



2018 Herbicide Evaluation Trials

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The following trials were conducted in corn and soybeans at the Spindletop Research Facility located in Lexington, Kentucky.

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HERBICIDES IN REPORT

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
2,4-D ESTER		
A22102F		SYNGENTA
AG16134		WINFIELD
AG18047		WINFIELD
AATREX	ATRAZINE	SYNGENTA
ABUNDIT EDGE	GLYPHOSATE	DUPONT
ACCUDROP	DEPOSITION AID	WINFIELD
ACURON	S-METOLACHLOR + ATRAZINE + MESOTRIONE + BICYCLOPYRONE	SYNGENTA
ACTIVATOR 90	NON-IONIC SURFACTANT	LOVELAND
AMS	AMMONIUM SULFATE	CLEAN CROP
AMSOL	AMMONIUM SULFATE	WINFIELD
ANTHEM MAXX	PYROXASULFONT + FLUTHIACET-METHYL	FMC
ARMEZON	TOPRAMEZONE	BASF
ARMEZON PRO	TOPRAMEZONE + DIMETHANIMID-P	BASF
AUTHORITY ELITE	SULFENTRAZONE + S-METOLACHLOR	FMC
AUTHORITY MAXX	SULFENTRAZONE + CHLORIMURON-ETHYL	FMC
AUTHORITY MTZ	SULFENTRAZONE + METRIBUZIN	FMC
AUTHORITY SUPREME	SULFENTRAZONE + PYROXASULFONE	FMC
AUTHORITY XL	SULFENTRAZONE	FMC
BALANCE BEAN	ISOXAFLUTOLE	BAYER
BALANCE FLEXX	ISOXAFLUTOLE	BAYER
BICEP II MAGNUM	ATRAZINE + S-METOLACHLOR	SYNGENTA
BOUNDARY	S-METOLACHLOR + METRIBUZIN	SYNGENTA
BROADAXE XC	SULFENTRAZONE + S-METOLACHLOR	SYNGENTA
CALLISTO	MESOTRIONE	SYNGENTA
CAPRENO	THIENCARBOZONE + TEMBOTRIONE	BAYER
CHEMSURF 90	SURFACTANT	WINFIELD
CLARITY	DICAMBA	BASF
CLASS ACT NG	AMMONIUM SULFATE + CORN SYRUP + ALKYL POLYGLUCOSIDE	WINFIELD
CLASS ACT RIDION	WATER CONDITIONER + SURFACTANT	WINFIELD
CLASSIC	CHLORIMURON ETHYL	DUPONT
CORVUS	ISOXAFLUTOLE + THIENCARBAZONE-METHYL	BAYER
COYOTE	S-METOLACHLOR + MESOTRIONE	UNITED PHOSPHORUS INC
CROP OIL CONCENTRATE (COC)		LOVELAND
DEGREE XTRA	ACETOCHLOR + ATRAZINE	MONSANTO
DIFLEXX	DICAMBA	BAYER
DIFLEXX DUO	DICAMBA + TEMBOTRIONE	BAYER

HERBICIDES IN REPORT (CONTINUED)

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
DOWNDRAFT	DRIFT REDUCING AGENT	WINFIELD
DUAL MAGNUM	S-METOLACHLOR	SYNGENTA
DUAL II MAGNUM	S-METOLACHLOR + BENOXACOR	SYNGENTA
DURANGO DMA	GLYPHOSATE	DOW AGROSCIENCE
ENDIGO	LAMBDA-CYHALOTHRIN + THIAMETHOXAM	SYNGENTA
ENGENIA	DICAMBA	BASF
ENLIST DUO	2,4-D(CHOLINE) + GLYPHOSATE	DOW AGROSCIENCE
ENLIST ONE	2,4-D (CHOLINE)	DOW AGROSCIENCE
ENVIVE	FLUMIOXAZIN + THIFENSULFURON	DUPONT
EVERPREX	S-METOLACHLOR	DUPONT
FEXAPAN	DICAMBA	DUPONT
FIERCE	FLUMIOXAZIN + PYROXASULFONE	VALENT
FIERCE EZ	FLUMIOXAZIN + PYROXASULFONE	VALENT
FIERCE MTZ	FLUMIOXAZIN + PYROXASULFONE + METRIBUZIN	VALENT
FLEXSTAR GT	FOMESAFEN + GLYPHOSATE	SYNGENTA
FULTIME NXT	ACETOCHLOR + ATRAZINE	DOW AGROSCIENCE
GRAMOXONE	PARAQUAT	SYNGENTA
HALEX GT	GLYPHOSATE(PS)+ MESOTRIONE + S-METOLACHLOR	SYNGENTA
HARNESS	ACETOCHLOR	MONSANTO
HARNESS XTRA	ACETOCHLOR + ATRAZINE	MONSANTO
HARNESS MAX	ACETOCHLOR + MESOTRIONE	MONSANTO
HEADLINE	PYRACLOSTROBIN	BASF
ICONIC	ADJUVANT	UNITED SUPPLIERS INC
IMPACT	TOPRAMEZONE	AMVAC
IMPACTZ	TOPRAMEZONE + ATRAZINE	AMVAC
INDUCE	NONIONIC SURFACTANT	HELENA
INTACT	DRIFT CONTROL + DEPOSITION AID	PRECISION LABS
INTERLINE	GLUFOSINATE	UNITED PHOSPHORUS INC
INTERLOCK	MODIFIED VEGETABLE OIL	WINFIELD
KEYSTONE NXT	ACETOCHLOR + ATRAZINE	DOW AGROSCIENCE
LAUDIS	TEMBOTRIONE	BAYER
LEXAR EZ	S-METOLACHLOR + ATRAZINE + MESOTRIONE	SYNGENTA
LIBERTY 280	GLUFOSINATE AMMONIUM	BAYER
MIRAVIS TOP	ADEPIDYN	SYNGENTA
MOCCASIN II PLUS	S-METOLACHLOR	UNITED PHOSPHORUS INC
MOCCASIN MTZ	S-METOLACHLOR + METRIBUZIN	UNITED PHOSPHORUS INC
MSO	METHYLATED SEED OIL	LOVELAND

HERBICIDES IN REPORT (CONTINUED)

<u>TRADE NAME</u>	<u>COMMON NAME</u>	<u>COMPANY</u>
NIS	NON-IONIC SURFACTANT	
NPAK AMS LIQUID	AMMONIUM SULFATE	WINFIELD
ONTARGET	DRIFT CONTROL + DEPOSITION AID	WINFIELD
OUTLOOK	DIMETHENAMID-P	BASF
PREFERENCE	SURFACTANT	WINFIELD
PREFIX	S-METOLACHLOR + BENOXACOR	SYNGENTA
PRINCEP	SIMAZINE	SYNGENTA
REFLEX	FOMESAFEN	SYNGENTA
RESICORE	ACETOCHLOR + CLOPYRALID + MESOTRIONE	DOW AGROSCIENCE
ROUNDUP POWERMAX	GLYPHOSATE (POTASSIUM SALT)	MONSANTO
ROUNDUP WEATHERMAX	GLYPHOSATE	MONSANTO
SCEPTER	IMAZAQUIN	BASF
SELECT MAX	CLETHODIM	VALENT
SENCOR	METRIBUZIN	BAYER
SEQUENCE	GLYPHOSATE + S-METOLACHLOR	SYNGENTA
SHARPEN	SAFLUFENACIL	BASF
SOLSTICE	MESOTRIONE + FLUTHIACET-METHYL	FMC
SONIC	SULFENTRAZONE + CLORANSULAM-METHYL	DOW AGROSCIENCE
SPARTAN	SULFENTRAZONE	FMC
STATUS	DIFLUFENZOPYR + DICAMBA	BASF
SURESTART II	ACETOCHLOR + FLUMETSULAM + CLOPYRALID	DOW AGROSCIENCE
SURVEIL	FLUMIOXAZIN + CLORANSULAM-METHLY	DOW AGROSCIENCE
TAVIUM	S-METOLACHLOR + DICAMBA	SYNGENTA
TOUCHDOWN HI-TECH	GLYPHOSATE	SYNGENTA
TRICOR	METRIBUZIN	UNITED PHOSPHORUS INC
TRIPLEFLEX	ACETOCHLOR + CLOPYRALID + FLUMETSULAM	MONSANTO
TRIPZIN	PENDIMETHALIN + METRIBUZIN	UNITED PHOSPHORUS INC
TRIVAPRO	SOLATENOL + AZOXYSTROBIN + PROPICONAZOLE	SYNGENTA
TRIVENCE	CHLORIMURON + METRIBUZIN + FLUMIOXAZIN	DUPONT
ULTRA-LITE	WATER CONDITIONER + SURFACTANT	WINFIELD
VALOR EZ	FLUMIOXAZIN	VALENT
VALOR SX	FLUMIOXAZIN	VALENT
VALOR XLT	FLUMIOXAZIN + CHLORIMURON	VALENT
VERDICT	SAFLUFENACIL + DIMETHENAMID-P	BASF
WARRANT	ACETOCHLOR	MONSANTO
XTENDIMAX WITH VAPORGRIP	DICAMBA + VAPROGRIP TECHNOLOGY	MONSANTO
ZIDUA	PYROXASULFONE	BASF
ZIDUA PRO	PYROXASULFONE + SAFLUFENACIL + IMAZETHAPYR	BASF

DEFINITIONS FOR METHODS OF APPLICATION

PREEMERGENCE

-14D	14 DAYS BEFORE PLANTING
-7DAY/EPP	7 DAYS BEFORE PLANTING
PRE	PREEMERGENCE
INFURROW	IN FURROW

POSTEMERGENCE

EP	EARLY POSTEMERGENCE, WEEDS 0-2"
+EP	EARLY POSTEMERGENCE FOLLOWING A PREEMERGENT
MP	MID-POSTEMERGENCE, WEEDS 2-4"
LP	LATE POSTEMERGENCE, WEEDS 4-6"
V2	SECOND TRIFOLIATE (SOYBEAN), 2 COLLAR CORN
V3	THIRD TRIFOLIATE(SOYBEAN), 3 COLLAR CORN
V4	FOURTH TRIFOLIATE(SOYBEAN), 4 COLLAR CORN
12C	12 INCH CORN
V5	5 UNFOLDED TRIFOLIATES(SOYBEAN), 5 COLLARS(CORN)
21DAP	21 DAYS AFTER PLANTING
28DAP	28 DAYS AFTER PLANTING
R3	BEGINNING POD ON SOYBEAN

ABBREVIATIONS

Crop and Weed Species

<u>ABBR</u>	<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
AMACH	Smooth Pigweed	<i>Amaranthus hybridus</i>
AMBTR	Giant Ragweed	<i>Ambrosia trifida</i>
GLXMA	Soybean	<i>Glycine max</i>
IPOSS	Morningglory	<i>Ipomoea sp.</i>
SETFA	Giant Foxtail	<i>Setaria faberi</i>
ZEAMX	Corn	<i>Zea mays</i>

APRIL CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
04-01-2018	51	41	46	0.03	89	61	56	53			
04-02-2018	49	36	42	0.64	95	81	49	47	50	48	
04-03-2018	77	49	63	0.02	93	50	54	48	57	50	
04-04-2018	47	29	38	0.50	82	44	54	47	56	50	
04-05-2018	54	25	39		90	33	50	44	51	46	
04-06-2018 E	61	34	47	0.01	92	40	55	50			
04-07-2018	42	29	35	0.14	82	59	51	49			
04-08-2018 E	43	26	34		81	35	50	44			
04-09-2018	50	33	41	0.14	97	54	47	44	48	45	
04-10-2018	48	34	41		90	52	47	44	49	46	
04-11-2018	63	30	46		93	39	49	43	50	45	
04-12-2018	77	53	65		57	27	53	47	54	49	
04-13-2018	80	62	71		54	29	55	51	56	52	
04-14-2018	72	60	66	0.64	96	54	55	53	57	55	
04-15-2018	63	42	52	1.57	97	81	55	52	57	54	
04-16-2018	39	33	36	0.04	91	68	52	46	54	49	
04-17-2018	59	32	45		75	42	50	45	52	47	
04-18-2018	75	38	56	0.31	93	46	53	47	55	49	
04-19-2018	51	39	45		70	51	53	49	54	50	
04-20-2018	61	33	47		80	30	53	46	53	48	
04-21-2018	66	38	52		65	30	54	48	54	50	
04-22-2018	70	44	57		60	36	54	50	55	52	
04-23-2018	63	52	57	0.73	95	44	53	52	54	53	
04-24-2018	58	52	55	0.74	96	88	54	52	55	54	
04-25-2018	65	51	58	0.01	95	57	55	53	56	55	
04-26-2018	68	46	57		89	50	56	52	57	54	
04-27-2018	71	47	59		98	34	58	53	58	55	
04-28-2018	60	41	50		68	43	57	54	57	54	
04-29-2018	63	34	48		69	24	57	51	55	52	
04-30-2018	73	38	55		74	23	58	51	55	51	

Summary for the period 4-1-2018 through 4-30-2018:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	61	40	50	5.52	84	47	53	49	54	50	
(Deviation from normal)	-5	-5	-5	+1.64							

MAY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
05-01-2018	80	48	64		64	32	60	52	57	52	
05-02-2018	82	62	72		67	45	62	56	59	55	
05-03-2018	83	66	74		83	50	64	59	61	59	
05-04-2018	75	64	69	0.24	96	62	63	61	62	61	
05-05-2018	66	58	62	0.83	97	93	62	61	62	61	
05-06-2018	78	57	67	1.42	98	49	65	60	63	61	
05-07-2018	73	52	62	0.01	98	58	63	61	62	60	
05-08-2018	79	51	65		83	44	64	59	62	59	
05-09-2018	80	55	67		92	45	65	60	62	60	
05-10-2018	83	69	76		73	41	67	63	64	62	
05-11-2018	85	65	75		87	42	68	64	65	63	
05-12-2018	86	70	78		71	44	69	65	66	64	
05-13-2018	87	66	76		82	48	70	65	67	65	
05-14-2018	90	69	79		80	43	71	66	68	66	
05-15-2018	90	68	79	0.52	95	46	72	68	69	67	
05-16-2018	81	65	73	0.96	96	61	71	68	69	68	
05-17-2018	80	64	72	0.04	97	68	71	68	70	68	
05-18-2018	80	65	72	1.05	96	72	70	68	70	68	
05-19-2018	78	67	72	0.46	96	71	70	68	71	69	
05-20-2018	88	67	77		96	50	74	68	72	69	
05-21-2018	88	66	77	1.25	97	46	76	70	72	70	
05-22-2018	81	67	74	0.14	98	66	74	71	73	71	
05-23-2018	84	64	74		95	49	76	71	72	71	
05-24-2018	83	59	71		91	44	75	70	72	70	
05-25-2018	88	62	75		93	39	75	70	72	69	
05-26-2018	86	70	78		87	54	76	72	73	70	
05-27-2018	90	69	79		93	46	78	72	74	72	
05-28-2018	86	67	76	0.20	96	61	77	73	74	72	
05-29-2018	85	70	77		94	67	77	73	75	73	
05-30-2018	82	72	77	0.38	94	69	75	73	74	74	
05-31-2018	82	67	74	0.89	96	74	73	71	74	72	

Summary for the period 5-1-2018 through 5-31-2018:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS		BARE		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	83	64	73	8.39	90	54	70	66	68	66	
(Deviation from normal)+	7	+9	+8	+3.92							

JUNE CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
06-01-2018	82	67	74	0.79	96	67	73	70	74	72	
06-02-2018	87	67	77		97	53	77	71	75	72	
06-03-2018	83	64	73		95	42	76	73	74	72	
06-04-2018	78	58	68		81	44	75	70	72	70	
06-05-2018	82	55	68		87	38	74	69	71	68	
06-06-2018	78	57	67		86	42	75	70	71	69	
06-07-2018	86	56	71		91	40	74	69	71	68	
06-08-2018	89	63	76		81	34					
06-09-2018	91	66	78		84	39					
06-10-2018	89	66	77	0.03	90	49					
06-11-2018	80	65	72	0.25	90	62	79	73			
06-12-2018	83	68	75	0.27							
06-13-2018	85	71	78		95	64	77	72	74	72	
06-14-2018	86	66	76		84	38	80	73	74	73	
06-15-2018	89	62	75		86	37	79	73	73	71	
06-16-2018	92	66	79		83	41	80	74	74	71	
06-17-2018	95	69	82		89	42	82	75	75	72	
06-18-2018	94	74	84		86	44	82	76	76	74	
06-19-2018	92	76	84		88	49	81	77	76	75	
06-20-2018	88	74	81	0.86	95	57	74	74	76	74	
06-21-2018	82	73	77	0.79	96	72	77	76	75	74	
06-22-2018	81	68	74	0.15	96	61	76	74	75	73	
06-23-2018	83	68	75		91	58	76	73	74	73	
06-24-2018	85	70	77	0.48	96	58	78	74	75	73	
06-25-2018	78	70	74	1.47	96	81	76	75	74	74	
06-26-2018	80	69	74	1.26	96	82	74	73	74	74	
06-27-2018	80	69	74	0.07	94	77	74	72	74	73	
06-28-2018	89	72	80		97	51	79	76	76	74	
06-29-2018	91	72	81		93	51	81	76	77	75	
06-30-2018	93	71	82		96	49	82	76	77	75	

Summary for the period 6-1-2018 through 6-30-2018:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	86	67	76	6.42	91	52	77	73	74	72	
(Deviation from normal)	+3	+5	+4	+2.76							

JULY CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
07-01-2018	89	70	79	1.51	97	66	79	77	77	76	
07-02-2018	88	74	81	0.14	95	63	79	76	77	76	
07-03-2018	90	71	80	0.21	93	56	80	76	78	76	
07-04-2018	96	71	83		95	53	83	77	78	76	
07-05-2018	95	74	84		96	51	74	73	79	77	
07-06-2018	86	65	75	0.18	91	60	81	78	78	76	
07-07-2018	83	60	71		85	48	79	75	76	74	
07-08-2018	89	64	76		86	43	80	75	76	74	
07-09-2018	92	66	79		95	44	80	75	76	74	
07-10-2018	91	72	81		95	46	80	76	77	75	
07-11-2018	89	67	78		91	45	80	77	77	76	
07-12-2018	86	64	75		84	39	78	75	75	74	
07-13-2018	90	64	77		91	40	78	74	75	72	
07-14-2018	93	68	80		86	40	79	74	76	73	
07-15-2018	84	70	77	0.14	94	68	77	75	75	74	
07-16-2018	84	73	78	1.05	96	68	76	75	76	74	
07-17-2018	87	70	78		96	38	78	75	76	75	
07-18-2018	88	64	76		93	34	80	73	75	73	
07-19-2018	87	63	75		84	35	80	74	74	72	
07-20-2018 E	84	64	74	1.69	98	67	74	73			
07-21-2018 E	79	63	71	0.22	98	63	76	72			
07-22-2018 E	76	67	71	0.77	99	80	81	78			
07-23-2018	75	67	71	0.02	97	79	74	73	73	72	
07-24-2018	82	64	73		98	57	77	72	74	72	
07-25-2018	86	66	76	0.01	97	42	78	73	74	72	
07-26-2018	88	67	77		94	48	78	74	74	72	
07-27-2018	82	63	72		92	45	78	75	74	73	
07-28-2018	84	59	71		97	47	77	72	73	71	
07-29-2018	86	61	73		97	37	77	72	73	71	
07-30-2018	86	67	76		95	53	77	73	74	72	
07-31-2018	84	70	77	0.21	98	60	77	73	74	73	

Summary for the period 7-1-2018 through 7-31-2018:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	86	67	77	6.15	94	52	78	75	76	74	
(Deviation from normal)	+1	+2	+1	+1.15							

AUGUST CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	BARE	GRASS	BARE	
08-01-2018	79	68	73	0.01	98	78	75	74	74	73	
08-02-2018	85	68	76	0.01	98	55	76	73	74	73	
08-03-2018	90	64	77		98	45	78	73	75	72	
08-04-2018	92	68	80		92	48	78	74	76	73	
08-05-2018	95	70	82		96	46	80	75	76	74	
08-06-2018	90	71	80	T	97	55	80	76	76	74	
08-07-2018	92	71	81	0.57	97	53	80	76	77	75	
08-08-2018	85	71	78	0.48	98	66	77	76	76	75	
08-09-2018	89	69	79		97	48	77	75	77	75	
08-10-2018	86	67	76		96	57	76	74	76	74	
08-11-2018	90	65	77	0.61	98	50	76	74	76	74	
08-12-2018	86	67	76	0.06	98	47	76	74	76	74	
08-13-2018	87	62	74		98	45	75	72	76	73	
08-14-2018	88	63	75		98	40	75	72	76	73	
08-15-2018	86	68	77	0.02	91	56	74	73	75	74	
08-16-2018	82	68	75	1.19	97	66	74	73	74	73	
08-17-2018	86	72	79	0.78	97	65	74	73	75	74	
08-18-2018	87	71	79	0.01	97	64	75	74	76	75	
08-19-2018	87	66	76		98	54	77	73	76	74	
08-20-2018	89	70	79	0.11	97	59	77	74	76	75	
08-21-2018	81	71	76	1.05	96	72	76	75	76	75	
08-22-2018	76	58	67		96	53	75	73	76	74	
08-23-2018	81	54	67		98	38	75	70	74	71	
08-24-2018	82	56	69		92	49	73	70	72	70	
08-25-2018	85	68	76	0.11	87	59	74	71	73	71	
08-26-2018	91	73	82		87	53	77	73	75	72	
08-27-2018	92	74	83		85	50	79	75	76	74	
08-28-2018	93	73	83		85	47	79	75	76	74	
08-29-2018	92	72	82	0.18	96	50	79	76	76	75	
08-30-2018	90	72	81	0.25	97	57	78	76	76	75	
08-31-2018	91	68	79	1.01	98	53	78	75	76	75	

Summary for the period 8-1-2018 through 8-31-2018:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	BARE	GRASS	BARE	
	87	68	77	6.45	95	54	77	74	75	74	
(Deviation from normal)+3	+3	+5	+4	+2.52							

SEPTEMBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
09-01-2018	87	70	78	0.81	96	59	77	75	76	75	
09-02-2018	92	70	81		98	49	79	75	76	75	
09-03-2018	96	73	84		94	43	80	76	77	75	
09-04-2018	93	72	82		96	43	80	76	77	75	
09-05-2018	88	73	80	0.24	95	52	80	77	77	76	
09-06-2018	92	69	80	0.16	96	54	80	76	77	76	
09-07-2018	90	68	79		97	58	78	76	77	75	
09-08-2018	77	67	72	2.10	98	83	77	73	76	74	
09-09-2018	70	62	66	2.26	98	95	73	72	74	72	
09-10-2018	66	61	63		98	81	71	70	72	70	
09-11-2018	74	62	68		95	65	71	70	71	70	
09-12-2018	80	62	71		97	65	72	70	72	70	
09-13-2018	90	64	77		98	54	75	70	74	71	
09-14-2018	90	67	78		95	53	76	72	75	72	
09-15-2018	90	71	80		96	54	77	74	76	74	
09-16-2018	84	71	77	0.05	92	61	75	74	75	74	
09-17-2018	79	70	74	1.91	97	85	74	73	75	74	
09-18-2018	90	68	79		98	53	76	72	76	74	
09-19-2018	92	70	81		95	50	77	73	76	74	
09-20-2018	94	70	82		94	45	78	74	76	74	
09-21-2018	88	69	78	0.86	98	57	76	75	75	74	
09-22-2018	72	62	67	0.36	97	75	74	71	74	71	
09-23-2018	66	60	63	1.70	98	96	71	68	71	69	
09-24-2018	71	64	67	1.75	98	94	69	68	70	69	
09-25-2018	81	70	75	0.24	93	74	76	72			
09-26-2018	77	65	71	0.05	93	70	76	75			
09-27-2018	62	57	59	0.39	90	74	76	71			
09-28-2018	68	50	59		100	66	74	69			
09-29-2018	73	51	62		100	55	76	69			
09-30-2018	81	54	67		90	54	78	70			

Summary for the period 9-1-2018 through 9-30-2018:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	82	65	74	12.88	96	64	76	73	75	73	
(Deviation from normal)	+4	+10	+7	+9.68							

OCTOBER CLIMATOLOGICAL DATA, SPINDLETOP

DATE	AIR TEMP			PRECIP	RH		SOIL TEMP				EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
10-01-2018	85	62	73		90	54	78	73			
10-02-2018	81	70	75	0.46	93	71	73	70			
10-03-2018	86	67	76		93	56					
10-04-2018 E	83	69	76	0.06	100	66	74	70			
10-05-2018 E	85	70	77		100	57	75	71			
10-06-2018 E	84	68	76		99	61	83	77			
10-07-2018	89	70	79		90	49					
10-08-2018 E	84	68	76		99	55	84	78			
10-09-2018 E	82	68	75		93	53	76	70			
10-10-2018 E	81	68	74	0.29	99	64	74	64			
10-11-2018 E	71	45	58	0.02	100	59	79	74			
10-12-2018 E	58	40	49	0.10	98	45	75	66			
10-13-2018 E	46	38	42	0.01	98	70	66	65			
10-14-2018 E	62	45	53	0.32	100	88	65	61			
10-15-2018	64	44	54	0.65	97	87	63	61	63	62	

Summary for the period 10-1-2018 through 10-15-2018:

	AIR TEMP			TOTAL PRECIP	RH		SOIL TEMP				TOTAL EVAP
	MX	MN	AV		MX	MN	GRASS	MN	BARE	MN	
	76	59	68	1.91	97	62	74	69	63	62	
(Deviation from normal)	+5	+11	+8	+0.67							

APRIL-OCTOBER SUMMARY

----- AIR TEMPERATURE -----											-- SOD --	
YEAR	MONTH	AVERAGE			EXTREME		AVG DEPART FROM NORM	NO. OF DAYS		4" TEMP AVERAGE		
		MAX	MIN	AVG	MAX	MIN		MAX	MIN	MAX	MIN	
2018	Apr	61	40	50	80	25	-5	0	6	53	49	
2018	May	83	64	73	90	48	+9	3	0	70	66	
2018	Jun	86	67	76	95	55	+4	7	0	77	73	
2018	Jul	86	67	77	96	59	+1	7	0	78	75	
2018	Aug	87	68	77	95	54	+2	12	0	77	74	
2018	Sep	82	65	74	96	50	+6	11	0	76	73	
2018	Oct	75	58	67	89	38	+10	0	0	73	69	

----- PRECIPITATION -----										
YEAR	MONTH	DEPARTURE			GREATEST			% RAIN DAYS	NO. DAYS >=.01	
		TOTAL	FROM NORMAL	CUMULATIVE TOTAL	DEPARTURE	24 HOUR TOTAL				
2018	Apr	5.52	+1.64	5.52	+1.64	1.57	47	14		
2018	May	8.39	+3.92	13.91	+5.56	1.42	45	14		
2018	Jun	6.42	+2.76	20.33	+8.32	1.47	37	11		
2018	Jul	6.15	+1.15	26.48	+9.47	1.69	39	12		
2018	Aug	6.45	+2.52	32.93	+11.99	1.19	52	16		
2018	Sep	12.88	+9.68	45.81	+21.67	2.26	47	14		
2018	Oct	1.91	-0.66	47.72	+21.01	0.65	26	8		

University of Kentucky

NO TILL CORN EARLY PREPLANT

Trial ID: C18001 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: HPQ002A4-2018US Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing				
Days After First/Last Applic.	27 27	27 27	27 27	27 27
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	15 DE-1	15 DE-1	15 DE-1	15 DE-1

Trt Treatment	Rate	Growth	1	2	3	4
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 NIS	0.25 % V/V	-7DAY	0	0	0	0
GRAMOXONE	3.3 PT/A	-7DAY				
3 NIS	0.25 % V/V	-7DAY	0	0	0	0
A22102F	5 PT/A	-7DAY				
4 NIS	0.25 % V/V	-7DAY	0	99	85	87
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
HALEX GT	3.6 PT/A	MP				
5 NIS	0.25 % V/V	-7DAY	0	99	90	90
AATREX	1 QT/A	-7DAY				
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
AATREX	1 QT/A	MP				
HALEX GT	4 PT/A	MP				
6 NIS	0.25 % V/V	-7DAY	0	99	90	90
CALLISTO	3 FL OZ/A	-7DAY				
AATREX	1 QT/A	-7DAY				
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
AATREX	1 QT/A	MP				
HALEX GT	4 PT/A	MP				
7 HARNESS XTRA	1.5 QT/A	-7DAY	0	72	82	82
ROUNDUP POWERMAX	1 QT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
IMPACT	1 FL OZ/A	MP				
ROUNDUP POWERMAX	1 QT/A	MP				
LSD P=.05				1.9	1.9	2.9
Standard Deviation			0.0	1.1	1.1	1.6
Replicate F			0.000	1.000	1.000	0.462
Replicate Prob(F)			1.0000	0.3966	0.3966	0.6411
Treatment F			0.000	6351.521	5429.001	2529.077
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,5,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-11-2018	6-11-2018	6-11-2018	6-11-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	41 13	41 13	41 13	41 13
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1

Trt Treatment	Rate	Growth	5	6	7	8
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 NIS	0.25 % V/V	-7DAY	0	0	0	0
GRAMOXONE	3.3 PT/A	-7DAY				
3 NIS	0.25 % V/V	-7DAY	0	0	0	0
A22102F	5 PT/A	-7DAY				
4 NIS	0.25 % V/V	-7DAY	0	99	99	99
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
HALEX GT	3.6 PT/A	MP				
5 NIS	0.25 % V/V	-7DAY	0	99	99	99
AATREX	1 QT/A	-7DAY				
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
AATREX	1 QT/A	MP				
HALEX GT	4 PT/A	MP				
6 NIS	0.25 % V/V	-7DAY	0	99	99	99
CALLISTO	3 FL OZ/A	-7DAY				
AATREX	1 QT/A	-7DAY				
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
AATREX	1 QT/A	MP				
HALEX GT	4 PT/A	MP				
7 HARNESS XTRA	1.5 QT/A	-7DAY	0	99	99	99
ROUNDUP POWERMAX	1 QT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
IMPACT	1 FL OZ/A	MP				
ROUNDUP POWERMAX	1 QT/A	MP				
LSD P=.05						
Standard Deviation			0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,5,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-26-2018	6-26-2018	6-26-2018	6-26-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	56 28	56 28	56 28	56 28
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	44 DE-1	44 DE-1	44 DE-1	44 DE-1

Trt Treatment	Rate	Growth	9	10	11	12
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 NIS	0.25 % V/V	-7DAY	0	0	0	0
GRAMOXONE	3.3 PT/A	-7DAY				
3 NIS	0.25 % V/V	-7DAY	0	0	0	0
A22102F	5 PT/A	-7DAY				
4 NIS	0.25 % V/V	-7DAY	0	99	99	99
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
HALEX GT	3.6 PT/A	MP				
5 NIS	0.25 % V/V	-7DAY	0	99	99	99
AATREX	1 QT/A	-7DAY				
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
AATREX	1 QT/A	MP				
HALEX GT	4 PT/A	MP				
6 NIS	0.25 % V/V	-7DAY	0	99	99	99
CALLISTO	3 FL OZ/A	-7DAY				
AATREX	1 QT/A	-7DAY				
A22102F	5 PT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
NIS	0.25 % V/V	MP				
AATREX	1 QT/A	MP				
HALEX GT	4 PT/A	MP				
7 HARNESS XTRA	1.5 QT/A	-7DAY	0	99	99	99
ROUNDUP POWERMAX	1 QT/A	-7DAY				
N-PAK AMS LIQUID	2.5 % V/V	MP				
IMPACT	1 FL OZ/A	MP				
ROUNDUP POWERMAX	1 QT/A	MP				
LSD P=.05						
Standard Deviation			0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,5,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	7-24-2018	7-24-2018	7-24-2018	7-24-2018	10-1-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	YIELD
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	84 56	84 56	84 56	84 56	153 125
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	
Days After Emergence	72 DE-1	72 DE-1	72 DE-1	72 DE-1	141 DE-1

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	13	14	15	16	20
1 UNTREATED CHECK			0	0	0	0	2.1
2 NIS	0.25 % V/V	-7DAY	0	0	0	0	60.6
GRAMOXONE	3.3 PT/A	-7DAY					
3 NIS	0.25 % V/V	-7DAY	0	0	0	0	84.7
A22102F	5 PT/A	-7DAY					
4 NIS	0.25 % V/V	-7DAY	0	99	99	99	129.5
A22102F	5 PT/A	-7DAY					
N-PAK AMS LIQUID	2.5 % V/V	MP					
NIS	0.25 % V/V	MP					
HALEX GT	3.6 PT/A	MP					
5 NIS	0.25 % V/V	-7DAY	0	99	99	99	176.4
AATREX	1 QT/A	-7DAY					
A22102F	5 PT/A	-7DAY					
N-PAK AMS LIQUID	2.5 % V/V	MP					
NIS	0.25 % V/V	MP					
AATREX	1 QT/A	MP					
HALEX GT	4 PT/A	MP					
6 NIS	0.25 % V/V	-7DAY	0	99	99	99	177.6
CALLISTO	3 FL OZ/A	-7DAY					
AATREX	1 QT/A	-7DAY					
A22102F	5 PT/A	-7DAY					
N-PAK AMS LIQUID	2.5 % V/V	MP					
NIS	0.25 % V/V	MP					
AATREX	1 QT/A	MP					
HALEX GT	4 PT/A	MP					
7 HARNESS XTRA	1.5 QT/A	-7DAY	0	99	99	99	136.6
ROUNDUP POWERMAX	1 QT/A	-7DAY					
N-PAK AMS LIQUID	2.5 % V/V	MP					
IMPACT	1 FL OZ/A	MP					
ROUNDUP POWERMAX	1 QT/A	MP					
LSD P=.05							8.95
Standard Deviation			0.0	0.0	0.0	0.0	5.03
Replicate F			0.000	0.000	0.000	0.000	1.963
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.1830
Treatment F			0.000	0.000	0.000	0.000	490.006
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,5,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

NO TILL CORN EARLY PREPLANT

Trial ID: C18001 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: HPQ002A4-2018US Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT CULLY

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

19 DP-1 = 1 ZEAMX 5-9-2018
33 DP-1 = 1 ZEAMX 5-9-2018
48 DP-1 = 1 ZEAMX 5-9-2018
76 DP-1 = 1 ZEAMX 5-9-2018
145 DP-1 = 1 ZEAMX 5-9-2018

ARM Action Codes

TY1 = $4.093985 * [18] * (100 - [19]) / 84.5$

University of Kentucky

NO TILL CORN EARLY PREPLANT

Trial ID: C18001 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: HPQ002A4-2018US Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
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City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: ZEAMX Zea mays
Variety: DKC 65-95
Description: RR

Planting Date: 5-9-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-13-2018
Harvest Date: 10-1-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: MASSEY FERGUSON 8XP
% Standard Moisture: 15.5

Planting Rate, Unit: 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 63 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Pest Description

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

Pest 2 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT² **Treatments:** 7 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:
200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

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Application Description

	A	B
Application Date:	5-1-2018	5-29-2018
Application Method:	SPRAY	SPRAY
Application Timing:	-7D	EP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	78 F	81 F
% Relative Humidity:	48	69
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	SW	WSW
Soil Temperature, Unit:	56 F	75 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	10	5
Next Moisture Occurred On:	5-4-2018	5-30-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V4
Height, Unit:		10 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:		2LF
Height, Unit:		3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:		6LF
Height, Unit:		4 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Stage Majority, Percent:		3LF
Height, Unit:		4 IN

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Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GAL/AC	24 GPA
Mix Overage, Unit:	0 mL	
Mix Size, Unit:	3 L	3 L
Propellant:	CO2	CO2

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CORN POSTEMERGENCE

Trial ID: C18005 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: SYN CORN 1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	5-18-2018	5-18-2018	5-18-2018	5-18-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	17 17	17 17	17 17	17 17
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	11 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	1	2	3	4
1	ACURON	2.5	QT/A	PRE	0	99	90	90
	AATREX	1.5	PT/A	PRE				
2	ACURON	2.5	QT/A	PRE	0	99	90	90
	PRINCEP	1	QT/A	PRE				
3	ACURON	1.5	QT/A	PRE	0	99	95	95
	AATREX	1.5	PT/A	PRE				
	HALEX GT	3.6	PT/A	12C				
	AATREX	1.5	PT/A	12C				
	NIS	0.25	% V/V	12C				
	N-PAK AMS LIQUID	2.5	% V/V	12C				
4	ACURON	1.25	QT/A	PRE	0	99	90	90
	AATREX	1	PT/A	PRE				
	ACURON	1.25	QT/A	12C				
	AATREX	1	PT/A	12C				
5	ACURON	1.5	QT/A	PRE	0	99	86	87
	AATREX	1	PT/A	PRE				
	ACURON	1	QT/A	12C				
	AATREX	1	PT/A	12C				
6	ACURON	1.25	QT/A	PRE	0	99	88	89
	AATREX	1	PT/A	PRE				
	ACURON	1.25	QT/A	12C				
	AATREX	1	PT/A	12C				
	ROUNDUP POWERMAX	32	FL OZ/A	12C				
7	ACURON	1.5	QT/A	PRE	0	99	90	90
	AATREX	1	PT/A	PRE				
	ACURON	1	QT/A	12C				
	AATREX	1	PT/A	12C				
	ROUNDUP POWERMAX	32	FL OZ/A	12C				
8	ANTHEM MAXX	3.3	OZ/A	PRE	0	99	90	90
	AATREX	1	LB AI/A	PRE				
	SOLSTICE	2.5	OZ/A	V4				
	AATREX	0.5	LB AI/A	V4				
	ROUNDUP POWERMAX	32	FL OZ/A	V4				
	COC	1	% V/V	V4				
	AMS	8.5	LB/100 GAL	V4				
9	ACURON	1.5	QT/A	PRE	0	99	95	95
	AATREX	1.5	PT/A	PRE				
	HALEX GT	3.6	PT/A	12C				
	AATREX	1.5	PT/A	12C				
	TRIVAPRO	13.7	FL OZ/A	12C				
	NIS	0.25	% V/V	12C				
	N-PAK AMS LIQUID	2.5	% V/V	12C				

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10,13,14 because error mean square = 0.

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Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	5-18-2018	5-18-2018	5-18-2018	5-18-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	17 17	17 17	17 17	17 17
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	11 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
10 ACURON	1.5 QT/A	PRE	0	99	88	88
AATREX	1 PT/A	PRE				
ACURON	1 QT/A	12C				
AATREX	1 PT/A	12C				
TRIVAPRO	13.7 FL OZ/A	12C				
11 BALANCE FLEXX	3 OZ/A	PRE	0	99	95	95
AATREX	16 OZ/A	PRE				
CAPRENO	3 OZ/A	V2				
AATREX	16 OZ/A	V2				
ROUNDUP POWERMAX	32 FL OZ/A	V2				
12 HARNESS XTRA	1.5 QT/A	PRE	0	99	70	72
HARNESS MAX	40 FL OZ/A	V4				
ROUNDUP POWERMAX	32 FL OZ/A	V4				
N-PAK AMS LIQUID	2.5 % V/V	V4				
LSD P=.05			.	.	0.8	2.1
Standard Deviation			0.0	0.0	0.5	1.2
Replicate F			0.000	0.000	1.000	0.704
Replicate Prob(F)			1.0000	1.0000	0.3840	0.5052
Treatment F			0.000	0.000	529.000	74.424
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001

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Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018	6-26-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	42 14	42 14	42 14	42 14	56 28
Trt-Eval Interval	AFER POST	AFER POST	AFER POST	AFER POST	AFER POST
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1	50 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	5	6	7	8	9
1 ACURON	2.5 QT/A	PRE	0	95	87	88	0
AATREX	1.5 PT/A	PRE					
2 ACURON	2.5 QT/A	PRE	0	99	88	87	0
PRINCEP	1 QT/A	PRE					
3 ACURON	1.5 QT/A	PRE	0	99	99	99	0
AATREX	1.5 PT/A	PRE					
HALEX GT	3.6 PT/A	12C					
AATREX	1.5 PT/A	12C					
NIS	0.25 % V/V	12C					
N-PAK AMS LIQUID	2.5 % V/V	12C					
4 ACURON	1.25 QT/A	PRE	0	99	99	99	0
AATREX	1 PT/A	PRE					
ACURON	1.25 QT/A	12C					
AATREX	1 PT/A	12C					
5 ACURON	1.5 QT/A	PRE	0	99	99	99	0
AATREX	1 PT/A	PRE					
ACURON	1 QT/A	12C					
AATREX	1 PT/A	12C					
6 ACURON	1.25 QT/A	PRE	0	99	99	99	0
AATREX	1 PT/A	PRE					
ACURON	1.25 QT/A	12C					
AATREX	1 PT/A	12C					
ROUNDUP POWERMAX	32 FL OZ/A	12C					
7 ACURON	1.5 QT/A	PRE	0	99	99	99	0
AATREX	1 PT/A	PRE					
ACURON	1 QT/A	12C					
AATREX	1 PT/A	12C					
ROUNDUP POWERMAX	32 FL OZ/A	12C					
8 ANTHEM MAXX	3.3 OZ/A	PRE	0	99	99	99	0
AATREX	1 LB AI/A	PRE					
SOLSTICE	2.5 OZ/A	V4					
AATREX	0.5 LB AI/A	V4					
ROUNDUP POWERMAX	32 FL OZ/A	V4					
COC	1 % V/V	V4					
AMS	8.5 LB/100 GAL	V4					
9 ACURON	1.5 QT/A	PRE	0	99	99	99	0
AATREX	1.5 PT/A	PRE					
HALEX GT	3.6 PT/A	12C					
AATREX	1.5 PT/A	12C					
TRIVAPRO	13.7 FL OZ/A	12C					
NIS	0.25 % V/V	12C					
N-PAK AMS LIQUID	2.5 % V/V	12C					

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10,13,14 because error mean square = 0.

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Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018	6-26-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	42 14	42 14	42 14	42 14	56 28
Trt-Eval Interval	AFER POST	AFER POST	AFER POST	AFER POST	AFER POST
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1	50 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	5	6	7	8	9
10 ACURON	1.5 QT/A	PRE	0	99	99	99	0
AATREX	1 PT/A	PRE					
ACURON	1 QT/A	12C					
AATREX	1 PT/A	12C					
TRIVAPRO	13.7 FL OZ/A	12C					
11 BALANCE FLEXX	3 OZ/A	PRE	0	99	90	96	0
AATREX	16 OZ/A	PRE					
CAPRENO	3 OZ/A	V2					
AATREX	16 OZ/A	V2					
ROUNDUP POWERMAX	32 FL OZ/A	V2					
12 HARNESS XTRA	1.5 QT/A	PRE	0	99	99	98	0
HARNESS MAX	40 FL OZ/A	V4					
ROUNDUP POWERMAX	32 FL OZ/A	V4					
N-PAK AMS LIQUID	2.5 % V/V	V4					
LSD P=.05					0.8	1.8	
Standard Deviation			0.0	0.0	0.5	1.0	0.0
Replicate F			0.000	0.000	1.000	1.441	0.000
Replicate Prob(F)			1.0000	1.0000	0.3840	0.2581	1.0000
Treatment F			0.000	0.000	284.364	52.917	0.000
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed		W Weed
Pest Code	SETFA	AMBTR	IPOSS		SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code				ZEAMX	
Crop Scientific Name				Zea mays	
Crop Name				Corn	
Rating Date	6-26-2018	6-26-2018	6-26-2018	7-24-2018	7-24-2018
Rating Type	PERCENT	PERCENT	PERCENT	CROP	PERCENT
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	56 28	56 28	56 28	84 56	84 56
Trt-Eval Interval	AFER POST	AFER POST	AFER POST	AFER POST	AFER POST
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	78 DE-1	78 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	10	11	12	13	14
1	ACURON	2.5	QT/A	PRE	95	89	88	0	95
	AATREX	1.5	PT/A	PRE					
2	ACURON	2.5	QT/A	PRE	99	85	87	0	99
	PRINCEP	1	QT/A	PRE					
3	ACURON	1.5	QT/A	PRE	99	99	99	0	99
	AATREX	1.5	PT/A	PRE					
	HALEX GT	3.6	PT/A	12C					
	AATREX	1.5	PT/A	12C					
	NIS	0.25	% V/V	12C					
	N-PAK AMS LIQUID	2.5	% V/V	12C					
4	ACURON	1.25	QT/A	PRE	99	99	99	0	99
	AATREX	1	PT/A	PRE					
	ACURON	1.25	QT/A	12C					
	AATREX	1	PT/A	12C					
5	ACURON	1.5	QT/A	PRE	99	99	99	0	99
	AATREX	1	PT/A	PRE					
	ACURON	1	QT/A	12C					
	AATREX	1	PT/A	12C					
6	ACURON	1.25	QT/A	PRE	99	99	95	0	99
	AATREX	1	PT/A	PRE					
	ACURON	1.25	QT/A	12C					
	AATREX	1	PT/A	12C					
	ROUNDUP POWERMAX	32	FL OZ/A	12C					
7	ACURON	1.5	QT/A	PRE	99	99	99	0	99
	AATREX	1	PT/A	PRE					
	ACURON	1	QT/A	12C					
	AATREX	1	PT/A	12C					
	ROUNDUP POWERMAX	32	FL OZ/A	12C					
8	ANTHEM MAXX	3.3	OZ/A	PRE	99	99	99	0	99
	AATREX	1	LB AI/A	PRE					
	SOLSTICE	2.5	OZ/A	V4					
	AATREX	0.5	LB AI/A	V4					
	ROUNDUP POWERMAX	32	FL OZ/A	V4					
	COC	1	% V/V	V4					
	AMS	8.5	LB/100 GAL	V4					
9	ACURON	1.5	QT/A	PRE	99	99	99	0	99
	AATREX	1.5	PT/A	PRE					
	HALEX GT	3.6	PT/A	12C					
	AATREX	1.5	PT/A	12C					
	TRIVAPRO	13.7	FL OZ/A	12C					
	NIS	0.25	% V/V	12C					
	N-PAK AMS LIQUID	2.5	% V/V	12C					

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10,13,14 because error mean square = 0.

