II	4.5	LBA/GAL	SL	
7.812mL		CALLISTO	4	LB/GAL	SC	4
249.973g		AMS			D	
10.417mL		TOUGH 5EC	5	LBA/GAL	EC	
41.667mL		BCP1016H			EC	
3.906mL		CALLISTO	4	LB/GAL	SC	
10.417mL		TOUGH 5EC	5	LB/GAL	EC	
41.667mL		ATRAZINE 4F	4	LB/GAL	F	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).  
 \* Product amount calculations increased 25 % for overage adjustment.  
 \* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 2 L.



# University of Tennessee

## Preemergence Tolerance and Efficacy of S-metalochlor and linuron

Trial ID:ADAMA SOY 3      Location:JACKSON      Trial Year:2020  
 Protocol ID:ADAMA SOY 3      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:Bob Montgomery  
    Sponsor Contact:

Reps: 4      Plots: 10 by 30 feet  
 Appl. Amount: 15 GAL/AC      Mix Size: 2 L (total for 4 plots; minimum=1.564 L)

Trt No.	Treatment Name	Rate	Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	CHECK									101	211	307	401
2	DUAL MAGNUM	1.33pt/a		PRE	A	2.0L		22.17 mL/mx		102	206	304	411
3	DUAL MAGNUM	1.67pt/a		PRE	A	2.0L		27.83 mL/mx		103	213	310	407
4	DUAL MAGNUM	2.0pt/a		PRE	A	2.0L		33.33 mL/mx		104	212	301	408
5	DUAL MAGNUM	2.5pt/a		PRE	A	2.0L		41.67 mL/mx		105	204	308	410
6	LOROX FL	1.00pt/a		PRE	A	2.0L		16.67 mL/mx		106	205	312	406
7	LOROX FL	1.25pt/a		PRE	A	2.0L		20.83 mL/mx		107	202	313	405
8	LOROX FL	1.5pt/a		PRE	A	2.0L		25.0 mL/mx		108	209	305	403
9	LOROX FL	2pt/a		PRE	A	2.0L		33.33 mL/mx		109	201	311	412
10	LOROX FL	2.25pt/a		PRE	A	2.0L		37.5 mL/mx		110	208	303	404
11	DUAL MAGNUM	1.33pt/a		PRE	A	2.0L		22.17 mL/mx		111	203	306	402
	LOROX FL	1.25pt/a		PRE	A	2.0L		20.83 mL/mx					
12	DUAL MAGNUM	1.67pt/a		PRE	A	2.0L		27.83 mL/mx		112	207	309	413
	LOROX FL	1.5pt/a		PRE	A	2.0L		25.0 mL/mx					
13	DUAL MAGNUM	2.5pt/a		PRE	A	2.0L		41.67 mL/mx		113	210	302	409
	LOROX FL	2pt/a		PRE	A	2.0L		33.33 mL/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
243.125mL		DUAL MAGNUM	7.64	LBA/GAL	EC	
265.625mL		LOROX FL	4	LBA/GAL	F	
27.708mL		DULA MAGNUM	7.64	LBA/GAL	EC	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).  
 \* Product amount calculations increased 25 % for overage adjustment.

# University of Tennessee

## Preemergence Tolerance and Efficacy of S-metalochlor and flumioxazin

Trial ID:ADAMA SOY 2      Location:JACKSON      Trial Year:2020  
 Protocol ID:ADAMA SOY 2      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:Bob Montgomery  
    Sponsor Contact:

Reps: 4      Plots: 10 by 30 feet  
 Appl. Amount: 15 GAL/AC      Mix Size: 2 L (total for 4 plots; minimum=1.564 L)