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Pest Type	W Weed	W Weed	W Weed		W Weed
Pest Code	SETFA	AMBTR	IPOSS		SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code				ZEAMX	
Crop Scientific Name				Zea mays	
Crop Name				Corn	
Rating Date	6-26-2018	6-26-2018	6-26-2018	7-24-2018	7-24-2018
Rating Type	PERCENT	PERCENT	PERCENT	CROP	PERCENT
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	56 28	56 28	56 28	84 56	84 56
Trt-Eval Interval	AFER POST	AFER POST	AFER POST	AFER POST	AFER POST
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	78 DE-1	78 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	10	11	12	13	14
10 ACURON	1.5 QT/A	PRE	99	99	99	0	99
AATREX	1 PT/A	PRE					
ACURON	1 QT/A	12C					
AATREX	1 PT/A	12C					
TRIVAPRO	13.7 FL OZ/A	12C					
11 BALANCE FLEXX	3 OZ/A	PRE	99	90	96	0	99
AATREX	16 OZ/A	PRE					
CAPRENO	3 OZ/A	V2					
AATREX	16 OZ/A	V2					
ROUNDUP POWERMAX	32 FL OZ/A	V2					
12 HARNESS XTRA	1.5 QT/A	PRE	99	99	98	0	99
HARNESS MAX	40 FL OZ/A	V4					
ROUNDUP POWERMAX	32 FL OZ/A	V4					
N-PAK AMS LIQUID	2.5 % V/V	V4					
LSD P=.05				0.6	1.8		
Standard Deviation			0.0	0.3	1.0	0.0	0.0
Replicate F			0.000	1.000	1.441	0.000	0.000
Replicate Prob(F)			1.0000	0.3840	0.2581	1.0000	1.0000
Treatment F			0.000	714.727	52.090	0.000	0.000
Treatment Prob(F)			1.0000	0.0001	0.0001	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10,13,14 because error mean square = 0.

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Pest Type	W Weed	W Weed		
Pest Code	AMBTR	IPOSS		
Pest Name	Giant ragweed	Morning glory		
Crop Code				ZEAMX
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	7-24-2018	7-24-2018	10-1-2018	
Rating Type	PERCENT	PERCENT	YIELD	
Rating Unit	CONTROL	CONTROL	BU	
Rating Timing	8 WEEK	8 WEEK		
Days After First/Last Applic.	84 56	84 56	153 125	
Trt-Eval Interval	AFER POST	AFER POST		
Days After Emergence	78 DE-1	78 DE-1	147 DE-1	

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	15	16	20
1	ACURON	2.5	QT/A	PRE	89	88	185.1
	AATREX	1.5	PT/A	PRE			
2	ACURON	2.5	QT/A	PRE	85	87	176.1
	PRINCEP	1	QT/A	PRE			
3	ACURON	1.5	QT/A	PRE	99	99	177.6
	AATREX	1.5	PT/A	PRE			
	HALEX GT	3.6	PT/A	12C			
	AATREX	1.5	PT/A	12C			
	NIS	0.25	% V/V	12C			
	N-PAK AMS LIQUID	2.5	% V/V	12C			
4	ACURON	1.25	QT/A	PRE	99	99	183.6
	AATREX	1	PT/A	PRE			
	ACURON	1.25	QT/A	12C			
	AATREX	1	PT/A	12C			
5	ACURON	1.5	QT/A	PRE	99	99	192.1
	AATREX	1	PT/A	PRE			
	ACURON	1	QT/A	12C			
	AATREX	1	PT/A	12C			
6	ACURON	1.25	QT/A	PRE	99	95	180.7
	AATREX	1	PT/A	PRE			
	ACURON	1.25	QT/A	12C			
	AATREX	1	PT/A	12C			
	ROUNDUP POWERMAX	32	FL OZ/A	12C			
7	ACURON	1.5	QT/A	PRE	99	99	182.8
	AATREX	1	PT/A	PRE			
	ACURON	1	QT/A	12C			
	AATREX	1	PT/A	12C			
	ROUNDUP POWERMAX	32	FL OZ/A	12C			
8	ANTHEM MAXX	3.3	OZ/A	PRE	99	99	203.2
	AATREX	1	LB AI/A	PRE			
	SOLSTICE	2.5	OZ/A	V4			
	AATREX	0.5	LB AI/A	V4			
	ROUNDUP POWERMAX	32	FL OZ/A	V4			
	COC	1	% V/V	V4			
	AMS	8.5	LB/100 GAL	V4			
9	ACURON	1.5	QT/A	PRE	99	99	187.5
	AATREX	1.5	PT/A	PRE			
	HALEX GT	3.6	PT/A	12C			
	AATREX	1.5	PT/A	12C			
	TRIVAPRO	13.7	FL OZ/A	12C			
	NIS	0.25	% V/V	12C			
	N-PAK AMS LIQUID	2.5	% V/V	12C			

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10,13,14 because error mean square = 0.

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Pest Type	W Weed	W Weed		
Pest Code	AMBTR	IPOSS		
Pest Name	Giant ragweed Morning glory			
Crop Code				ZEAMX
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	7-24-2018	7-24-2018	10-1-2018	
Rating Type	PERCENT	PERCENT	YIELD	
Rating Unit	CONTROL	CONTROL	BU	
Rating Timing	8 WEEK	8 WEEK		
Days After First/Last Applic.	84 56	84 56	153 125	
Trt-Eval Interval	AFER POST	AFER POST		
Days After Emergence	78 DE-1	78 DE-1	147 DE-1	

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	15	16	20
10 ACURON	1.5 QT/A	PRE	99	99	199.8
AATREX	1 PT/A	PRE			
ACURON	1 QT/A	12C			
AATREX	1 PT/A	12C			
TRIVAPRO	13.7 FL OZ/A	12C			
11 BALANCE FLEXX	3 OZ/A	PRE	90	96	185.7
AATREX	16 OZ/A	PRE			
CAPRENO	3 OZ/A	V2			
AATREX	16 OZ/A	V2			
ROUNDUP POWERMAX	32 FL OZ/A	V2			
12 HARNESS XTRA	1.5 QT/A	PRE	99	98	187.8
HARNESS MAX	40 FL OZ/A	V4			
ROUNDUP POWERMAX	32 FL OZ/A	V4			
N-PAK AMS LIQUID	2.5 % V/V	V4			
LSD P=.05			0.6	1.8	7.47
Standard Deviation			0.3	1.0	4.41
Replicate F			1.000	1.441	0.368
Replicate Prob(F)			0.3840	0.2581	0.6960
Treatment F			714.727	52.090	10.265
Treatment Prob(F)			0.0001	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10,13,14 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE

Trial ID: C18005 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: SYN CORN 1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT CULLY

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

17 DP-1 = 1 ZEAMX 5-1-2018
42 DP-1 = 1 ZEAMX 5-1-2018
56 DP-1 = 1 ZEAMX 5-1-2018
84 DP-1 = 1 ZEAMX 5-1-2018
153 DP-1 = 1 ZEAMX 5-1-2018

ARM Action Codes

TY1 = $4.093985 * [18] * (100 - [19]) / 84.5$

University of Kentucky

CORN POSTEMERGENCE

Trial ID: C18005 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: SYN CORN 1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: ZEAMX Zea mays
Variety: DKC 65-95
Description: RR

Planting Rate, Unit: 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Spacing within Row, Unit: 30 IN
Rows per Plot: 6

Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Corn

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018
Harvest Date: 10-1-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: MASSEY FERGUSON 8XP
% Standard Moisture: 15.5

Pest Description

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

Pest 2 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT² **Treatments:** 12
Replications: 3

Site Type: FIELD field
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:
200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6	% OM: 2.6	Texture: SIL	silt loam
% Silt: 62	pH: 6.4	Soil Name: MAURY SILT LOAM	
% Clay: 32	CEC: 18	Fert. Level: E	excellent
		Soil Drainage: E	excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

University of Kentucky

Application Description

	A	B	C
Application Date:	5-1-2018	5-20-2018	5-29-2018
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V2	V4
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	84 F	81 F
% Relative Humidity:	48	50	69
Wind Velocity, Unit:	8 MPH	8 MPH	8 MPH
Wind Direction:	SW	SW	E
Soil Temperature, Unit:	55 F	71 F	74 F
Soil Moisture:	NORMAL	ABONOR	NORMAL
% Cloud Cover:	10	10	10
Next Moisture Occurred On:	5-4-2018	5-21-2018	5-30-2018

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		V2	V5
Height, Unit:		8 IN	12 IN

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:	3 IN	6 IN	
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:	4 IN	6 IN	
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:	2 IN	3 IN	

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	24 GAL/AC	24 GAL/AC	24 GPA
Mix Overage, Unit:	0 mL	0 mL	
Mix Size, Unit:	3 L	3 L	3 L
Propellant:	CO2	CO2	CO2

University of Kentucky

CORN POSTEMERGENCE II

Trial ID: C18006
Protocol ID: BASF-RR CORN
Project ID:

Location: LEXINGTON, KY Trial Year: 2018
Investigator: Sara Carter
Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	6-4-2018	6-4-2018	6-4-2018	6-4-2018	6-18-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	34 14	34 14	34 14	34 14	48 28
Trt-Eval Interval					
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	28 DE-1	42 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5
1 CHECK			0	0	0	0	0
2 VERDICT	10 FL OZ/A	PRE	0	99	95	95	0
ZIDUA	2.5 FL OZ/A	PRE					
ARMEZON PRO	16 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
3 VERDICT	10 FL OZ/A	PRE	0	99	95	95	0
ZIDUA	2.5 FL OZ/A	PRE					
STATUS	3 OZ WT/A	V3					
CALLISTO	3 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
4 ACURON	56 FL OZ/A	PRE	0	99	99	99	0
CALLISTO	3 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
5 RESICORE	40 FL OZ/A	PRE	0	99	99	99	0
RESICORE	40 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
6 HARNESS	20 FL OZ/A	PRE	0	99	99	99	0
CALLISTO	3.2 FL OZ/A	PRE					
HARNESS	20 FL OZ/A	V3					
CALLISTO	3.2 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
7 CORVUS	2.8 FL OZ/A	PRE	0	99	99	99	0
CAPRENO HERBICIDE	3 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail Giant ragweed Morning glory			
Crop Code		ZEAMX			ZEAMX
Crop Scientific Name		Zea mays			Zea mays
Crop Name		Corn			Corn
Rating Date		6-4-2018	6-4-2018	6-4-2018	6-4-2018 6-18-2018
Rating Type		CROP	PERCENT	PERCENT	PERCENT CROP
Rating Unit		INJURY	CONTROL	CONTROL	CONTROL INJURY
Rating Timing		2 WEEK	2 WEEK	2 WEEK	2 WEEK 4 WEEK
Days After First/Last Applic.		34 14	34 14	34 14	34 14 48 28
Trt-Eval Interval					
Days After Emergence		28 DE-1	28 DE-1	28 DE-1	28 DE-1 42 DE-1
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	1	2	3
			4	5	
8 CHECK			0	0	0
LSD P=.05			.	.	.
Standard Deviation			0.0	0.0	0.0
Replicate F			0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS	SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Giant foxtail
Crop Code				ZEAMX
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	6-18-2018	6-18-2018	6-18-2018	7-16-2018
Rating Type	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK
Days After First/Last Applic.	48 28	48 28	48 28	76 56
Trt-Eval Interval				76 56
Days After Emergence	42 DE-1	42 DE-1	42 DE-1	70 DE-1

Trt Treatment	Rate	Growth	6	7	8	9	10
No. Name	Rate Unit	Stage					
1 CHECK			0	0	0	0	0
2 VERDICT	10 FL OZ/A	PRE	99	89	90	0	99
ZIDUA	2.5 FL OZ/A	PRE					
ARMEZON PRO	16 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
3 VERDICT	10 FL OZ/A	PRE	99	95	95	0	99
ZIDUA	2.5 FL OZ/A	PRE					
STATUS	3 OZ WT/A	V3					
CALLISTO	3 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
4 ACURON	56 FL OZ/A	PRE	99	99	99	0	99
CALLISTO	3 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
5 RESICORE	40 FL OZ/A	PRE	99	99	99	0	99
RESICORE	40 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
6 HARNESS	20 FL OZ/A	PRE	99	99	99	0	99
CALLISTO	3.2 FL OZ/A	PRE					
HARNESS	20 FL OZ/A	V3					
CALLISTO	3.2 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					
7 CORVUS	2.8 FL OZ/A	PRE	99	95	99	0	99
CAPRENO HERBICIDE	3 FL OZ/A	V3					
ATRAZINE	16 FL OZ/A	V3					
ROUNDUP POWERMAX	32 FL OZ/A	V3					
NIS	0.25 % V/V	V3					
AMS	8.5 LB/100 GAL	V3					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed		W Weed	
Pest Code		SETFA	AMBTR	IPOSS		SETFA	
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	
Crop Code					ZEAMX		
Crop Scientific Name					Zea mays		
Crop Name					Corn		
Rating Date		6-18-2018	6-18-2018	6-18-2018	7-16-2018	7-16-2018	
Rating Type		PERCENT	PERCENT	PERCENT	CROP	PERCENT	
Rating Unit		CONTROL	CONTROL	CONTROL	INJURY	CONTROL	
Rating Timing		4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.		48 28	48 28	48 28	76 56	76 56	
Trt-Eval Interval							
Days After Emergence		42 DE-1	42 DE-1	42 DE-1	70 DE-1	70 DE-1	
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	6	7	8	9	10
8 CHECK			0	0	0	0	0
LSD P=.05			.	0.7	.	.	.
Standard Deviation			0.0	0.4	0.0	0.0	0.0
Replicate F			0.000	1.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	0.3927	1.0000	1.0000	1.0000
Treatment F			0.000	35777.396	0.000	0.000	0.000
Treatment Prob(F)			1.0000	0.0001	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed		
Pest Code	AMBTR	IPOSS		
Pest Name	Giant ragweed	Morning glory		
Crop Code				ZEAMX
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	7-16-2018	7-16-2018	10-1-2018	
Rating Type	PERCENT	PERCENT	YIELD	
Rating Unit	CONTROL	CONTROL	BU	
Rating Timing	8 WEEK	8 WEEK		
Days After First/Last Applic.	76 56	76 56	153 133	
Trt-Eval Interval				
Days After Emergence	70 DE-1	70 DE-1	147 DE-1	

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	11	12	16
1	CHECK				0	0	42.6
2	VERDICT	10 FL OZ/A		PRE	89	90	193.4
	ZIDUA	2.5 FL OZ/A		PRE			
	ARMEZON PRO	16 FL OZ/A		V3			
	ATRAZINE	16 FL OZ/A		V3			
	ROUNDUP POWERMAX	32 FL OZ/A		V3			
	NIS	0.25 % V/V		V3			
	AMS	8.5 LB/100 GAL		V3			
3	VERDICT	10 FL OZ/A		PRE	95	95	192.9
	ZIDUA	2.5 FL OZ/A		PRE			
	STATUS	3 OZ WT/A		V3			
	CALLISTO	3 FL OZ/A		V3			
	ROUNDUP POWERMAX	32 FL OZ/A		V3			
	NIS	0.25 % V/V		V3			
	AMS	8.5 LB/100 GAL		V3			
4	ACURON	56 FL OZ/A		PRE	99	99	192.2
	CALLISTO	3 FL OZ/A		V3			
	ATRAZINE	16 FL OZ/A		V3			
	ROUNDUP POWERMAX	32 FL OZ/A		V3			
	NIS	0.25 % V/V		V3			
	AMS	8.5 LB/100 GAL		V3			
5	RESICORE	40 FL OZ/A		PRE	99	99	201.1
	RESICORE	40 FL OZ/A		V3			
	ATRAZINE	16 FL OZ/A		V3			
	ROUNDUP POWERMAX	32 FL OZ/A		V3			
	NIS	0.25 % V/V		V3			
	AMS	8.5 LB/100 GAL		V3			
6	HARNESS	20 FL OZ/A		PRE	99	99	201.4
	CALLISTO	3.2 FL OZ/A		PRE			
	HARNESS	20 FL OZ/A		V3			
	CALLISTO	3.2 FL OZ/A		V3			
	ATRAZINE	16 FL OZ/A		V3			
	ROUNDUP POWERMAX	32 FL OZ/A		V3			
	NIS	0.25 % V/V		V3			
	AMS	8.5 LB/100 GAL		V3			
7	CORVUS	2.8 FL OZ/A		PRE	95	99	194.7
	CAPRENO HERBICIDE	3 FL OZ/A		V3			
	ATRAZINE	16 FL OZ/A		V3			
	ROUNDUP POWERMAX	32 FL OZ/A		V3			
	NIS	0.25 % V/V		V3			
	AMS	8.5 LB/100 GAL		V3			

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	
Pest Code		AMBTR	IPOSS	
Pest Name		Giant ragweed Morning glory		
Crop Code				ZEAMX
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date		7-16-2018	7-16-2018	10-1-2018
Rating Type		PERCENT	PERCENT	YIELD
Rating Unit		CONTROL	CONTROL	BU
Rating Timing		8 WEEK	8 WEEK	
Days After First/Last Applic.		76 56	76 56	153 133
Trt-Eval Interval				
Days After Emergence		70 DE-1	70 DE-1	147 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	11	12
8 CHECK			0	0
LSD P=.05			0.7	. 11.56
Standard Deviation			0.4	0.0 6.60
Replicate F			1.000	0.000 5.404
Replicate Prob(F)			0.3927	1.0000 0.0182
Treatment F			35777.396	0.000 291.860
Treatment Prob(F)			0.0001	1.0000 0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE II

Trial ID: C18006 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: BASF-RR CORN Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

34 DP-1 = 1 ZEAMX 5-1-2018
48 DP-1 = 1 ZEAMX 5-1-2018
76 DP-1 = 1 ZEAMX 5-1-2018
153 DP-1 = 1 ZEAMX 5-1-2018

ARM Action Codes

TY1 = $4.093985 * [14] * (100 - [15]) / 84.5$

University of Kentucky

CORN POSTEMERGENCE II

Trial ID: C18006 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BASF-RR CORN Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: GREG STAPLETON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: ZEAMX Zea mays
Variety: DKC 65-95
Description: RR

Corn

Planting Rate, Unit: 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018

Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: MASSEY FERGUSON 8XP
% Standard Moisture: 15.5

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT² **Treatments:** 8
Replications: 3

Site Type: FIELD field
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:
200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

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Application Description

	A	B
Application Date:	5-1-2018	5-21-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	V3
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	89 F
% Relative Humidity:	48	46
Wind Velocity, Unit:	8 MPH	0 MPH
Wind Direction:	SW	ESE
Soil Temperature, Unit:	55 F	71 F
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	10	60
Next Moisture Occurred On:	5-4-2018	5-21-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V3
Height, Unit:		7 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:		2 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:		5 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Height, Unit:		1.5 IN

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GAL/AC	24 GAL/AC
Mix Overage, Unit:	0 mL	0 mL
Mix Size, Unit:	3 L	3 L
Propellant:	CO2	CO2

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CORN POSTEMERGENCE III

Trial ID: C18007 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BAYER CORN2 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOSHUA JONES

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS	SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Giant foxtail
Crop Code	ZEAMX		ZEAMX	
Crop Scientific Name	Zea mays		Zea mays	
Crop Name	Corn		Corn	
Rating Date	6-4-2018	6-4-2018	6-4-2018	6-4-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	34 15	34 15	34 15	34 15
Trt-Eval Interval	48 29	48 29	48 29	48 29
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	28 DE-1

Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	1	2	3	4	5	6
1 UNTREATED CHECK			0	0	0	0	0	0
2 CORVUS	3 OZ/A PRE		0	99	99	99	0	90
AATREX	16 OZ/A PRE							
DIFLEXX DUO	24 OZ/A V2							
AATREX	16 OZ/A V2							
ROUNDUP POWERMAX	32 OZ/A V2							
3 BALANCE FLEXX	3 OZ/A PRE		0	99	99	99	0	90
AATREX	16 OZ/A PRE							
DIFLEXX DUO	24 OZ/A V2							
AATREX	16 OZ/A V2							
ROUNDUP POWERMAX	32 OZ/A V2							
4 CORVUS	3 OZ/A PRE		0	99	99	99	0	90
AATREX	16 OZ/A PRE							
CAPRENO	3 OZ/A V2							
AATREX	16 OZ/A V2							
ROUNDUP POWERMAX	32 OZ/A V2							
5 BALANCE FLEXX	3 OZ/A PRE		0	99	99	99	0	99
AATREX	16 OZ/A PRE							
CAPRENO	3 OZ/A V2							
AATREX	16 OZ/A V2							
ROUNDUP POWERMAX	32 OZ/A V2							
6 CORVUS	3 OZ/A PRE		0	99	99	99	0	95
AATREX	16 OZ/A PRE							
LAUDIS	3 OZ/A V2							
AATREX	16 OZ/A V2							
ROUNDUP POWERMAX	32 OZ/A V2							
7 BALANCE FLEXX	3 OZ/A PRE		0	99	99	99	0	93
AATREX	16 OZ/A PRE							
LAUDIS	3 OZ/A V2							
AATREX	16 OZ/A V2							
ROUNDUP POWERMAX	32 OZ/A V2							
8 CHECK			0	0	0	0	0	0
LSD P=.05			.	.	.	.	.	1.8
Standard Deviation			0.0	0.0	0.0	0.0	0.0	1.0
Replicate F			0.000	0.000	0.000	0.000	0.000	1.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	0.3927
Treatment F			0.000	0.000	0.000	0.000	0.000	5352.503
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,9 because error mean square = 0.

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Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	IPOSS	SETFA	AMBTR			
Pest Name	Giant ragweed	Morning glory	Giant foxtail	Giant ragweed			
Crop Code	ZEAMX						
Crop Scientific Name	Zea mays						
Crop Name	Corn						
Rating Date	6-18-2018	6-18-2018	7-16-2018	7-16-2018			
Rating Type	PERCENT	PERCENT	CROP	PERCENT			
Rating Unit	CONTROL	CONTROL	INJURY	CONTROL			
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK			
Days After First/Last Applic.	48 29	48 29	76 57	76 57			
Trt-Eval Interval							
Days After Emergence	42 DE-1	42 DE-1	70 DE-1	70 DE-1			
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	7	8	9	10	11
1 UNTREATED CHECK			0	0	0	0	0
2 CORVUS	3 OZ/A PRE		90	90	0	90	90
AATREX	16 OZ/A PRE						
DIFLEXX DUO	24 OZ/A V2						
AATREX	16 OZ/A V2						
ROUNDUP POWERMAX	32 OZ/A V2						
3 BALANCE FLEXX	3 OZ/A PRE		88	90	0	90	88
AATREX	16 OZ/A PRE						
DIFLEXX DUO	24 OZ/A V2						
AATREX	16 OZ/A V2						
ROUNDUP POWERMAX	32 OZ/A V2						
4 CORVUS	3 OZ/A PRE		90	90	0	90	90
AATREX	16 OZ/A PRE						
CAPRENO	3 OZ/A V2						
AATREX	16 OZ/A V2						
ROUNDUP POWERMAX	32 OZ/A V2						
5 BALANCE FLEXX	3 OZ/A PRE		99	99	0	99	99
AATREX	16 OZ/A PRE						
CAPRENO	3 OZ/A V2						
AATREX	16 OZ/A V2						
ROUNDUP POWERMAX	32 OZ/A V2						
6 CORVUS	3 OZ/A PRE		99	99	0	95	99
AATREX	16 OZ/A PRE						
LAUDIS	3 OZ/A V2						
AATREX	16 OZ/A V2						
ROUNDUP POWERMAX	32 OZ/A V2						
7 BALANCE FLEXX	3 OZ/A PRE		89	93	0	93	89
AATREX	16 OZ/A PRE						
LAUDIS	3 OZ/A V2						
AATREX	16 OZ/A V2						
ROUNDUP POWERMAX	32 OZ/A V2						
8 CHECK			0	0	0	0	0
LSD P=.05			0.7	1.8	.	1.8	0.7
Standard Deviation			0.4	1.0	0.0	1.0	0.4
Replicate F			1.000	1.000	0.000	1.000	1.000
Replicate Prob(F)			0.3927	0.3927	1.0000	0.3927	0.3927
Treatment F			33369.575	5441.646	0.000	5352.503	33369.575
Treatment Prob(F)			0.0001	0.0001	1.0000	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,9 because error mean square = 0.

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Pest Type	W Weed
Pest Code	IPOSS
Pest Name	Morning glory
Crop Code	ZEAMX
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	7-16-2018 10-1-2018
Rating Type	PERCENT YIELD
Rating Unit	CONTROL BU
Rating Timing	8 WEEK
Days After First/Last Applic.	76 57 153 134
Trt-Eval Interval	
Days After Emergence	70 DE-1 147 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	12	16
1	UNTREATED CHECK				0	53.4
2	CORVUS	3 OZ/A	PRE		90	174.2
	AATREX	16 OZ/A	PRE			
	DIFLEXX DUO	24 OZ/A	V2			
	AATREX	16 OZ/A	V2			
	ROUNDUP POWERMAX	32 OZ/A	V2			
3	BALANCE FLEXX	3 OZ/A	PRE		90	182.0
	AATREX	16 OZ/A	PRE			
	DIFLEXX DUO	24 OZ/A	V2			
	AATREX	16 OZ/A	V2			
	ROUNDUP POWERMAX	32 OZ/A	V2			
4	CORVUS	3 OZ/A	PRE		90	167.9
	AATREX	16 OZ/A	PRE			
	CAPRENO	3 OZ/A	V2			
	AATREX	16 OZ/A	V2			
	ROUNDUP POWERMAX	32 OZ/A	V2			
5	BALANCE FLEXX	3 OZ/A	PRE		99	195.7
	AATREX	16 OZ/A	PRE			
	CAPRENO	3 OZ/A	V2			
	AATREX	16 OZ/A	V2			
	ROUNDUP POWERMAX	32 OZ/A	V2			
6	CORVUS	3 OZ/A	PRE		99	178.3
	AATREX	16 OZ/A	PRE			
	LAUDIS	3 OZ/A	V2			
	AATREX	16 OZ/A	V2			
	ROUNDUP POWERMAX	32 OZ/A	V2			
7	BALANCE FLEXX	3 OZ/A	PRE		93	172.0
	AATREX	16 OZ/A	PRE			
	LAUDIS	3 OZ/A	V2			
	AATREX	16 OZ/A	V2			
	ROUNDUP POWERMAX	32 OZ/A	V2			
8	CHECK				0	39.2
LSD P=.05					1.8	14.51
Standard Deviation					1.0	8.28
Replicate F					1.000	1.923
Replicate Prob(F)					0.3927	0.1828
Treatment F					5441.646	166.997
Treatment Prob(F)					0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,9 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE III

Trial ID: C18007 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: BAYER CORN2 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOSHUA JONES

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

34 DP-1 = 1 ZEAMX 5-1-2018
48 DP-1 = 1 ZEAMX 5-1-2018
76 DP-1 = 1 ZEAMX 5-1-2018
153 DP-1 = 1 ZEAMX 5-1-2018

ARM Action Codes

TY1 = $4.093985 * [14] * (100 - [15]) / 84.5$

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CORN POSTEMERGENCE III

Trial ID: C18007 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BAYER CORN2 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOSHUA JONES

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

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Crop Description

Crop 1: ZEAMX Zea mays
Variety: DKC 65-95
Description: RR

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018
Harvest Date: 10-1-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: MASSEY FERGUSON 8XP
% Standard Moisture: 15.5

Planting Rate, Unit: 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT²
Replications: 3

Site Type: FIELD field
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:
200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

University of Kentucky

Application Description

	A	B
Application Date:	5-1-2018	5-20-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	V2
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	84 F
% Relative Humidity:	48	50
Wind Velocity, Unit:	8 MPH	8 MPH
Wind Direction:	SW	SW
Soil Temperature, Unit:	55 F	71 F
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	10	10
Next Moisture Occurred On:	5-4-2018	5-21-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V2
Height, Unit:		6 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:		2 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:		4 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Height, Unit:		1.5 IN

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GAL/AC	24 GAL/AC
Mix Overage, Unit:	0 mL	0 mL
Mix Size, Unit:	3 L	3 L
Propellant:	CO2	CO2

University of Kentucky

CORN POSTEMERGENCE IV

Trial ID: C18008 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: MON 24-13 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: DAN CHILDS

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-1-2018	6-1-2018	6-1-2018	6-1-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	31 31	31 31	31 31	31 31
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 TRIPLEFLEX	1 QT/A	PRE	0	95	85	91
HARNESS MAX	40 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
2 HARNESS XTRA	1.75 QT/A	PRE	0	99	80	85
HARNESS MAX	40 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
3 HARNESS XTRA	1.5 QT/A	PRE	0	99	85	85
HARNESS MAX	40 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
4 DEGREE XTRA	2.25 QT/A	PRE	0	99	85	90
HARNESS MAX	40 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
5 HARNESS MAX	64 FL OZ/A	PRE	0	99	90	90
ATRAZINE	1 QT/A	PRE				
DIFLEXX	16 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
INTACT	0.5 % V/V	LP				
6 HARNESS MAX	75 FL OZ/A	PRE	0	99	95	95
ATRAZINE	1 QT/A	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
7 ACURON	48 FL OZ/A	PRE	0	99	85	90
HALEX GT	58 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
8 BICEP II MAGNUM	56 FL OZ/A	PRE	0	99	75	83
HALEX GT	58 FL OZ/A	LP				
NIS	0.25 % V/V	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
9 LEXAR EZ	1.5 QT/A	PRE	0	99	85	88
HALEX GT	1.8 QT/A	LP				
NIS	0.25 % V/V	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
10 KEYSTONE NXT	1.75 QT/A	PRE	0	99	88	88
RESICORE	1.25 QT/A	LP				
DURANGO DMA	36 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

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Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-1-2018	6-1-2018	6-1-2018	6-1-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	31 31	31 31	31 31	31 31
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4
11 SURESTART II	1 QT/A	PRE	0	99	88	88
RESICORE	2.5 QT/A	LP				
DURANGO DMA	36 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
12 RESICORE	2.5 QT/A	PRE	0	99	88	88
ATRAZINE	1 QT/A	PRE				
DURANGO DMA	36 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
13 ARMEZON PRO	20 FL OZ/A	PRE	0	99	88	88
ATRAZINE	1 QT/A	PRE				
STATUS	5 OZ WT/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
14 HARNESS XTRA	1.75 QT/A	PRE	0	99	95	95
BALANCE FLEXX	3 FL OZ/A	PRE				
DIFLEXX	16 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
15 CORVUS	5.6 FL OZ/A	PRE	0	99	85	95
ATRAZINE	1 QT/A	PRE				
DIFLEXX	16 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
16 CHECK			0	0	0	0
LSD P=.05			.	.	.	2.4
Standard Deviation			0.0	0.0	0.0	1.5
Replicate F			0.000	0.000	0.000	1.208
Replicate Prob(F)			1.0000	1.0000	1.0000	0.3130
Treatment F			0.000	0.000	0.000	716.451
Treatment Prob(F)			1.0000	1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-18-2018	6-18-2018	6-18-2018	6-18-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	48 14	48 14	48 14	48 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	42 DE-1	42 DE-1	42 DE-1	42 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	5	6	7	8
1	TRIPLEFLEX	1 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
2	HARNESS XTRA	1.75 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
3	HARNESS XTRA	1.5 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
4	DEGREE XTRA	2.25 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
5	HARNESS MAX	64 FL OZ/A		PRE	0	99	99	99
	ATRAZINE	1 QT/A		PRE				
	DIFLEXX	16 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	INTACT	0.5 % V/V		LP				
6	HARNESS MAX	75 FL OZ/A		PRE	0	99	99	99
	ATRAZINE	1 QT/A		PRE				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
7	ACURON	48 FL OZ/A		PRE	0	99	99	99
	HALEX GT	58 FL OZ/A		LP				
	NIS	0.25 % V/V		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
8	BICEP II MAGNUM	56 FL OZ/A		PRE	0	99	99	99
	HALEX GT	58 FL OZ/A		LP				
	NIS	0.25 % V/V		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
9	LEXAR EZ	1.5 QT/A		PRE	0	99	99	99
	HALEX GT	1.8 QT/A		LP				
	NIS	0.25 % V/V		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
10	KEYSTONE NXT	1.75 QT/A		PRE	0	99	99	99
	RESICORE	1.25 QT/A		LP				
	DURANGO DMA	36 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-18-2018	6-18-2018	6-18-2018	6-18-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	48 14	48 14	48 14	48 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	42 DE-1	42 DE-1	42 DE-1	42 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	5	6	7	8
11 SURESTART II	1 QT/A	PRE	0	99	99	99
RESICORE	2.5 QT/A	LP				
DURANGO DMA	36 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
12 RESICORE	2.5 QT/A	PRE	0	99	99	99
ATRAZINE	1 QT/A	PRE				
DURANGO DMA	36 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
13 ARMEZON PRO	20 FL OZ/A	PRE	0	99	99	99
ATRAZINE	1 QT/A	PRE				
STATUS	5 OZ WT/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
14 HARNESS XTRA	1.75 QT/A	PRE	0	99	96	99
BALANCE FLEXX	3 FL OZ/A	PRE				
DIFLEXX	16 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
15 CORVUS	5.6 FL OZ/A	PRE	0	99	99	99
ATRAZINE	1 QT/A	PRE				
DIFLEXX	16 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
16 CHECK			0	0	0	0
LSD P=.05			.	.	1.0	.
Standard Deviation			0.0	0.0	0.6	0.0
Replicate F			0.000	0.000	1.000	0.000
Replicate Prob(F)			1.0000	1.0000	0.3798	1.0000
Treatment F			0.000	0.000	5497.263	0.000
Treatment Prob(F)			1.0000	1.0000	0.0001	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	7-2-2018	7-2-2018	7-2-2018	7-2-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	62 28	62 28	62 28	62 28
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	56 DE-1	56 DE-1	56 DE-1	56 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	9	10	11	12
1	TRIPLEFLEX	1 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
2	HARNESS XTRA	1.75 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
3	HARNESS XTRA	1.5 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
4	DEGREE XTRA	2.25 QT/A		PRE	0	99	99	99
	HARNESS MAX	40 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
5	HARNESS MAX	64 FL OZ/A		PRE	0	99	99	99
	ATRAZINE	1 QT/A		PRE				
	DIFLEXX	16 FL OZ/A		LP				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	INTACT	0.5 % V/V		LP				
6	HARNESS MAX	75 FL OZ/A		PRE	0	99	95	99
	ATRAZINE	1 QT/A		PRE				
	ROUNDUP POWERMAX	32 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
7	ACURON	48 FL OZ/A		PRE	0	99	99	99
	HALEX GT	58 FL OZ/A		LP				
	NIS	0.25 % V/V		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
8	BICEP II MAGNUM	56 FL OZ/A		PRE	0	99	99	99
	HALEX GT	58 FL OZ/A		LP				
	NIS	0.25 % V/V		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
9	LEXAR EZ	1.5 QT/A		PRE	0	99	99	99
	HALEX GT	1.8 QT/A		LP				
	NIS	0.25 % V/V		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				
10	KEYSTONE NXT	1.75 QT/A		PRE	0	99	99	99
	RESICORE	1.25 QT/A		LP				
	DURANGO DMA	36 FL OZ/A		LP				
	N-PAK AMS LIQUID	2.5 % V/V		LP				

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	ZEAMX			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	7-2-2018	7-2-2018	7-2-2018	7-2-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	62 28	62 28	62 28	62 28
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	56 DE-1	56 DE-1	56 DE-1	56 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	9	10	11	12
11 SURESTART II	1 QT/A	PRE	0	99	99	99
RESICORE	2.5 QT/A	LP				
DURANGO DMA	36 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
12 RESICORE	2.5 QT/A	PRE	0	99	99	99
ATRAZINE	1 QT/A	PRE				
DURANGO DMA	36 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
13 ARMEZON PRO	20 FL OZ/A	PRE	0	99	99	99
ATRAZINE	1 QT/A	PRE				
STATUS	5 OZ WT/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
14 HARNESS XTRA	1.75 QT/A	PRE	0	99	99	99
BALANCE FLEXX	3 FL OZ/A	PRE				
DIFLEXX	16 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
15 CORVUS	5.6 FL OZ/A	PRE	0	99	99	99
ATRAZINE	1 QT/A	PRE				
DIFLEXX	16 FL OZ/A	LP				
ROUNDUP POWERMAX	32 FL OZ/A	LP				
N-PAK AMS LIQUID	2.5 % V/V	LP				
16 CHECK			0	0	0	0
LSD P=.05			.	.	.	.
Standard Deviation			0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	7-30-2018	7-30-2018	7-30-2018	7-30-2018	10-1-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	YIELD
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	90 56	90 56	90 56	90 56	153 119
Trt-Eval Interval		AFTER POST	AFTER POST	AFTER POST	
Days After Emergence		84 DE-1	84 DE-1	84 DE-1	147 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	13	14	15	16	20
1	TRIPLEFLEX	1 QT/A		PRE	0	99	99	99	173.3
	HARNESS MAX	40 FL OZ/A		LP					
	ROUNDUP POWERMAX	32 FL OZ/A		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
2	HARNESS XTRA	1.75 QT/A		PRE	0	99	99	99	164.0
	HARNESS MAX	40 FL OZ/A		LP					
	ROUNDUP POWERMAX	32 FL OZ/A		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
3	HARNESS XTRA	1.5 QT/A		PRE	0	99	99	99	160.5
	HARNESS MAX	40 FL OZ/A		LP					
	ROUNDUP POWERMAX	32 FL OZ/A		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
4	DEGREE XTRA	2.25 QT/A		PRE	0	99	99	99	148.4
	HARNESS MAX	40 FL OZ/A		LP					
	ROUNDUP POWERMAX	32 FL OZ/A		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
5	HARNESS MAX	64 FL OZ/A		PRE	0	99	99	99	167.3
	ATRAZINE	1 QT/A		PRE					
	DIFLEXX	16 FL OZ/A		LP					
	ROUNDUP POWERMAX	32 FL OZ/A		LP					
	INTACT	0.5 % V/V		LP					
6	HARNESS MAX	75 FL OZ/A		PRE	0	99	95	99	186.8
	ATRAZINE	1 QT/A		PRE					
	ROUNDUP POWERMAX	32 FL OZ/A		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
7	ACURON	48 FL OZ/A		PRE	0	99	99	99	155.6
	HALEX GT	58 FL OZ/A		LP					
	NIS	0.25 % V/V		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
8	BICEP II MAGNUM	56 FL OZ/A		PRE	0	99	99	99	168.4
	HALEX GT	58 FL OZ/A		LP					
	NIS	0.25 % V/V		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
9	LEXAR EZ	1.5 QT/A		PRE	0	99	99	99	169.6
	HALEX GT	1.8 QT/A		LP					
	NIS	0.25 % V/V		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					
10	KEYSTONE NXT	1.75 QT/A		PRE	0	99	99	99	170.2
	RESICORE	1.25 QT/A		LP					
	DURANGO DMA	36 FL OZ/A		LP					
	N-PAK AMS LIQUID	2.5 % V/V		LP					

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	7-30-2018	7-30-2018	7-30-2018	7-30-2018	10-1-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	YIELD
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	90 56	90 56	90 56	90 56	153 119
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	
Days After Emergence	84 DE-1	84 DE-1	84 DE-1	84 DE-1	147 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	13	14	15	16	20
11 SURESTART II	1 QT/A	PRE	0	99	99	99	179.0
RESICORE	2.5 QT/A	LP					
DURANGO DMA	36 FL OZ/A	LP					
N-PAK AMS LIQUID	2.5 % V/V	LP					
12 RESICORE	2.5 QT/A	PRE	0	99	99	99	174.6
ATRAZINE	1 QT/A	PRE					
DURANGO DMA	36 FL OZ/A	LP					
N-PAK AMS LIQUID	2.5 % V/V	LP					
13 ARMEZON PRO	20 FL OZ/A	PRE	0	99	99	99	172.0
ATRAZINE	1 QT/A	PRE					
STATUS	5 OZ WT/A	LP					
ROUNDUP POWERMAX	32 FL OZ/A	LP					
N-PAK AMS LIQUID	2.5 % V/V	LP					
14 HARNESS XTRA	1.75 QT/A	PRE	0	99	99	99	174.1
BALANCE FLEXX	3 FL OZ/A	PRE					
DIFLEXX	16 FL OZ/A	LP					
ROUNDUP POWERMAX	32 FL OZ/A	LP					
N-PAK AMS LIQUID	2.5 % V/V	LP					
15 CORVUS	5.6 FL OZ/A	PRE	0	99	99	99	151.7
ATRAZINE	1 QT/A	PRE					
DIFLEXX	16 FL OZ/A	LP					
ROUNDUP POWERMAX	32 FL OZ/A	LP					
N-PAK AMS LIQUID	2.5 % V/V	LP					
16 CHECK			0	0	0	0	102.3
LSD P=.05			.	.	.	.	37.97
Standard Deviation			0.0	0.0	0.0	0.0	22.77
Replicate F			0.000	0.000	0.000	0.000	0.445
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.6447
Treatment F			0.000	0.000	0.000	0.000	2.118
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0391

Could not calculate LSD (% mean diff) for columns 1,2,3,5,6,8,9,10,11,12,13,14,15,16 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE IV

Trial ID: C18008 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: MON 24-13 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: DAN CHILDS

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

31 DP-1 = 1 ZEAMX 5-1-2018
48 DP-1 = 1 ZEAMX 5-1-2018
62 DP-1 = 1 ZEAMX 5-1-2018
90 DP-1 = 1 ZEAMX 5-1-2018
153 DP-1 = 1 ZEAMX 5-1-2018

ARM Action Codes

TY1 = $4.093985 * [18] * (100 - [19]) / 84.5$

University of Kentucky

CORN POSTEMERGENCE IV

Trial ID: C18008 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: MON 24-13 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: DAN CHILDS

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: ZEAMX Zea mays
Variety: DKC 65-95
Description: RR

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018
Harvest Date: 10-1-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: MASSEY FERGUSON 8XP
% Standard Moisture: 15.5

Planting Rate, Unit: 30000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Pest Description

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

Pest 2 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT² **Treatments:** 16
Replications: 3

Site Type: FIELD field

Tillage Type: CONTIL conventional-till
Study Design: RACOB Randomized Complete Block (RCB)

Field Prep./Maintenance:
 200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6	% OM: 2.6	Texture: SIL	silt loam
% Silt: 62	pH: 6.4	Soil Name: MAURY SILT LOAM	
% Clay: 32	CEC: 18	Fert. Level: E	excellent
		Soil Drainage: E	excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