Trt No.	Treatment Name	Rate	Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	CHECK									101	205	309	408
2	DUAL MAGNUM	1.33pt/a		PRE	A	2.0L		22.17 mL/mx		102	212	311	401
3	DUAL MAGNUM	1.67pt/a		PRE	A	2.0L		27.83 mL/mx		103	201	308	409
4	DUAL MAGNUM	2.0pt/a		PRE	A	2.0L		33.33 mL/mx		104	206	304	411
5	DUAL MAGNUM	2.5pt/a		PRE	A	2.0L		41.67 mL/mx		105	204	305	406
6	VALOR SX	1oz/a		PRE	A	2.0L		0.9986 g/mx		106	207	310	405
7	VALOR SX	2oz/a		PRE	A	2.0L		1.997 g/mx		107	209	303	412
8	VALOR SX	2.5oz/a		PRE	A	2.0L		2.496 g/mx		108	210	306	402
9	VALOR SX	3oz/a		PRE	A	2.0L		2.996 g/mx		109	208	302	403
10	DUAL MAGNUM	1.33pt/a		PRE	A	2.0L		22.17 mL/mx		110	202	301	410
	VALOR SX	1oz/a		PRE	A	2.0L		0.9986 g/mx					
11	DUAL MAGNUM	1.67pt/a		PRE	A	2.0L		27.83 mL/mx		111	203	312	407
	VALOR SX	2oz/a		PRE	A	2.0L		1.997 g/mx					
12	DUAL MAGNUM	2.5pt/a		PRE	A	2.0L		41.67 mL/mx		112	211	307	404
	VALOR SX	2.5oz/a		PRE	A	2.0L		2.496 g/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
270.833mL		DUAL MAGNUM	7.64	LBA/GAL	EC	
17.475g		VALOR SX	51	%WW	DF	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).

\* Product amount calculations increased 25 % for overage adjustment.

# University of Tennessee

## Preemergence Tolerance and Efficacy of Pyroxysulfone and metribuzin

Trial ID:ADAMASOY1      Location:JACKSON      Trial Year:2020  
 Protocol ID:ADAMASOY1      Investigator (Creator):Dr. Larry Steckel  
 Project ID:      Study Director:Bob Montgomery  
 Sponsor Contact:

Reps: 4      Plots: 10 by 30 feet  
 Appl. Amount: 15 GAL/AC      Mix Size: 2 L (total for 4 plots; minimum=1.564 L)

Trt No.	Treatment Name	Rate	Unit	Appl Timing	Appl Code	Mix Size	Mix Unit	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	CHECK									101	210	301	414
2	ZIDUA SC	2.5fl oz/a		PRE	A	2.0L		2.604 mL/mx		102	208	303	413
3	ZIDUA SC	3.75fl oz/a		PRE	A	2.0L		3.906 mL/mx		103	204	305	406
4	ZIDUA SC	5.75fl oz/a		PRE	A	2.0L		5.99 mL/mx		104	214	308	409
5	ZIDUA SC	7fl oz/a		PRE	A	2.0L		7.292 mL/mx		105	211	309	404
6	GLORY	0.333lb/a		PRE	A	2.0L		5.32 g/mx		106	202	314	412
7	GLORY	0.5lb/a		PRE	A	2.0L		7.988 g/mx		107	203	302	405
8	GLORY	0.66lb/a		PRE	A	2.0L		10.54 g/mx		108	209	312	408
9	GLORY	1.0lb/a		PRE	A	2.0L		15.98 g/mx		109	205	311	407
10	GLORY	1.25lb/a		PRE	A	2.0L		19.97 g/mx		110	201	307	411
11	ZIDUA SC	2fl oz/a		PRE	A	2.0L		2.083 mL/mx		111	213	310	402
	GLORY	0.333lb/a		PRE	A	2.0L		5.32 g/mx					
12	ZIDUA SC	2.5fl oz/a		PRE	A	2.0L		2.604 mL/mx		112	207	306	403
	GLORY	0.5lb/a		PRE	A	2.0L		7.988 g/mx					
13	ZIDUA SC	3.75fl oz/a		PRE	A	2.0L		3.906 mL/mx		113	212	313	401
	GLORY	0.66lb/a		PRE	A	2.0L		10.54 g/mx					
14	ZIDUA SC	5.75fl oz/a		PRE	A	2.0L		5.99 mL/mx		114	206	304	410
	GLORY	1.25lb/a		PRE	A	2.0L		19.97 g/mx					

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
42.969mL		ZIDUA SC	4.17	LBA/GAL	SC	
129.532g		GLORY	75	%AW/W	DF	

\* 'Per area' calculations based on application amount= 15 GAL/AC, mix size= 2 L (mix size basis).  
 \* Product amount calculations increased 25 % for overage adjustment.