University of Kentucky

Application Description

	A	B
Application Date:	5-1-2018	6-4-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	LP
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	SARA CARTER
Air Temperature, Unit:	82 F	74 F
% Relative Humidity:	48	42
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	SW	WNW
Soil Temperature, Unit:	55 F	71 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	10	0
Next Moisture Occurred On:	5-4-2018	6-10-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Height, Unit:	14	IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:	6	IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:	10	IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Height, Unit:	4	IN

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GAL/AC	24 GAL/AC
Mix Overage, Unit:	0 mL	0 mL
Mix Size, Unit:	3 L	3 L
Propellant:	CO2	CO2

University of Kentucky

CORN POSTEMERGENCE V

Trial ID: C18009
Protocol ID: AMVAC-CORN
Project ID:

Location: LEXINGTON, KY Trial Year: 2018
Investigator: Sara Carter
Study Director: CHARLES SLACK
Sponsor Contact: SCOTT AKIN

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	6-4-2018	6-4-2018	6-4-2018	6-4-2018	6-18-2018
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	34 6	34 6	34 6	34 6	48 20
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	28 DE-1	42 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	1	2	3	4	5
1 UNTREATED CHECK			0	0	0	0	0
2 HARNESS XTRA	3.6 PT/A	PRE	0	99	93	93	0
3 HARNESS XTRA	3.6 PT/A	PRE	0	99	99	99	0
IMPACT Z	10.7 FL OZ/A	MP					
MSO	1 % V/V	MP					
N-PAK AMS LIQUID	2.5 % V/V	MP					
4 HARNESS XTRA	3.6 PT/A	PRE	0	99	99	99	0
IMPACT Z	8 FL OZ/A	MP					
ROUNDUP POWERMAX	32 FL OZ/A	MP					
MSO	0.5 % V/V	MP					
N-PAK AMS LIQUID	2.5 % V/V	MP					
5 HARNESS XTRA	3.6 PT/A	PRE	0	99	95	99	0
IMPACT Z	5 FL OZ/A	MP					
LIBERTY 280	22 FL OZ/A	MP					
N-PAK AMS LIQUID	2.5 % V/V	MP					
6 HARNESS	1.87 PT/A	EP	0	99	99	99	0
IMPACT	1 FL OZ/A	EP					
ATRAZINE	1 PT/A	EP					
MSO	0.25 % V/V	EP					
N-PAK AMS LIQUID	2.5 % V/V	EP					
7 HARNESS	1.87 PT/A	EP	0	99	99	99	0
IMPACT	0.75 FL OZ/A	EP					
ROUNDUP POWERMAX	32 FL OZ/A	EP					
ATRAZINE	1 PT/A	EP					
MSO	0.25 % V/V	EP					
N-PAK AMS LIQUID	2.5 % V/V	EP					
8 HALEX GT	3.6 PT/A	EP	0	99	99	99	0
ATRAZINE	1 PT/A	EP					
NIS	0.25 % V/V	EP					
N-PAK AMS LIQUID	2.5 % V/V	EP					
LSD P=.05			.	.	7.3	6.8	.
Standard Deviation			0.0	0.0	4.2	3.9	0.0
Replicate F			0.000	0.000	2.131	1.000	0.000
Replicate Prob(F)			1.0000	1.0000	0.1556	0.3927	1.0000
Treatment F			0.000	0.000	203.856	240.880	0.000
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed		W Weed
Pest Code	SETFA	AMBTR	IPOSS		SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code					
Crop Scientific Name					ZEAMX
Crop Name					Zea mays Corn
Rating Date	6-18-2018	6-18-2018	6-18-2018	7-16-2018	7-16-2018
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	48 20	48 20	48 20	76 48	76 48
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	42 DE-1	42 DE-1	42 DE-1	70 DE-1	70 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	6	7	8	9	10
1 UNTREATED CHECK			0	0	0	0	0
2 HARNESS XTRA	3.6 PT/A	PRE	99	70	72	0	99
3 HARNESS XTRA	3.6 PT/A	PRE	99	95	95	0	99
IMPACT Z	10.7 FL OZ/A	MP					
MSO	1 % V/V	MP					
N-PAK AMS LIQUID	2.5 % V/V	MP					
4 HARNESS XTRA	3.6 PT/A	PRE	99	99	99	0	99
IMPACT Z	8 FL OZ/A	MP					
ROUNDUP POWERMAX	32 FL OZ/A	MP					
MSO	0.5 % V/V	MP					
N-PAK AMS LIQUID	2.5 % V/V	MP					
5 HARNESS XTRA	3.6 PT/A	PRE	99	95	99	0	99
IMPACT Z	5 FL OZ/A	MP					
LIBERTY 280	22 FL OZ/A	MP					
N-PAK AMS LIQUID	2.5 % V/V	MP					
6 HARNESS	1.87 PT/A	EP	99	99	99	0	99
IMPACT	1 FL OZ/A	EP					
ATRAZINE	1 PT/A	EP					
MSO	0.25 % V/V	EP					
N-PAK AMS LIQUID	2.5 % V/V	EP					
7 HARNESS	1.87 PT/A	EP	99	99	99	0	99
IMPACT	0.75 FL OZ/A	EP					
ROUNDUP POWERMAX	32 FL OZ/A	EP					
ATRAZINE	1 PT/A	EP					
MSO	0.25 % V/V	EP					
N-PAK AMS LIQUID	2.5 % V/V	EP					
8 HALEX GT	3.6 PT/A	EP	99	99	99	0	99
ATRAZINE	1 PT/A	EP					
NIS	0.25 % V/V	EP					
N-PAK AMS LIQUID	2.5 % V/V	EP					
LSD P=.05			.	3.9	1.8	.	.
Standard Deviation			0.0	2.2	1.0	0.0	0.0
Replicate F			0.000	1.000	1.000	0.000	0.000
Replicate Prob(F)			1.0000	0.3927	0.3927	1.0000	1.0000
Treatment F			0.000	711.564	3472.772	0.000	0.000
Treatment Prob(F)			1.0000	0.0001	0.0001	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	IPOSS	
Pest Name	Giant ragweed	Morning glory	
Crop Code			ZEAMX
Crop Scientific Name			Zea mays
Crop Name			Corn
Rating Date	7-16-2018	7-16-2018	10-1-2018
Rating Type	CONTRO	CONTRO	YIELD
Rating Unit	%	%	BU
Rating Timing	8 WEEK	8 WEEK	
Days After First/Last Applic.	76 48	76 48	153 125
Trt-Eval Interval	AFTER POST	AFTER POST	
Days After Emergence	70 DE-1	70 DE-1	147 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	11	12	16
1	UNTREATED CHECK				0	0	32.6
2	HARNESS XTRA	3.6	PT/A	PRE	70	72	103.2
3	HARNESS XTRA	3.6	PT/A	PRE	95	95	174.4
	IMPACT Z	10.7	FL OZ/A	MP			
	MSO	1	% V/V	MP			
	N-PAK AMS LIQUID	2.5	% V/V	MP			
4	HARNESS XTRA	3.6	PT/A	PRE	99	99	181.9
	IMPACT Z	8	FL OZ/A	MP			
	ROUNDUP POWERMAX	32	FL OZ/A	MP			
	MSO	0.5	% V/V	MP			
	N-PAK AMS LIQUID	2.5	% V/V	MP			
5	HARNESS XTRA	3.6	PT/A	PRE	95	99	175.9
	IMPACT Z	5	FL OZ/A	MP			
	LIBERTY 280	22	FL OZ/A	MP			
	N-PAK AMS LIQUID	2.5	% V/V	MP			
6	HARNESS	1.87	PT/A	EP	99	99	174.5
	IMPACT	1	FL OZ/A	EP			
	ATRAZINE	1	PT/A	EP			
	MSO	0.25	% V/V	EP			
	N-PAK AMS LIQUID	2.5	% V/V	EP			
7	HARNESS	1.87	PT/A	EP	99	99	173.2
	IMPACT	0.75	FL OZ/A	EP			
	ROUNDUP POWERMAX	32	FL OZ/A	EP			
	ATRAZINE	1	PT/A	EP			
	MSO	0.25	% V/V	EP			
	N-PAK AMS LIQUID	2.5	% V/V	EP			
8	HALEX GT	3.6	PT/A	EP	99	99	186.6
	ATRAZINE	1	PT/A	EP			
	NIS	0.25	% V/V	EP			
	N-PAK AMS LIQUID	2.5	% V/V	EP			
	LSD P=.05				3.9	1.8	12.87
	Standard Deviation				2.2	1.0	7.35
	Replicate F				1.000	1.000	5.789
	Replicate Prob(F)				0.3927	0.3927	0.0147
	Treatment F				711.564	3472.772	164.429
	Treatment Prob(F)				0.0001	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,5,6,9,10 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE V

Trial ID: C18009 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: AMVAC-CORN Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT AKIN

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

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

Rating Unit

% = percent
BU = bushel

Plant-Eval Interval

34 DP-1 = 1 ZEAMX 5-1-2018
48 DP-1 = 1 ZEAMX 5-1-2018
76 DP-1 = 1 ZEAMX 5-1-2018
153 DP-1 = 1 ZEAMX 5-1-2018

ARM Action Codes

TY1 = $4.093985^{*14} * (100 - [15]) / 84.5$

University of Kentucky

CORN POSTEMERGENCE V

Trial ID: C18009 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: AMVAC-CORN Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT AKIN

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: ZEAMX Zea mays

Variety: BECKS 6127A3

Description: RR/LL

Corn

Planting Rate, Unit: 30000 S/A

Depth, Unit: 1.5 IN

Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 55 F

Soil Moisture: GOOD good

Seed Bed: SMOOTH smooth

Planting Date: 5-1-2018

Planting Method: PLANTD

Planting Equipment: FE

Emergence Date: 5-7-2018

Harvest Date: 10-1-2018

Harvested Width, Unit: 5 FT

Harvested Length, Unit: 38 FT

Harvest Equipment: MASSEY FERGUSON 8XP

% Standard Moisture: 15.5

planted
field equipment

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*

Common Name: Giant foxtail

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*

Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.

Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT

Treated Plot Length: 44 FT

Treated Plot Area: 440 FT² **Treatments:** 8

Replications: 3

Site Type: FIELD

field

Tillage Type: CONTIL conventional-till

Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:

200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6

% OM: 2.6

Texture: SIL

silt loam

% Silt: 62

pH: 6.4

Soil Name: MAURY SILT LOAM

% Clay: 32

CEC: 18

Fert. Level: E

excellent

Soil Drainage: E

excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP

Distance, Unit: 1.5 MI

University of Kentucky

Application Description

	A	B	C
Application Date:	5-1-2018	5-21-2018	5-29-2018
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	MP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	76 F	77 F
% Relative Humidity:	48	42	75
Wind Velocity, Unit:	8 MPH	0 MPH	4 MPH
Wind Direction:	SW	S	SW
Soil Temperature, Unit:	55 F	71 F	74 F
Soil Moisture:	NORMAL	ABONOR	SLIWET
% Cloud Cover:	10	60	20
Next Moisture Occurred On:	5-4-2018	5-21-2018	5-30-2018

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Height, Unit:	5 IN	6 IN	6 IN

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:	2 IN	3 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:	3 IN	5 IN	5 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:	1.5 IN	2 IN	2 IN

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	24 GAL/AC	24 GAL/AC	24 GAL/AC
Mix Overage, Unit:	0 mL	0 mL	0 mL
Mix Size, Unit:	3 L	3 L	3 L
Propellant:	CO2	CO2	CO2

University of Kentucky

CORN POSTEMERGENCE VI

Trial ID: C18010 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BAYER CORN1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOSHUA JONES

		W Weed SETFA	W Weed AMBTR	W Weed IPOSS	
Pest Type		Giant foxtail	Giant ragweed	Morning glory	
Pest Code					
Pest Name					
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	6-4-2018	6-4-2018	6-4-2018	6-4-2018	6-18-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	14 14	14 14	14 14	14 14	28 28
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	28 DE-1	42 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5
1	UNTREATED				0	0	0	0	0
2	DIFLEXX DUO	32 OZ/A		MP	0	99	99	99	0
	ROUNDUP WeatherMAX	32 OZ/A		MP					
	AATREX	16 OZ/A		MP					
	AMS	8.5 LB/100	GAL	MP					
3	DIFLEXX DUO	24 OZ/A		MP	0	99	99	99	0
	ROUNDUP WeatherMAX	32 OZ/A		MP					
	AATREX	16 OZ/A		MP					
	AMS	8.5 LB/100	GAL	MP					
4	DIFLEXX DUO	24 OZ/A		MP	0	99	99	99	0
	LIBERTY 280	32 OZ/A		MP					
	AATREX	16 OZ/A		MP					
	AMS	8.5 LB/100	GAL	MP					
5	CAPRENO	3 OZ/A		MP	0	99	99	99	0
	ROUNDUP WeatherMAX	32 OZ/A		MP					
	AATREX	16 OZ/A		MP					
	AMS	8.5 LB/100	GAL	MP					
6	HALEX GT	57.6 OZ/A		MP	0	99	99	99	0
	AATREX	16 OZ/A		MP					
	NIS	0.25 % V/V		MP					
	AMS	8.5 LB/100	GAL	MP					
7	ARMEZON PRO	16 OZ/A		MP	0	99	99	99	0
	ROUNDUP WeatherMAX	32 OZ/A		MP					
	AATREX	16 OZ/A		MP					
	AMS	8.5 LB/100	GAL	MP					
8	ARMEZON	0.5717 OZ/A		MP	0	99	99	99	0
	STATUS	3 OZ/A		MP					
	ROUNDUP WeatherMAX	32 OZ/A		MP					
	AATREX	16 OZ/A		MP					
	AMS	8.5 LB/100	GAL	MP					
9	LAUDIS	3 OZ/A		MP	0	99	99	99	0
	AATREX	16 OZ/A		MP					
	ROUNDUP WeatherMAX	32 OZ/A		MP					
	AMS	8.5 LB/100	GAL	MP					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9,11 because error mean square = 0.

University of Kentucky

Pest Type			W Weed	W Weed	W Weed			
Pest Code			SETFA	AMBTR	IPOSS			
Pest Name			Giant foxtail	Giant ragweed	Morning glory			
Crop Code			ZEAMX					ZEAMX
Crop Scientific Name			Zea mays					Zea mays
Crop Name			Corn					Corn
Rating Date			6-4-2018	6-4-2018	6-4-2018	6-4-2018	6-18-2018	
Rating Type			CROP	PERCENT	PERCENT	PERCENT	PERCENT	CROP
Rating Unit			INJURY	CONTROL	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing			2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	
Days After First/Last Applic.			14 14	14 14	14 14	14 14	28 28	
Trt-Eval Interval			14 DA-A	14 DA-A	14 DA-A	14 DA-A	28 DA-A	
Days After Emergence			28 DE-1	28 DE-1	28 DE-1	28 DE-1	42 DE-1	
Trt Treatment								
No. Name	Rate	Unit	Growth Stage	1	2	3	4	5
10 CALLISTO	3 OZ/A		MP	0	99	99	99	0
AATREX	16 OZ/A		MP					
ROUNDUP WeatherMAX	32 OZ/A		MP					
AMS	8.5 LB/100 GAL		MP					
LSD P=.05								
Standard Deviation				0.0	0.0	0.0	0.0	0.0
Replicate F				0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F				0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9,11 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS	SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Giant foxtail
Crop Code				ZEAMX
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	6-18-2018	6-18-2018	6-18-2018	7-16-2018
Rating Type	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	4 WEEK	4 WEEK	4 WEEK	8 WEEK
Days After First/Last Applic.	28 28	28 28	28 28	56 56
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	56 DA-A
Days After Emergence	42 DE-1	42 DE-1	42 DE-1	70 DE-1

Trt Treatment	Rate	Rate Unit	Growth Stage	6	7	8	9	10
1 UNTREATED				0	0	0	0	0
2 DIFLEXX DUO	32 OZ/A	MP		93	95	95	0	93
ROUNDUP WeatherMAX	32 OZ/A	MP						
AATREX	16 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						
3 DIFLEXX DUO	24 OZ/A	MP		99	90	95	0	99
ROUNDUP WeatherMAX	32 OZ/A	MP						
AATREX	16 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						
4 DIFLEXX DUO	24 OZ/A	MP		95	95	95	0	95
LIBERTY 280	32 OZ/A	MP						
AATREX	16 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						
5 CAPRENO	3 OZ/A	MP		99	99	99	0	99
ROUNDUP WeatherMAX	32 OZ/A	MP						
AATREX	16 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						
6 HALEX GT	57.6 OZ/A	MP		99	99	99	0	99
AATREX	16 OZ/A	MP						
NIS	0.25 % V/V	MP						
AMS	8.5 LB/100 GAL	MP						
7 ARMEZON PRO	16 OZ/A	MP		99	95	95	0	99
ROUNDUP WeatherMAX	32 OZ/A	MP						
AATREX	16 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						
8 ARMEZON	0.5717 OZ/A	MP		99	99	93	0	99
STATUS	3 OZ/A	MP						
ROUNDUP WeatherMAX	32 OZ/A	MP						
AATREX	16 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						
9 LAUDIS	3 OZ/A	MP		95	95	95	0	95
AATREX	16 OZ/A	MP						
ROUNDUP WeatherMAX	32 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9,11 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed		W Weed		
Pest Code		SETFA	AMBTR	IPOSS		SETFA		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Crop Code					ZEAMX			
Crop Scientific Name					Zea mays			
Crop Name					Corn			
Rating Date		6-18-2018	6-18-2018	6-18-2018	7-16-2018	7-16-2018		
Rating Type		PERCENT	PERCENT	PERCENT	CROP	PERCENT		
Rating Unit		CONTROL	CONTROL	CONTROL	INJURY	CONTROL		
Rating Timing		4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.		28 28	28 28	28 28	56 56	56 56		
Trt-Eval Interval		28 DA-A	28 DA-A	28 DA-A	56 DA-A	56 DA-A		
Days After Emergence		42 DE-1	42 DE-1	42 DE-1	70 DE-1	70 DE-1		
Trt Treatment								
No. Name	Rate	Unit	Growth Stage	6	7	8	9	10
10 CALLISTO	3 OZ/A	MP		99	95	95	0	99
AATREX	16 OZ/A	MP						
ROUNDUP WeatherMAX	32 OZ/A	MP						
AMS	8.5 LB/100 GAL	MP						
LSD P=.05				1.6	.	1.6	.	1.6
Standard Deviation				0.9	0.0	0.9	0.0	0.9
Replicate F				1.000	0.000	1.000	0.000	1.000
Replicate Prob(F)				0.3874	1.0000	0.3874	1.0000	0.3874
Treatment F				3438.294	0.000	3309.440	0.000	3438.294
Treatment Prob(F)				0.0001	1.0000	0.0001	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9,11 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed		
Pest Code	AMBTR	IPOSS		
Pest Name	Giant ragweed	Morning glory		
Crop Code			ZEAMX	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Rating Date	7-16-2018	7-16-2018	10-1-2018	
Rating Type	PERCENT	PERCENT	YIELD	
Rating Unit	CONTROL	CONTROL	BU	
Rating Timing	8 WEEK	8 WEEK		
Days After First/Last Applic.	56 56	56 56	133 133	
Trt-Eval Interval	56 DA-A	56 DA-A	133 DA-A	
Days After Emergence	70 DE-1	70 DE-1	147 DE-1	

Trt No.	Treatment Name	Rate	Unit	Growth Stage	11	12	16
1	UNTREATED				0	0	32.7
2	DIFLEXX DUO	32 OZ/A		MP	95	95	173.1
	ROUNDUP WeatherMAX	32 OZ/A		MP			
	AATREX	16 OZ/A		MP			
	AMS	8.5 LB/100	GAL	MP			
3	DIFLEXX DUO	24 OZ/A		MP	90	95	183.9
	ROUNDUP WeatherMAX	32 OZ/A		MP			
	AATREX	16 OZ/A		MP			
	AMS	8.5 LB/100	GAL	MP			
4	DIFLEXX DUO	24 OZ/A		MP	95	95	193.3
	LIBERTY 280	32 OZ/A		MP			
	AATREX	16 OZ/A		MP			
	AMS	8.5 LB/100	GAL	MP			
5	CAPRENO	3 OZ/A		MP	99	99	176.0
	ROUNDUP WeatherMAX	32 OZ/A		MP			
	AATREX	16 OZ/A		MP			
	AMS	8.5 LB/100	GAL	MP			
6	HALEX GT	57.6 OZ/A		MP	99	99	177.0
	AATREX	16 OZ/A		MP			
	NIS	0.25 % V/V		MP			
	AMS	8.5 LB/100	GAL	MP			
7	ARMEZON PRO	16 OZ/A		MP	95	95	167.1
	ROUNDUP WeatherMAX	32 OZ/A		MP			
	AATREX	16 OZ/A		MP			
	AMS	8.5 LB/100	GAL	MP			
8	ARMEZON	0.5717 OZ/A		MP	99	93	161.5
	STATUS	3 OZ/A		MP			
	ROUNDUP WeatherMAX	32 OZ/A		MP			
	AATREX	16 OZ/A		MP			
	AMS	8.5 LB/100	GAL	MP			
9	LAUDIS	3 OZ/A		MP	95	95	176.0
	AATREX	16 OZ/A		MP			
	ROUNDUP WeatherMAX	32 OZ/A		MP			
	AMS	8.5 LB/100	GAL	MP			

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9,11 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed			
Pest Code		AMBTR	IPOSS			
Pest Name		Giant ragweed		Morning glory		
Crop Code					ZEAMX	
Crop Scientific Name					Zea mays	
Crop Name					Corn	
Rating Date		7-16-2018	7-16-2018	10-1-2018		
Rating Type		PERCENT	PERCENT	YIELD		
Rating Unit		CONTROL	CONTROL	BU		
Rating Timing		8 WEEK	8 WEEK			
Days After First/Last Applic.		56 56	56 56	133 133		
Trt-Eval Interval		56 DA-A	56 DA-A	133 DA-A		
Days After Emergence		70 DE-1	70 DE-1	147 DE-1		
Trt Treatment						
No. Name	Rate	Unit	Growth Stage	11	12	16
10 CALLISTO	3 OZ/A	MP		95	95	172.5
AATREX	16 OZ/A	MP				
ROUNDUP WeatherMAX	32 OZ/A	MP				
AMS	8.5 LB/100 GAL	MP				
LSD P=.05				.	1.6	9.27
Standard Deviation				0.0	0.9	5.40
Replicate F				0.000	1.000	2.973
Replicate Prob(F)				1.0000	0.3874	0.0766
Treatment F				0.000	3309.440	217.625
Treatment Prob(F)				1.0000	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9,11 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE VI

Trial ID: C18010 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: BAYER CORN1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOSHUA JONES

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

34 DP-1 = 1 ZEAMX 5-1-2018
48 DP-1 = 1 ZEAMX 5-1-2018
76 DP-1 = 1 ZEAMX 5-1-2018
153 DP-1 = 1 ZEAMX 5-1-2018

ARM Action Codes

TY1 = $4.093985 * [14] * (100 - [15]) / 84.5$

University of Kentucky

CORN POSTEMERGENCE VI

Trial ID: C18010 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BAYER CORN1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOSHUA JONES

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: ZEAMX Zea mays

Variety: BECKS 6127A3

Corn

Description: RR/LL

Planting Rate, Unit: 30000 S/A

Depth, Unit: 1.5 IN

Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 55 F

Soil Moisture: GOOD good

Seed Bed: SMOOTH smooth

Planting Date: 5-1-2018

Planting Method: PLANTD

Planting Equipment: FE

Emergence Date: 5-7-2018

Harvest Date: 10-1-2018

Harvested Width, Unit: 5 FT

Harvested Length, Unit: 38 FT

Harvest Equipment: MASSEY FERGUSON 8XP

% Standard Moisture: 15.5

planted
field equipment

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*

Common Name: Giant foxtail

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*

Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.

Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT

Treated Plot Length: 44 FT

Treated Plot Area: 440 FT² **Treatments:** 10

Replications: 3

Site Type: FIELD field

Tillage Type: CONTIL conventional-till

Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:

200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6

% OM: 2.6

Texture: SIL silt loam

% Silt: 62

pH: 6.4

Soil Name: MAURY SILT LOAM

% Clay: 32

CEC: 18

Fert. Level: E excellent

Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP

Distance, Unit: 1.5 MI

University of Kentucky

Application Description

A

Application Date: 5-21-2018
Application Method: SPRAY
Application Timing: MP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 84 F
% Relative Humidity: 50
Wind Velocity, Unit: 6 MPH
Wind Direction: SW
Soil Temperature, Unit: 71 F
Soil Moisture: ABONOR
% Cloud Cover: 60
Next Moisture Occurred On: 5-21-2018

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ZEAMX BCOR
Height, Unit: 6 IN

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Height, Unit: 2 IN
Pest 2 Code, Type, Scale: AMBTR W
Height, Unit: 4 IN
Pest 3 Code, Type, Scale: IPOSS W
Height, Unit: 1.5 IN

Application Equipment

A

Appl. Equipment: ATV
Equipment Type: ALTEVE
Operation Pressure, Unit: 30 PSI
Nozzle Type: FLAT FAN
Nozzle Size: 8004 DG
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GAL/AC
Mix Overage, Unit: 0 mL
Mix Size, Unit: 3 L
Propellant: CO2

University of Kentucky

CORN POSTEMERGENCE VII

Trial ID: C18011 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: UPI-CORN Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: TONY ESTES

Pest Type		W Weed	W Weed	W Weed		W Weed		
Pest Code		SETFA	AMBTR	IPOSS		SETFA		
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Crop Code	ZEAMX				ZEAMX			
Crop Scientific Name	Zea mays				Zea mays			
Crop Name	Corn				Corn			
Rating Date	6-4-2018	6-4-2018	6-4-2018	6-4-2018	6-18-2018	6-18-2018		
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP	PERCENT		
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL		
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK		
Days After First/Last Applic.	15 15	15 15	15 15	15 15	29 29	29 29		
Trt-Eval Interval	15 DA-A	15 DA-A	15 DA-A	15 DA-A	29 DA-A	29 DA-A		
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	28 DE-1	42 DE-1	42 DE-1		
Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	1	2	3	4	5	6
1 UNTREATED			0	0	0	0	0	0
2 MOCCASIN II PLUS	1.33 PT/A	EP	0	99	99	99	0	99
ATRAZINE	48 FL OZ/A	EP						
INTERLINE	29 FL OZ/A	EP						
AMS	2.5 % V/V	EP						
3 COYOTE	64 FL OZ/A	EP	0	99	99	99	0	99
INTERLINE	29 FL OZ/A	EP						
AMS	2.5 % V/V	EP						
4 CHECK			0	0	0	0	0	0
LSD P=.05			.	.	.	.	.	.
Standard Deviation			0.0	0.0	0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,11,12 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed		W Weed	W Weed	
Pest Code		AMBTR	IPOSS		SETFA	AMBTR	
Pest Name		Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	
Crop Code					ZEAMX		
Crop Scientific Name					Zea mays		
Crop Name					Corn		
Rating Date		6-18-2018	6-18-2018	7-16-2018	7-16-2018	7-16-2018	
Rating Type		PERCENT	PERCENT	CROP	PERCENT	PERCENT	
Rating Unit		CONTROL	CONTROL	INJURY	CONTROL	CONTROL	
Rating Timing		4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.		29 29	29 29	57 57	57 57	57 57	
Trt-Eval Interval		29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A	
Days After Emergence		42 DE-1	42 DE-1	70 DE-1	70 DE-1	70 DE-1	
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	7	8	9	10	11
1 UNTREATED			0	0	0	0	0
2 MOCCASIN II PLUS	1.33 PT/A	EP	90	95	0	99	90
ATRAZINE	48 FL OZ/A	EP					
INTERLINE	29 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
3 COYOTE	64 FL OZ/A	EP	95	95	0	99	95
INTERLINE	29 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
4 CHECK			0	0	0	0	0
LSD P=.05			.	.	.	.	.
Standard Deviation			0.0	0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,11,12 because error mean square = 0.

University of Kentucky

Pest Type	W Weed
Pest Code	IPOSS
Pest Name	Morning glory
Crop Code	ZEAMX
Crop Scientific Name	Zea mays
Crop Name	Corn
Rating Date	7-16-2018 10-1-2018
Rating Type	PERCENT YIELD
Rating Unit	CONTROL BU
Rating Timing	8 WEEK
Days After First/Last Applic.	57 57 134 134
Trt-Eval Interval	29 DA-A 134 DA-A
Days After Emergence	70 DE-1 147 DE-1

Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	12	17
1 UNTREATED			0	42.3
2 MOCCASIN II PLUS	1.33 PT/A	EP	95	174.0
ATRAZINE	48 FL OZ/A	EP		
INTERLINE	29 FL OZ/A	EP		
AMS	2.5 % V/V	EP		
3 COYOTE	64 FL OZ/A	EP	95	178.3
INTERLINE	29 FL OZ/A	EP		
AMS	2.5 % V/V	EP		
4 CHECK			0	66.9
LSD P=.05			.	39.93
Standard Deviation			0.0	19.99
Replicate F			0.000	1.199
Replicate Prob(F)			1.0000	0.3646
Treatment F			0.000	37.750
Treatment Prob(F)			1.0000	0.0003

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,11,12 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE VII

Trial ID: C18011 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: UPI-CORN Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: TONY ESTES

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

34 DP-1 = 1 ZEAMX 5-1-2018
48 DP-1 = 1 ZEAMX 5-1-2018
76 DP-1 = 1 ZEAMX 5-1-2018
153 DP-1 = 1 ZEAMX 5-1-2018

ARM Action Codes

TY1 = $4.093985 * [15] * (100 - [16]) / 84.5$

University of Kentucky

CORN POSTEMERGENCE VII

Trial ID: C18011 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: UPI-CORN Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: TONY ESTES

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: ZEAMX Zea mays

Variety: BECKS 6127A3

Description: RR/LL

Corn

Planting Rate, Unit: 30000 S/A

Depth, Unit: 1.5 IN

Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 55 F

Soil Moisture: GOOD good

Seed Bed: SMOOTH smooth

Planting Date: 5-1-2018

Planting Method: PLANTD

Planting Equipment: FE

Emergence Date: 5-7-2018

Harvest Date: 10-1-2018

Harvested Width, Unit: 5 FT

Harvested Length, Unit: 38 FT

Harvest Equipment: MASSEY FERGUSON 8XP

% Standard Moisture: 15.5

planted
field equipment

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*

Common Name: Giant foxtail

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*

Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.

Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT

Treated Plot Length: 44 FT

Treated Plot Area: 440 FT² **Treatments:** 4

Replications: 3

Site Type: FIELD

field

Tillage Type: CONTIL conventional-till

Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:

200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6

Texture: SIL silt loam

% Silt: 62 **pH:** 6.4

Soil Name: MAURY SILT LOAM

% Clay: 32 **CEC:** 18

Fert. Level: E excellent

Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP

Distance, Unit: 1.5 MI

University of Kentucky

Application Description

A

Application Date: 5-20-2018
Application Method: SPRAY
Application Timing: EP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 89 F
% Relative Humidity: 46
Wind Velocity, Unit: 2 MPH
Wind Direction: ESE
Soil Temperature, Unit: 71 F
Soil Moisture: ABONOR
% Cloud Cover: 10
Next Moisture Occurred On: 5-21-2018

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ZEAMX BCOR
Height, Unit: 5 IN

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Height, Unit: 2 IN
Pest 2 Code, Type, Scale: AMBTR W
Height, Unit: 3 IN
Pest 3 Code, Type, Scale: IPOSS W
Height, Unit: 1.5 IN

Application Equipment

A

Appl. Equipment: ATV
Equipment Type: ALTEVE
Operation Pressure, Unit: 30 PSI
Nozzle Type: FLAT FAN
Nozzle Size: 8004 DG
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GAL/AC
Mix Overage, Unit: 0 mL
Mix Size, Unit: 3 L
Propellant: CO2

University of Kentucky

CORN POSTEMERGENCE VIII

Trial ID: C18012 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: DOWCORN1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: BOBBY HAYGOOD

Pest Type		W Weed	W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	SETFA	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	Giant foxtail	
Crop Code		ZEAMX			ZEAMX	
Crop Scientific Name		Zea mays			Zea mays	
Crop Name		Corn			Corn	
Rating Date		6-4-2018	6-4-2018	6-4-2018	6-4-2018	6-18-2018
Rating Type		CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit		INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing		2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.		34 12	34 12	34 12	34 12	48 26
Trt-Eval Interval						
Days After Emergence		28 DE-1	28 DE-1	28 DE-1	28 DE-1	42 DE-1

Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	1	2	3	4	5	6
1 SURESTART II	2 PT/A	PRE	0	99	99	99	0	99
ENLIST DUO	3.5 PT/A	V4						
AMS	2.5 % V/V	V4						
2 SURESTART II	2 PT/A	PRE	0	99	99	99	0	99
ENLIST DUO	4.67 PT/A	V4						
AMS	2.5 % V/V	V4						
3 SURESTART II	2 PT/A	V2	0	99	99	99	0	99
ENLIST DUO	3.5 PT/A	V2						
AMS	2.5 % V/V	V2						
4 SURESTART II	2 PT/A	V2	0	99	99	99	0	99
ENLIST DUO	4.67 PT/A	V2						
AMS	2.5 % V/V	V2						
LSD P=.05			0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation								
Replicate F			0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed		W Weed	W Weed	W Weed	
Pest Code		AMBTR	IPOSS		SETFA	AMBTR	IPOSS	
Pest Name		Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory	
Crop Code				ZEAMX				
Crop Scientific Name				Zea mays				
Crop Name				Corn				
Rating Date		6-18-2018	6-18-2018	7-16-2018	7-16-2018	7-16-2018	7-16-2018	
Rating Type		PERCENT	PERCENT	CROP	PERCENT	PERCENT	PERCENT	
Rating Unit		CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL	
Rating Timing		4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.		48 26	48 26	76 54	76 54	76 54	76 54	
Trt-Eval Interval								
Days After Emergence		42 DE-1	42 DE-1	70 DE-1	70 DE-1	70 DE-1	70 DE-1	
Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	7	8	9	10	11	12
1 SURESTART II	2 PT/A	PRE	96	99	0	99	96	99
ENLIST DUO	3.5 PT/A	V4						
AMS	2.5 % V/V	V4						
2 SURESTART II	2 PT/A	PRE	99	99	0	99	99	99
ENLIST DUO	4.67 PT/A	V4						
AMS	2.5 % V/V	V4						
3 SURESTART II	2 PT/A	V2	99	99	0	99	99	99
ENLIST DUO	3.5 PT/A	V2						
AMS	2.5 % V/V	V2						
4 SURESTART II	2 PT/A	V2	99	99	0	99	99	99
ENLIST DUO	4.67 PT/A	V2						
AMS	2.5 % V/V	V2						
LSD P=.05			2.3	.	.	.	2.3	.
Standard Deviation			1.2	0.0	0.0	0.0	1.2	0.0
Replicate F			1.000	0.000	0.000	0.000	1.000	0.000
Replicate Prob(F)			0.4219	1.0000	1.0000	1.0000	0.4219	1.0000
Treatment F			4.000	0.000	0.000	0.000	4.000	0.000
Treatment Prob(F)			0.0701	1.0000	1.0000	1.0000	0.0701	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,8,9,10,12 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE VIII

Trial ID: C18012 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: DOWCORN1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: BOBBY HAYGOOD

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US

AMBTR, Ambrosia trifida, Giant ragweed = US

IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Plant-Eval Interval

34 DP-1 = 1 ZEAMX 5-1-2018

48 DP-1 = 1 ZEAMX 5-1-2018

76 DP-1 = 1 ZEAMX 5-1-2018

University of Kentucky

CORN POSTEMERGENCE VIII

Trial ID: C18012 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: DOWCORN1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: BOBBY HAYGOOD

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: MY16P76
Description: ENLIST

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018
Planting Rate, Unit: 27000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 5
Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

University of Kentucky

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 4
Replications: 3

Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:
200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Application Description

	A	B	C
Application Date:	5-1-2018	5-20-2018	5-23-2018
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V2	V4
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	84 F	84 F
% Relative Humidity:	48	50	50
Wind Velocity, Unit:	8 MPH	6 MPH	4 MPH
Wind Direction:	SW	W	SE
Soil Temperature, Unit:	55 F	71 F	71 F
Soil Moisture:	NORMAL	ABONOR	ABONOR
% Cloud Cover:	10	20	40
Next Moisture Occurred On:	5-4-2018	5-21-2018	5-28-2018

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Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		V2 99	V4 99
Height, Unit:		5 IN	6 IN

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		2 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		3 IN	4 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:		1.5 IN	1.5 IN

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	ARINDL	ARINDL
Nozzle Size:	8004 DG	AIXR11003	AIXR11003
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	24 GPA	20 GAL/AC	20 GPA
Mix Overage, Unit:		0 mL	
Mix Size, Unit:	3 L	2.5 L	2.5 L
Propellant:	CO2	CO2	CO2

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CORN POSTEMERGENCE IX

Trial ID: C18014 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN 1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

Pest Type		W Weed	W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS	SETFA
Pest Name		Giant foxtail	Giant ragweed	Morning glory	Giant foxtail
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018	6-4-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK
Days After First/Last Applic.	7 7	7 7	7 7	7 7	14 14
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	28 DE-1

Trt	Treatment	Rate	Growth						
No.	Name	Rate Unit	Stage	1	2	3	4	5	6
1	UNTREATED			0	0	0	0	0	0
2	ENLIST DUO	3.5 PT/A	MP	0	93	85	85	0	95
3	ENLIST DUO	3.5 PT/A	MP	0	95	90	90	0	95
	CLASS ACT NG	2.5 % V/V	MP						
4	ENLIST DUO	3.5 PT/A	MP	0	95	85	90	0	95
	CLASS ACT NG	1 % V/V	MP						
5	ENLIST DUO	3.5 PT/A	MP	0	95	90	90	0	95
	ULTRA-LITE	2.5 % V/V	MP						
6	ENLIST DUO	3.5 PT/A	MP	0	95	95	95	0	96
	AG 18047	1 % V/V	MP						
7	ENLIST DUO	3.5 PT/A	MP	0	95	85	85	0	95
	PREFERENCE	0.25 % V/V	MP						
8	ENLIST DUO	3.5 PT/A	MP	0	95	90	90	0	95
	AG 16134	0.25 % V/V	MP						
9	ENLIST DUO	3.5 PT/A	MP	0	95	90	90	0	95
	CHEMSURF 90	0.25 % V/V	MP						
10	CHECK			0	0	0	0	0	0
	LSD P=.05			.	1.6	.	.	.	1.3
	Standard Deviation			0.0	0.9	0.0	0.0	0.0	0.7
	Replicate F			0.000	1.000	0.000	0.000	0.000	1.000
	Replicate Prob(F)			1.0000	0.3874	1.0000	1.0000	1.0000	0.3874
	Treatment F			0.000	5751.667	0.000	0.000	0.000	9057.668
	Treatment Prob(F)			1.0000	0.0001	1.0000	1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,3,4,5,7,8,9,10 because error mean square = 0.

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Pest Type	W Weed	W Weed		W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS		SETFA	AMBTR	IPOSS
Pest Name	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed	Morning glory
Crop Code			ZEAMX			
Crop Scientific Name			Zea mays			
Crop Name			Corn			
Rating Date	6-4-2018	6-4-2018	6-11-2018	6-11-2018	6-11-2018	6-11-2018
Rating Type	PERCENT	PERCENT	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	3 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	14 14	14 14	21 21	21 21	21 21	21 21
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A	14 DA-A
Days After Emergence	28 DE-1	28 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1

Trt Treatment	Rate	Growth	7	8	9	10	11	12
No. Name	Rate Unit	Stage						
1 UNTREATED			0	0	0	0	0	0
2 ENLIST DUO	3.5 PT/A	MP	99	99	0	95	99	99
3 ENLIST DUO	3.5 PT/A	MP	99	99	0	95	92	99
CLASS ACT NG	2.5 % V/V	MP						
4 ENLIST DUO	3.5 PT/A	MP	99	99	0	90	99	99
CLASS ACT NG	1 % V/V	MP						
5 ENLIST DUO	3.5 PT/A	MP	99	99	0	95	90	99
ULTRA-LITE	2.5 % V/V	MP						
6 ENLIST DUO	3.5 PT/A	MP	99	99	0	95	99	99
AG 18047	1 % V/V	MP						
7 ENLIST DUO	3.5 PT/A	MP	99	99	0	95	99	99
PREFERENCE	0.25 % V/V	MP						
8 ENLIST DUO	3.5 PT/A	MP	99	99	0	95	98	98
AG 16134	0.25 % V/V	MP						
9 ENLIST DUO	3.5 PT/A	MP	99	99	0	95	98	99
CHEMSURF 90	0.25 % V/V	MP						
10 CHECK			0	0	0	0	0	0
LSD P=.05			.	.	.	.	2.2	1.3
Standard Deviation			0.0	0.0	0.0	0.0	1.3	0.7
Replicate F			0.000	0.000	0.000	0.000	2.633	1.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0993	0.3874
Treatment F			0.000	0.000	0.000	0.000	3067.640	9769.001
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,3,4,5,7,8,9,10 because error mean square = 0.

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CORN POSTEMERGENCE IX

Trial ID: C18014 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: WIN 1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: THOMAS HAYDEN

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Plant-Eval Interval

27 DP-1 = 1 ZEAMX 5-1-2018
34 DP-1 = 1 ZEAMX 5-1-2018
41 DP-1 = 1 ZEAMX 5-1-2018

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CORN POSTEMERGENCE IX

Trial ID: C18014 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN 1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: MY16P76
Description: ENLIST

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018

Planting Rate, Unit: 27000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 5
Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

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Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 10
Replications: 3

Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Analyzed By:

200 UNITS NITROGEN APPLIED PRE-PLANT

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP

Distance, Unit: 1.5 MI

Application Description

Application Date: 5-21-2018
Application Method: SPRAY
Application Timing: MP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 86 F
% Relative Humidity: 46
Wind Velocity, Unit: 5 MPH
Soil Temperature, Unit: 71 F
Soil Moisture: NORMAL
% Cloud Cover: 5
Next Moisture Occurred On: 5-21-2018

Crop Stage At Each Application

A
Crop 1 Code, BBCH Scale: ZEAMX BCOR
Height, Unit: 5 IN

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Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Height, Unit: 2 IN
Pest 2 Code, Type, Scale: AMBTR W
Height, Unit: 4 IN
Pest 3 Code, Type, Scale: IPOSS W
Height, Unit: 1.5 IN

Application Equipment

A

Appl. Equipment: ATV
Equipment Type: ALTEVE
Operation Pressure, Unit: 30 PSI
Nozzle Type: ARINDL
Nozzle Size: AIXR11003
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Water Hardness (ppm CaCO3): 1000
Spray Volume, Unit: 20 GPA
Mix Size, Unit: 2.5 L
Propellant: CO2

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CORN POSTEMERGENCE X

Trial ID: C18015 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN 2 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

Pest Type		W Weed	W Weed	W Weed		W Weed
Pest Code		SETFA	AMBTR	IPOSS		SETFA
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code	ZEAMX				ZEAMX	
Crop Scientific Name	Zea mays				Zea mays	
Crop Name	Corn				Corn	
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018	6-4-2018	6-4-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	1 WEEK	1WEEK	1 WEEK	1 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	7 7	7 7	7 7	7 7	14 14	14 14
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	28 DE-1	28 DE-1

Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	1	2	3	4	5	6
1 UNTREATED			0	0	0	0	0	0
2 ENLIST DUO	3.5 PT/A	MP	0	95	90	90	0	95
3 ENLIST DUO	3.5 PT/A	MP	0	95	95	95	0	96
INTERLOCK	4 FL OZ/A	MP						
4 ENLIST DUO	3.5 PT/A	MP	0	95	95	95	0	95
ACCUDROP	3 FL OZ/A	MP						
5 ENLIST DUO	3.5 PT/A	MP	0	95	95	95	0	95
DOWNDRAFT	4 FL OZ/A	MP						
6 ENLIST DUO	3.5 PT/A	MP	0	95	95	95	0	96
CLASS ACT NG	2.5 % V/V	MP						
INTERLOCK	4 FL OZ/A	MP						
7 ENLIST DUO	3.5 PT/A	MP	0	99	95	95	0	99
CLASS ACT NG	2.5 % V/V	MP						
ACCUDROP	3 FL OZ/A	MP						
8 ENLIST DUO	3.5 PT/A	MP	0	99	95	99	0	99
CLASS ACT NG	2.5 % V/V	MP						
DOWNDRAFT	4 FL OZ/A	MP						
9 ENLIST DUO	3.5 PT/A	MP	0	99	95	99	0	99
PREFERENCE	0.25 % V/V	MP						
INTERLOCK	4 FL OZ/A	MP						
10 ENLIST DUO	3.5 PT/A	MP	0	99	95	95	0	99
PREFERENCE	0.25 % V/V	MP						
ACCUDROP	3 FL OZ/A	MP						
11 ENLIST DUO	3.5 PT/A	MP	0	99	95	95	0	99
PREFERENCE	0.25 % V/V	MP						
DOWNDRAFT	4 FL OZ/A	MP						
12 CHECK UNTREATED			0	0	0	0	0	0
LSD P=.05			.	.	.	.	.	1.5
Standard Deviation			0.0	0.0	0.0	0.0	0.0	0.9
Replicate F			0.000	0.000	0.000	0.000	0.000	2.200
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	0.1346
Treatment F			0.000	0.000	0.000	0.000	0.000	5332.563
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,9 because error mean square = 0.

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA	AMBTR
Pest Name	Giant ragweed	Morning glory	Giant foxtail	Giant ragweed
Crop Code			ZEAMX	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Rating Date	6-4-2018	6-11-2018	6-11-2018	6-11-2018
Rating Type	PERCENT	PERCENT	CROP	PERCENT
Rating Unit	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	2 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	14 14	21 21	21 21	21 21
Trt-Eval Interval	14 DA-A	14 DA-A	21 DA-A	21 DA-A
Days After Emergence	28 DE-1	35 DE-1	35 DE-1	35 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	7	8	9	10	11
1	UNTREATED				0	0	0	0	0
2	ENLIST DUO	3.5	PT/A	MP	99	99	0	95	95
3	ENLIST DUO	3.5	PT/A	MP	96	99	0	96	89
	INTERLOCK	4	FL OZ/A	MP					
4	ENLIST DUO	3.5	PT/A	MP	99	99	0	95	95
	ACCUDROP	3	FL OZ/A	MP					
5	ENLIST DUO	3.5	PT/A	MP	96	99	0	95	89
	DOWNDRAFT	4	FL OZ/A	MP					
6	ENLIST DUO	3.5	PT/A	MP	99	99	0	96	93
	CLASS ACT NG	2.5	% V/V	MP					
	INTERLOCK	4	FL OZ/A	MP					
7	ENLIST DUO	3.5	PT/A	MP	99	96	0	99	95
	CLASS ACT NG	2.5	% V/V	MP					
	ACCUDROP	3	FL OZ/A	MP					
8	ENLIST DUO	3.5	PT/A	MP	99	99	0	99	93
	CLASS ACT NG	2.5	% V/V	MP					
	DOWNDRAFT	4	FL OZ/A	MP					
9	ENLIST DUO	3.5	PT/A	MP	99	99	0	99	95
	PREFERENCE	0.25	% V/V	MP					
	INTERLOCK	4	FL OZ/A	MP					
10	ENLIST DUO	3.5	PT/A	MP	99	99	0	99	95
	PREFERENCE	0.25	% V/V	MP					
	ACCUDROP	3	FL OZ/A	MP					
11	ENLIST DUO	3.5	PT/A	MP	99	98	0	99	99
	PREFERENCE	0.25	% V/V	MP					
	DOWNDRAFT	4	FL OZ/A	MP					
12	CHECK UNTREATED				0	0	0	0	0
LSD P=.05					1.5	1.6	.	1.5	2.2
Standard Deviation					0.9	0.9	0.0	0.9	1.3
Replicate F					2.200	1.571	0.000	2.200	0.600
Replicate Prob(F)					0.1346	0.2302	1.0000	0.1346	0.5575
Treatment F					5457.663	5210.536	0.000	5332.563	2413.873
Treatment Prob(F)					0.0001	0.0001	1.0000	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,9 because error mean square = 0.

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Pest Type	W Weed
Pest Code	IPOSS
Pest Name	Morning glory
Crop Code	
Crop Scientific Name	
Crop Name	
Rating Date	6-11-2018
Rating Type	PERCENT
Rating Unit	CONTROL
Rating Timing	3 WEEK
Days After First/Last Applic.	21 21
Trt-Eval Interval	21 DA-A
Days After Emergence	35 DE-1

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	12
1 UNTREATED			0
2 ENLIST DUO	3.5 PT/A	MP	99
3 ENLIST DUO	3.5 PT/A	MP	99
INTERLOCK	4 FL OZ/A	MP	
4 ENLIST DUO	3.5 PT/A	MP	99
ACCUDROP	3 FL OZ/A	MP	
5 ENLIST DUO	3.5 PT/A	MP	99
DOWNDRAFT	4 FL OZ/A	MP	
6 ENLIST DUO	3.5 PT/A	MP	99
CLASS ACT NG	2.5 % V/V	MP	
INTERLOCK	4 FL OZ/A	MP	
7 ENLIST DUO	3.5 PT/A	MP	96
CLASS ACT NG	2.5 % V/V	MP	
ACCUDROP	3 FL OZ/A	MP	
8 ENLIST DUO	3.5 PT/A	MP	99
CLASS ACT NG	2.5 % V/V	MP	
DOWNDRAFT	4 FL OZ/A	MP	
9 ENLIST DUO	3.5 PT/A	MP	99
PREFERENCE	0.25 % V/V	MP	
INTERLOCK	4 FL OZ/A	MP	
10 ENLIST DUO	3.5 PT/A	MP	99
PREFERENCE	0.25 % V/V	MP	
ACCUDROP	3 FL OZ/A	MP	
11 ENLIST DUO	3.5 PT/A	MP	98
PREFERENCE	0.25 % V/V	MP	
DOWNDRAFT	4 FL OZ/A	MP	
12 CHECK UNTREATED			0
LSD P=.05			1.6
Standard Deviation			0.9
Replicate F			1.571
Replicate Prob(F)			0.2302
Treatment F			5210.536
Treatment Prob(F)			0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,9 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE X

Trial ID: C18015 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: WIN 2 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: THOMAS HAYDEN

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Plant-Eval Interval

27 DP-1 = 1 ZEAMX 5-1-2018
34 DP-1 = 1 ZEAMX 5-1-2018
41 DP-1 = 1 ZEAMX 5-1-2018

University of Kentucky

CORN POSTEMERGENCE X

Trial ID: C18015 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN 2 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: MY16P76
Description: ENLIST

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018
Planting Rate, Unit: 27000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 5
Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

University of Kentucky

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 12
Replications: 3

Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:

200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6	% OM: 2.6	Texture: SIL	silt loam
% Silt: 62	pH: 6.4	Soil Name: MAURY SILT LOAM	
% Clay: 32	CEC: 18	Fert. Level: E	excellent
		Soil Drainage: E	excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Application Description

A

Application Date: 5-21-2018
Application Method: SPRAY
Application Timing: MP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 89 F
% Relative Humidity: 46
Wind Velocity, Unit: 2 MPH
Wind Direction: ESE
Soil Temperature, Unit: 71 F
Soil Moisture: NORMAL
% Cloud Cover: 5
Next Moisture Occurred On: 5-21-2018

University of Kentucky

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ZEAMX BCOR
Height, Unit: 5 IN

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Height, Unit: 2 IN
Pest 2 Code, Type, Scale: AMBTR W
Height, Unit: 4 IN
Pest 3 Code, Type, Scale: IPOSS W
Height, Unit: 1.5 IN

Application Equipment

A

Appl. Equipment: ATV
Equipment Type: ALTEVE
Operation Pressure, Unit: 30 PSI
Nozzle Type: ARINDL
Nozzle Size: AIXR11003
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 20 GPA
Mix Size, Unit: 2.5 L
Propellant: CO2

University of Kentucky

CORN POSTEMERGENCE XI

Trial ID: C18016 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN3 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

Pest Type		W Weed	W Weed	W Weed		W Weed
Pest Code		SETFA	AMBTR	IPOSS		SETFA
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code	ZEAMX				ZEAMX	
Crop Scientific Name	Zea mays				Zea mays	
Crop Name	Corn				Corn	
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018	6-4-2018	6-4-2018
Rating Type	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	7 7	7 7	7 7	7 7	14 14	14 14
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	28 DE-1	28 DE-1

Trt Treatment	Rate	Growth						
No. Name	Rate Unit	Stage	1	2	3	4	5	6
1 UNTREATED CHECK			0	0	0	0	0	0
2 ENLIST ONE	1.5 PT/A	MP	0	20	80	80	0	20
3 ENLIST ONE	1.5 PT/A	MP	0	20	80	80	0	20
INTERLOCK	4 FL OZ/A	MP						
4 ENLIST ONE	1.5 PT/A	MP	0	20	80	80	0	20
ACCUDROP	3 FL OZ/A	MP						
5 ENLIST ONE	1.5 PT/A	MP	0	20	70	70	0	20
DOWNDRAFT	4 FL OZ/A	MP						
6 ENLIST ONE	1.5 PT/A	MP	0	20	80	80	0	20
CLASS ACT NG	2.5 % V/V	MP						
INTERLOCK	4 FL OZ/A	MP						
7 ENLIST ONE	1.5 PT/A	MP	0	20	90	90	0	20
CLASS ACT NG	2.5 % V/V	MP						
ACCUDROP	3 FL OZ/A	MP						
8 ENLIST ONE	1.5 PT/A	MP	0	20	95	95	0	20
CLASS ACT NG	2.5 % V/V	MP						
DOWNDRAFT	4 FL OZ/A	MP						
9 ENLIST ONE	1.5 PT/A	MP	0	20	90	90	0	20
PREFERENCE	0.25 % V/V	MP						
INTERLOCK	4 FL OZ/A	MP						
10 ENLIST ONE	1.5 PT/A	MP	0	20	80	80	0	20
PREFERENCE	0.25 % V/V	MP						
ACCUDROP	3 FL OZ/A	MP						
11 ENLIST ONE	1.5 PT/A	MP	0	20	85	85	0	20
PREFERENCE	0.25 % V/V	MP						
DOWNDRAFT	4 FL OZ/A	MP						
12 CHECK			0	0	0	0	0	0
LSD P=.05			.	.	.	.	.	.
Standard Deviation			0.0	0.0	0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,11,12 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA	AMBTR
Pest Name	Giant ragweed	Morning glory	Giant foxtail	Giant ragweed
Crop Code			ZEAMX	
Crop Scientific Name			Zea mays	
Crop Name			Corn	
Rating Date	6-4-2018	6-4-2018	6-11-2018	6-11-2018
Rating Type	PERCENT	PERCENT	PERCENT	PERCENT
Rating Unit	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	2 WEEK	2 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	14 14	14 14	21 21	21 21
Trt-Eval Interval	14 DA-A	14 DA-A	21 DA-A	21 DA-A
Days After Emergence	28 DE-1	28 DE-1	35 DE-1	35 DE-1

Trt	Treatment	Rate	Growth	7	8	9	10	11
No.	Name	Rate Unit	Stage					
1	UNTREATED CHECK			0	0	0	0	0
2	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	95
3	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	95
	INTERLOCK	4 FL OZ/A	MP					
4	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	99
	ACCUDROP	3 FL OZ/A	MP					
5	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	99
	DOWNDRAFT	4 FL OZ/A	MP					
6	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	95
	CLASS ACT NG	2.5 % V/V	MP					
	INTERLOCK	4 FL OZ/A	MP					
7	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	99
	CLASS ACT NG	2.5 % V/V	MP					
	ACCUDROP	3 FL OZ/A	MP					
8	ENLIST ONE	1.5 PT/A	MP	99	99	0	93	90
	CLASS ACT NG	2.5 % V/V	MP					
	DOWNDRAFT	4 FL OZ/A	MP					
9	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	90
	PREFERENCE	0.25 % V/V	MP					
	INTERLOCK	4 FL OZ/A	MP					
10	ENLIST ONE	1.5 PT/A	MP	95	99	0	20	99
	PREFERENCE	0.25 % V/V	MP					
	ACCUDROP	3 FL OZ/A	MP					
11	ENLIST ONE	1.5 PT/A	MP	99	99	0	20	90
	PREFERENCE	0.25 % V/V	MP					
	DOWNDRAFT	4 FL OZ/A	MP					
12	CHECK			0	0	0	0	0
	LSD P=.05			.	.	.	1.4	.
	Standard Deviation			0.0	0.0	0.0	0.8	0.0
	Replicate F			0.000	0.000	0.000	1.000	0.000
	Replicate Prob(F)			1.0000	1.0000	1.0000	0.3840	1.0000
	Treatment F			0.000	0.000	0.000	2389.818	0.000
	Treatment Prob(F)			1.0000	1.0000	1.0000	0.0001	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,11,12 because error mean square = 0.

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Pest Type	W Weed
Pest Code	IPOSS
Pest Name	Morning glory
Crop Code	
Crop Scientific Name	
Crop Name	
Rating Date	6-11-2018
Rating Type	PERCENT
Rating Unit	CONTROL
Rating Timing	3 WEEK
Days After First/Last Applic.	21 21
Trt-Eval Interval	21 DA-A
Days After Emergence	35 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	
					12
1	UNTREATED CHECK				0
2	ENLIST ONE	1.5	PT/A	MP	99
3	ENLIST ONE	1.5	PT/A	MP	99
	INTERLOCK	4	FL OZ/A	MP	
4	ENLIST ONE	1.5	PT/A	MP	99
	ACCUDROP	3	FL OZ/A	MP	
5	ENLIST ONE	1.5	PT/A	MP	99
	DOWNDRAFT	4	FL OZ/A	MP	
6	ENLIST ONE	1.5	PT/A	MP	99
	CLASS ACT NG	2.5	% V/V	MP	
	INTERLOCK	4	FL OZ/A	MP	
7	ENLIST ONE	1.5	PT/A	MP	99
	CLASS ACT NG	2.5	% V/V	MP	
	ACCUDROP	3	FL OZ/A	MP	
8	ENLIST ONE	1.5	PT/A	MP	99
	CLASS ACT NG	2.5	% V/V	MP	
	DOWNDRAFT	4	FL OZ/A	MP	
9	ENLIST ONE	1.5	PT/A	MP	99
	PREFERENCE	0.25	% V/V	MP	
	INTERLOCK	4	FL OZ/A	MP	
10	ENLIST ONE	1.5	PT/A	MP	99
	PREFERENCE	0.25	% V/V	MP	
	ACCUDROP	3	FL OZ/A	MP	
11	ENLIST ONE	1.5	PT/A	MP	99
	PREFERENCE	0.25	% V/V	MP	
	DOWNDRAFT	4	FL OZ/A	MP	
12	CHECK				0
LSD P=.05					.
Standard Deviation					0.0
Replicate F					0.000
Replicate Prob(F)					1.0000
Treatment F					0.000
Treatment Prob(F)					1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,11,12 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE XI

Trial ID: C18016 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: WIN3 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: THOMAS HAYDEN

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US

AMBTR, Ambrosia trifida, Giant ragweed = US

IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Plant-Eval Interval

27 DP-1 = 1 ZEAMX 5-1-2018

34 DP-1 = 1 ZEAMX 5-1-2018

41 DP-1 = 1 ZEAMX 5-1-2018

University of Kentucky

CORN POSTEMERGENCE XI

Trial ID: C18016 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN3 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: MY16P76
Description: ENLIST

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018

Planting Rate, Unit: 27000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 5
Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

University of Kentucky

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 12
Replications: 3

Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:

200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6	% OM: 2.6	Texture: SIL	silt loam
% Silt: 62	pH: 6.4	Soil Name: MAURY SILT LOAM	
% Clay: 32	CEC: 18	Fert. Level: E	excellent
		Soil Drainage: E	excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Application Description

A

Application Date: 5-21-2018
Application Method: SPRAY
Application Timing: MP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 89 F
% Relative Humidity: 46
Wind Velocity, Unit: 2 MPH
Wind Direction: ESE
Soil Temperature, Unit: 71 F
Soil Moisture: NORMAL
% Cloud Cover: 5
Next Moisture Occurred On: 5-21-2018

University of Kentucky

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ZEAMX BCOR
Height, Unit: 5 IN

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Height, Unit: 2 IN
Pest 2 Code, Type, Scale: AMBTR W
Height, Unit: 4 IN
Pest 3 Code, Type, Scale: IPOSS W
Height, Unit: 1.5 IN

Application Equipment

A

Appl. Equipment: ATV
Equipment Type: ALTEVE
Operation Pressure, Unit: 30 PSI
Nozzle Type: ARINDL
Nozzle Size: AIXR11003
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 20 GPA
Mix Size, Unit: 2.5 L
Propellant: CO2

University of Kentucky

CORN POSTEMERGENCE XII

Trial ID: C18017 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN4 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	ZEAMX				ZEAMX
Crop Scientific Name	Zea mays				Zea mays
Crop Name	Corn				Corn
Rating Date	6-1-2018	6-1-2018	6-1-2018	6-1-2018	6-8-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK
Days After First/Last Applic.	8 8	8 8	8 8	8 8	15 15
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1	32 DE-1

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	1	2	3	4	5
1 UNTREATED CHECK			0	0	0	0	0
2 ENLIST ONE	1.5 PT/A	MP	0	95	70	70	0
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
3 ENLIST ONE	1.5 PT/A	MP	0	95	85	85	0
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
CLASS ACT NG	2.5 % V/V	MP					
4 ENLIST ONE	1.5 PT/A	MP	0	95	80	83	0
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
CLASS ACT RIDION	1 % V/V	MP					
5 ENLIST ONE	1.5 PT/A	MP	0	95	85	85	0
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
AG 18047	1 % V/V	MP					
6 ENLIST ONE	1.5 PT/A	MP	0	95	90	90	0
LIBERTY 280	18 FL OZ/A	MP					
7 ENLIST ONE	1.5 PT/A	MP	0	95	90	90	0
LIBERTY 280	18 FL OZ/A	MP					
CLASS ACT NG	2.5 % V/V	MP					
8 ENLIST ONE	1.5 PT/A	MP	0	95	95	95	0
LIBERTY 280	18 FL OZ/A	MP					
CLASS ACT RIDION	1 % V/V	MP					
9 ENLIST ONE	1.5 PT/A	MP	0	95	95	95	0
LIBERTY 280	18 FL OZ/A	MP					
AG 18047	1 % V/V	MP					
10 CHECK			0	0	0	0	0
LSD P=.05			.	.	.	1.6	.
Standard Deviation			0.0	0.0	0.0	0.9	0.0
Replicate F			0.000	0.000	0.000	1.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	0.3874	1.0000
Treatment F			0.000	0.000	0.000	4989.334	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	0.0001	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,5,7,8,9,11,12 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	IPOSS	SETFA			
Pest Name	Giant foxtail	Giant ragweed	Morning glory	Giant foxtail			
Crop Code				ZEAMX			
Crop Scientific Name				Zea mays			
Crop Name				Corn			
Rating Date	6-8-2018	6-8-2018	6-8-2018	6-15-2018			
Rating Type	PERCENT	PERCENT	PERCENT	CROP			
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY			
Rating Timing	2 WEEK	2 WEEK	2 WEEK	3 WEEK			
Days After First/Last Applic.	15 15	15 15	15 15	22 22			
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	21 DA-A			
Days After Emergence	32 DE-1	32 DE-1	32 DE-1	39 DE-1			
Trt Treatment	Rate	Growth	6	7	8	9	10
No. Name	Rate Unit	Stage					
1 UNTREATED CHECK			0	0	0	0	0
2 ENLIST ONE	1.5 PT/A	MP	96	99	99	0	96
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
3 ENLIST ONE	1.5 PT/A	MP	99	99	99	0	99
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
CLASS ACT NG	2.5 % V/V	MP					
4 ENLIST ONE	1.5 PT/A	MP	99	99	99	0	99
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
CLASS ACT RIDION	1 % V/V	MP					
5 ENLIST ONE	1.5 PT/A	MP	99	99	99	0	99
TOUCHDOWN HI-TECH	18 FL OZ/A	MP					
AG 18047	1 % V/V	MP					
6 ENLIST ONE	1.5 PT/A	MP	99	99	99	0	95
LIBERTY 280	18 FL OZ/A	MP					
7 ENLIST ONE	1.5 PT/A	MP	96	99	99	0	95
LIBERTY 280	18 FL OZ/A	MP					
CLASS ACT NG	2.5 % V/V	MP					
8 ENLIST ONE	1.5 PT/A	MP	99	99	99	0	99
LIBERTY 280	18 FL OZ/A	MP					
CLASS ACT RIDION	1 % V/V	MP					
9 ENLIST ONE	1.5 PT/A	MP	99	99	99	0	99
LIBERTY 280	18 FL OZ/A	MP					
AG 18047	1 % V/V	MP					
10 CHECK			0	0	0	0	0
LSD P=.05			1.8	.	.	.	1.3
Standard Deviation			1.1	0.0	0.0	0.0	0.7
Replicate F			0.474	0.000	0.000	0.000	1.000
Replicate Prob(F)			0.6302	1.0000	1.0000	1.0000	0.3874
Treatment F			4583.422	0.000	0.000	0.000	9554.334
Treatment Prob(F)			0.0001	1.0000	1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,5,7,8,9,11,12 because error mean square = 0.

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Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Name	Giant ragweed Morning glory	
Crop Code		
Crop Scientific Name		
Crop Name		
Rating Date	6-15-2018	6-15-2018
Rating Type	PERCENT	PERCENT
Rating Unit	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK
Days After First/Last Applic.	22 22	22 22
Trt-Eval Interval	21 DA-A	21 DA-A
Days After Emergence	39 DE-1	39 DE-1

Trt	Treatment	Rate	Growth		
No.	Name	Rate Unit	Stage	11	12
1	UNTREATED CHECK			0	0
2	ENLIST ONE	1.5 PT/A	MP	95	99
	TOUCHDOWN HI-TECH	18 FL OZ/A	MP		
3	ENLIST ONE	1.5 PT/A	MP	99	99
	TOUCHDOWN HI-TECH	18 FL OZ/A	MP		
	CLASS ACT NG	2.5 % V/V	MP		
4	ENLIST ONE	1.5 PT/A	MP	99	99
	TOUCHDOWN HI-TECH	18 FL OZ/A	MP		
	CLASS ACT RIDION	1 % V/V	MP		
5	ENLIST ONE	1.5 PT/A	MP	99	99
	TOUCHDOWN HI-TECH	18 FL OZ/A	MP		
	AG 18047	1 % V/V	MP		
6	ENLIST ONE	1.5 PT/A	MP	95	99
	LIBERTY 280	18 FL OZ/A	MP		
7	ENLIST ONE	1.5 PT/A	MP	95	99
	LIBERTY 280	18 FL OZ/A	MP		
	CLASS ACT NG	2.5 % V/V	MP		
8	ENLIST ONE	1.5 PT/A	MP	95	99
	LIBERTY 280	18 FL OZ/A	MP		
	CLASS ACT RIDION	1 % V/V	MP		
9	ENLIST ONE	1.5 PT/A	MP	99	99
	LIBERTY 280	18 FL OZ/A	MP		
	AG 18047	1 % V/V	MP		
10	CHECK			0	0
LSD	P=.05			.	.
Standard Deviation				0.0	0.0
Replicate F				0.000	0.000
Replicate Prob(F)				1.0000	1.0000
Treatment F				0.000	0.000
Treatment Prob(F)				1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,5,7,8,9,11,12 because error mean square = 0.

University of Kentucky

CORN POSTEMERGENCE XII

Trial ID: C18017 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: WIN4 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: THOMAS HAYDEN

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US

AMBTR, Ambrosia trifida, Giant ragweed = US

IPOSS, Ipomoea sp., Morning glory = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Plant-Eval Interval

31 DP-1 = 1 ZEAMX 5-1-2018

38 DP-1 = 1 ZEAMX 5-1-2018

45 DP-1 = 1 ZEAMX 5-1-2018

University of Kentucky

CORN POSTEMERGENCE XII

Trial ID: C18017 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN4 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-1-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: MY16P76
Description: ENLIST

Planting Date: 5-1-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-7-2018
Planting Rate, Unit: 27000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 5
Soil Temperature, Unit: 55 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

University of Kentucky

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 10
Replications: 3

Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:
200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Application Description

A
Application Date: 5-24-2018
Application Method: SPRAY
Application Timing: MP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 80 F
% Relative Humidity: 50
Wind Velocity, Unit: 6 MPH
Wind Direction: SW
Soil Temperature, Unit: 71 F
Soil Moisture: WET
% Cloud Cover: 10
Next Moisture Occurred On: 5-28-2018

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Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ZEAMX BCOR
 Height, Unit: 5 IN

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
 Height, Unit: 2 IN
 Pest 2 Code, Type, Scale: AMBTR W
 Height, Unit: 4 IN
 Pest 3 Code, Type, Scale: IPOSS W
 Height, Unit: 1.5 IN

Application Equipment

A

Appl. Equipment: ATV
 Equipment Type: ALTEVE
 Operation Pressure, Unit: 30 PSI
 Nozzle Type: ARINDL
 Nozzle Size: AIXR11003
 Nozzle Spacing, Unit: 20 IN
 Boom Length, Unit: 10 FT
 Boom Height, Unit: 20 IN
 Ground Speed, Unit: 4 MPH
 Carrier: WATER
 Water Hardness (ppm CaCO3): 1000
 Spray Volume, Unit: 20 GPA
 Mix Size, Unit: 2.5 L
 Propellant: CO2

University of Kentucky

CORN VARIETY

Trial ID: C18020
Protocol ID: MON CORN VAR
Project ID:

Location: LEXINGTON, KY Trial Year: 2018
Investigator: Sara Carter
Study Director: CHARLES SLACK
Sponsor Contact: GLEN MURPHY/MATT LIVESAY

Pest Type
Pest Code
Pest Name
Crop Code ZEAMX
Crop Scientific Name Zea mays
Crop Name Corn
Rating Date 10-8-2018
Rating Type YIELD
Rating Unit BU
Rating Timing
Days After First/Last Applic. 147 126
Trt-Eval Interval
Days After Emergence 142 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	
					3
1	DEGREE XTRA	2	QT/A	PRE	234.3
	AATREX	1	QT/A	PRE	
	ROUNDUP POWERMAX	36	OZ/A	PRE	
	AMS	2.5	% V/V	PRE	
	DEGREE XTRA	2	QT/A	V5	
	ROUNDUP POWERMAX	32	FL OZ/A	V5	
	AMS	2.5	% V/V	V5	
	DKC 60-88				
2	DEGREE XTRA	2	QT/A	PRE	212.7
	AATREX	1	QT/A	PRE	
	ROUNDUP POWERMAX	36	OZ/A	PRE	
	AMS	2.5	% V/V	PRE	
	HEADLINE	6	OZ/A	INFURROW	
	DEGREE XTRA	2	QT/A	V5	
	ROUNDUP POWERMAX	32	FL OZ/A	V5	
	AMS	2.5	% V/V	V5	
	DKC 60-88				
3	DEGREE XTRA	2	QT/A	PRE	204.3
	AATREX	1	QT/A	PRE	
	ROUNDUP POWERMAX	36	OZ/A	PRE	
	AMS	2.5	% V/V	PRE	
	DEGREE XTRA	2	QT/A	V5	
	ROUNDUP POWERMAX	32	FL OZ/A	V5	
	AMS	2.5	% V/V	V5	
	DKC 62-53				
4	DEGREE XTRA	2	QT/A	PRE	194.2
	AATREX	1	QT/A	PRE	
	ROUNDUP POWERMAX	36	OZ/A	PRE	
	AMS	2.5	% V/V	PRE	
	HEADLINE	6	OZ/A	INFURROW	
	DEGREE XTRA	2	QT/A	V5	
	ROUNDUP POWERMAX	32	FL OZ/A	V5	
	AMS	2.5	% V/V	V5	
	DKC 62-53				
5	DEGREE XTRA	2	QT/A	PRE	201.0
	AATREX	1	QT/A	PRE	
	ROUNDUP POWERMAX	36	OZ/A	PRE	
	AMS	2.5	% V/V	PRE	
	DEGREE XTRA	2	QT/A	V5	
	ROUNDUP POWERMAX	32	FL OZ/A	V5	
	AMS	2.5	% V/V	V5	
	DKC 63-57				

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

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Pest Type
 Pest Code
 Pest Name
 Crop Code ZEAMX
 Crop Scientific Name Zea mays
 Crop Name Corn
 Rating Date 10-8-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 147 126
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	
6 DEGREE XTRA	2 QT/A	PRE	188.8
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
HEADLINE	6 OZ/A	INFURROW	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 63-57			
7 DEGREE XTRA	2 QT/A	PRE	214.4
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
P1197 AM			
8 DEGREE XTRA	2 QT/A	PRE	219.7
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
HEADLINE	6 OZ/A	INFURROW	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
P1197 AM			
9 DEGREE XTRA	2 QT/A	PRE	185.6
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 64-35			
10 DEGREE XTRA	2 QT/A	PRE	187.3
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
HEADLINE	6 OZ/A	INFURROW	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 64-35			

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code ZEAMX
 Crop Scientific Name Zea mays
 Crop Name Corn
 Rating Date 10-8-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 147 126
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt	Treatment	Rate	Growth	
No.	Name	Rate Unit	Stage	3
11	DEGREE XTRA	2 QT/A	PRE	218.3
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	P 1142 AM			
12	DEGREE XTRA	2 QT/A	PRE	218.1
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	HEADLINE	6 OZ/A	INFURROW	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	P1142 AM			
13	DEGREE XTRA	2 QT/A	PRE	187.5
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 65-20			
14	DEGREE XTRA	2 QT/A	PRE	199.7
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	HEADLINE	6 OZ/A	INFURROW	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 65-20			
15	DEGREE XTRA	2 QT/A	PRE	219.0
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 65-95			

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

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Pest Type
 Pest Code
 Pest Name
 Crop Code ZEAMX
 Crop Scientific Name Zea mays
 Crop Name Corn
 Rating Date 10-8-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 147 126
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	3
16 DEGREE XTRA	2 QT/A	PRE	215.1
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
HEADLINE	6 OZ/A	INFURROW	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 65-95			
17 DEGREE XTRA	2 QT/A	PRE	187.2
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 66-29			
18 DEGREE XTRA	2 QT/A	PRE	191.5
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
HEADLINE	6 OZ/A	INFURROW	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 66-29			
19 DEGREE XTRA	2 QT/A	PRE	208.4
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 66-75			
20 DEGREE XTRA	2 QT/A	PRE	216.4
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
HEADLINE	6 OZ/A	INFURROW	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 66-75			

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code ZEAMX
 Crop Scientific Name Zea mays
 Crop Name Corn
 Rating Date 10-8-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 147 126
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt	Treatment	Rate	Growth	
No.	Name	Rate Unit	Stage	3
21	DEGREE XTRA	2 QT/A	PRE	205.1
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 67-99			
22	DEGREE XTRA	2 QT/A	PRE	198.8
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	HEADLINE	6 OZ/A	INFURROW	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 67-99			
23	DEGREE XTRA	2 QT/A	PRE	222.4
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 67-44			
24	DEGREE XTRA	2 QT/A	PRE	221.8
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	HEADLINE	6 OZ/A	INFURROW	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 67-44			
25	DEGREE XTRA	2 QT/A	PRE	212.5
	AATREX	1 QT/A	PRE	
	ROUNDUP POWERMAX	36 OZ/A	PRE	
	AMS	2.5 % V/V	PRE	
	DEGREE XTRA	2 QT/A	V5	
	ROUNDUP POWERMAX	32 FL OZ/A	V5	
	AMS	2.5 % V/V	V5	
	DKC 70-27			

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

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Pest Type
 Pest Code
 Pest Name
 Crop Code ZEAMX
 Crop Scientific Name Zea mays
 Crop Name Corn
 Rating Date 10-8-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 147 126
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	3
26 DEGREE XTRA	2 QT/A	PRE	208.4
AATREX	1 QT/A	PRE	
ROUNDUP POWERMAX	36 OZ/A	PRE	
AMS	2.5 % V/V	PRE	
HEADLINE	6 OZ/A	INFURROW	
DEGREE XTRA	2 QT/A	V5	
ROUNDUP POWERMAX	32 FL OZ/A	V5	
AMS	2.5 % V/V	V5	
DKC 70-27			
LSD P=.05			.
Standard Deviation			.

Crop Code
 ZEAMX, BCOR, Zea mays, Corn = US

Rating Type
 YIELD = yield

Rating Unit
 BU = bushel

Plant-Eval Interval
 147 DP-1 = 1 ZEAMX 5-14-2018

ARM Action Codes
 $TY1 = 1.152381*[1]*(100-[2])/84.5$

University of Kentucky

CORN VARIETY

Trial ID: C18020 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: MON CORN VAR Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: GLEN MURPHY/MATT LIVESAY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: F-H fungicide
Trial Status: F one-year/final
Initiation Date: 5-14-2018 **Planned Completion Date:** 10-1-2018
Completion Date: 10-8-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: SEE TREATMENT LIST

Planting Rate, Unit: 30000 S/A	Planting Date: 5-14-2018	
Depth, Unit: 1.5 IN	Planting Method: PLANTD	planted
Row Spacing, Unit: 30 IN	Planting Equipment: FE	field equipment
	Emergence Date: 5-19-2018	
	Harvest Date: 10-8-2018	
Rows per Plot: 6	Harvested Width, Unit: 5 FT	
	Harvested Length, Unit: 135 FT	
Soil Temperature, Unit: 68 F	Harvest Equipment: MASSEY FERGUSON 8XP	
Soil Moisture: GOOD good	% Standard Moisture: 15.5	
Seed Bed: SMOOTH smooth		

University of Kentucky

Site and Design

Treated Plot Width: 15 FT
Treated Plot Length: 135 FT

Site Type: FIELD field

Treated Plot Area: 2025 FT² Treatments: 26
Replications: 1

Tillage Type: CONTIL conventional-till
Study Design: RACOBL Randomized Complete Block (RCB)

Field Prep./Maintenance:

200 UNITS NITROGEN APPLIED PRE-PLANT

Soil Description

Description Name: MAURY

% Sand: 6 % OM: 2.6 Texture: SIL silt loam
% Silt: 62 pH: 6.4 Soil Name: MAURY SILT LOAM
% Clay: 32 CEC: 18 Fert. Level: E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP

Distance, Unit: 1 MI

Application Description

	A	B
Application Date:	5-14-2018	6-4-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	V5
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	85 F	72 F
% Relative Humidity:	60	60
Wind Velocity, Unit:	3 MPH	2 MPH
Wind Direction:	SW	W
Soil Temperature, Unit:	69 F	71 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	10	20
Next Moisture Occurred On:	5-15-2018	6-10-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V5 95
Height, Unit:		10 IN

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Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8003 DG	8003 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	15 FT	15 FT
Boom Height, Unit:	30 IN	30 IN
Ground Speed, Unit:	6 MPH	6 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	18 GPA	18 GPA
Mix Size, Unit:	15 GAL	15 GAL
Propellant:	CO2	CO2
Tank Mix (Y/N):	Y yes	Y yes

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE

Trial ID: S18020
Protocol ID: DOW SOY1
Project ID:

Location: LEXINGTON, KY Trial Year: 2018
Investigator: Sara Carter
Study Director: CHARLES SLACK
Sponsor Contact: BOBBY HAYGOOD

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-31-2018	5-31-2018	5-31-2018	5-31-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	28 1	28 1	28 1	28 1
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 TRIVENCE	8 OZ/A	PRE	0	99	90	90
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
2 SONIC	6 OZ/A	PRE	0	99	85	85
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
3 ENVIVE	3.5 OZ/A	PRE	0	99	88	88
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
4 SURVEIL	3.5 OZ/A	PRE	0	96	90	90
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
5 BROADAXE XC	22 OZ/A	PRE	0	96	70	70
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	28DAP				
ROUNDUP POWERMAX	32 FL OZ/A	28DAP				

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-31-2018	5-31-2018	5-31-2018	5-31-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	28 1	28 1	28 1	28 1
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	4
6 CHECK			0	0
LSD P=.05			.	4.9
Standard Deviation			0.0	2.7
				0.0
Replicate F			0.000	2.500
Replicate Prob(F)			1.0000	0.1317
Treatment F			0.000	665.125
Treatment Prob(F)			1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-19-2018	6-19-2018	6-19-2018	6-19-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	47 14	47 14	47 14	47 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1

Trt	Treatment	Rate	Growth	5	6	7	8
No.	Name	Rate Unit	Stage				
1	TRIVENCE	8 OZ/A	PRE	0	99	99	99
	ABUNDIT EDGE	32 FL OZ/A	PRE				
	FEXAPAN	22 FL OZ/A	PRE				
	INTACT	0.5 PT/A	PRE				
	ABUNDIT EDGE	32 FL OZ/A	MP				
	FEXAPAN	22 FL OZ/A	MP				
	EVERPREX	1 PT/A	MP				
	INTACT	0.5 PT/A	MP				
2	SONIC	6 OZ/A	PRE	0	99	99	99
	ABUNDIT EDGE	32 FL OZ/A	PRE				
	FEXAPAN	22 FL OZ/A	PRE				
	INTACT	0.5 PT/A	PRE				
	ABUNDIT EDGE	32 FL OZ/A	MP				
	FEXAPAN	22 FL OZ/A	MP				
	EVERPREX	1 PT/A	MP				
	INTACT	0.5 PT/A	MP				
3	ENVIVE	3.5 OZ/A	PRE	0	99	99	99
	ABUNDIT EDGE	32 FL OZ/A	PRE				
	FEXAPAN	22 FL OZ/A	PRE				
	INTACT	0.5 PT/A	PRE				
	ABUNDIT EDGE	32 FL OZ/A	MP				
	FEXAPAN	22 FL OZ/A	MP				
	EVERPREX	1 PT/A	MP				
	INTACT	0.5 PT/A	MP				
4	SURVEIL	3.5 OZ/A	PRE	0	99	99	99
	ABUNDIT EDGE	32 FL OZ/A	PRE				
	FEXAPAN	22 FL OZ/A	PRE				
	INTACT	0.5 PT/A	PRE				
	ABUNDIT EDGE	32 FL OZ/A	MP				
	FEXAPAN	22 FL OZ/A	MP				
	EVERPREX	1 PT/A	MP				
	INTACT	0.5 PT/A	MP				
5	BROADAXE XC	22 OZ/A	PRE	0	99	95	90
	TRICOR	4 OZ/A	PRE				
	PREFIX	2 PT/A	28DAP				
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP				

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type			W Weed	W Weed	W Weed
Pest Code			SETFA	AMBTR	IPOSS
Pest Name			Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Date	6-19-2018	6-19-2018	6-19-2018	6-19-2018	6-19-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	47 14	47 14	47 14	47 14	47 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1	41 DE-1
Trt Treatment					
No. Name	Rate	Growth	5	6	7
	Rate Unit	Stage			
6 CHECK			0	0	0
LSD P=.05			.	.	.
Standard Deviation			0.0	0.0	0.0
Replicate F			0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	7-3-2018	7-3-2018	7-3-2018	7-31-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	61 28	61 28	61 28	89 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	55 DE-1	55 DE-1	55 DE-1	83 DE-1

Trt Treatment	Rate	Growth	9	10	11	12
No. Name	Rate Unit	Stage				
1 TRIVENCE	8 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
2 SONIC	6 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
3 ENVIVE	3.5 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
4 SURVEIL	3.5 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
5 BROADAXE XC	22 OZ/A	PRE	0	99	92	89
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	28DAP				
ROUNDUP POWERMAX	32 FL OZ/A	28DAP				

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	7-3-2018	7-3-2018	7-3-2018	7-31-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	61 28	61 28	61 28	89 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	55 DE-1	55 DE-1	55 DE-1	83 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	9	10
			11	12
6 CHECK			0	0
LSD P=.05			.	2.1
Standard Deviation			0.0	0.9
				0.5
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.4019
Treatment Prob(F)			1.0000	3443.176
				21371.802
				0.0001
				0.0001

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	7-31-2018	7-31-2018	7-31-2018	7-31-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	89 56	89 56	89 56	89 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	83 DE-1	83 DE-1	83 DE-1	83 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	16
1 TRIVENCE	8 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
2 SONIC	6 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
3 ENVIVE	3.5 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
4 SURVEIL	3.5 OZ/A	PRE	0	99	99	99
ABUNDIT EDGE	32 FL OZ/A	PRE				
FEXAPAN	22 FL OZ/A	PRE				
INTACT	0.5 PT/A	PRE				
ABUNDIT EDGE	32 FL OZ/A	MP				
FEXAPAN	22 FL OZ/A	MP				
EVERPREX	1 PT/A	MP				
INTACT	0.5 PT/A	MP				
5 BROADAXE XC	22 OZ/A	PRE	0	99	92	89
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	28DAP				
ROUNDUP POWERMAX	32 FL OZ/A	28DAP				

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type			W Weed	W Weed	W Weed
Pest Code			SETFA	AMBTR	IPOSS
Pest Name			Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA				
Crop Scientific Name	Glycine max				
Crop Name	Soybean				
Rating Date	7-31-2018		7-31-2018	7-31-2018	7-31-2018
Rating Type	CROP		PERCENT	PERCENT	PERCENT
Rating Unit	INJURY		CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK		8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	89 56		89 56	89 56	89 56
Trt-Eval Interval	AFTER POST		AFTER POST	AFTER POST	AFTER POST
Days After Emergence	83 DE-1		83 DE-1	83 DE-1	83 DE-1
Trt Treatment		Rate			
No. Name		Rate Unit	Growth Stage		
				13	14
					15
					16
6 CHECK				0	0
LSD P=.05				.	2.1
Standard Deviation				0.0	0.9
					1.2
					0.5
Replicate F				0.000	0.000
Replicate Prob(F)				1.0000	1.0000
Treatment F				0.000	0.000
Treatment Prob(F)				1.0000	1.0000
					3443.176
					21371.802
					0.0001
					0.0001

Could not calculate LSD (% mean diff) for columns 1,3,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE

Trial ID: S18020 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: DOW SOY1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: BOBBY HAYGOOD

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Plant-Eval Interval

29 DP-1 = 1 GLXMA 5-2-2018
48 DP-1 = 1 GLXMA 5-2-2018
62 DP-1 = 1 GLXMA 5-2-2018
90 DP-1 = 1 GLXMA 5-2-2018

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE

Trial ID: S18020 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: DOW SOY1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: BOBBY HAYGOOD

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-2-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG38X6
Description: RR2X

Planting Date: 5-2-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-9-2018

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 6
Soil Temperature, Unit: 59 F
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

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Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT² **Treatments:** 6 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: LANTON
% Sand: 7 **% OM:** 4 **Texture:** SIL silt loam
% Silt: 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM
% Clay: 30 **CEC:** 22 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

Application Description

	A	B	C
Application Date:	5-3-2018	5-30-2018	6-5-2018
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	28DAP	MP
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	78 F	75 F
% Relative Humidity:	48	72	42
Wind Velocity, Unit:	8 MPH	4 MPH	2 MPH
Wind Direction:	SW	SW	NNW
Soil Temperature, Unit:	61 F	74 F	71 F
Soil Moisture:	NORMAL	WET	GOOD
% Cloud Cover:	10	20	0
Next Moisture Occurred On:	5-4-2018	5-30-2018	6-10-2018

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	V3 95	V4 95	V4 95
Height, Unit:	6 IN	7 IN	7 IN

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:	1 IN	3 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:	2 IN	4 IN	5 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:	1 IN	2 IN	2.5 IN

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	30 IN	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA	24 GPA
Mix Size, Unit:	3 liters	3 liters	3 liters
Propellant:	CO2	CO2	CO2

Date	By	Notes
5-7-2018	SARA CARTER	OVERSPRAYED ENTIRE AREA WITH 32 FL OZ/A LIBERTY FOR BURNDOWN
5-11-2018	SARA CARTER	OVERSPRAYED ENTIRE AREA WITH 32 OZ/A ROUNDUP PLUS 2% AMS

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE II

Trial ID: S18021 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: FMC-SOY1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: MATTHEW WIGGINS

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Part Rated				
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	25 25	25 25	25 25	25 25
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1

Trt Treatment	Rate	Growth	1	2	3	4
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 AUTHORITY MAXX	5 OZ/A	PRE	0	83	87	88
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
3 AUTHORITY MTZ	14 OZ/A	PRE	0	53	72	70
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
4 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	72	70
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
5 AUTHORITY SUPREME	6.4 FL OZ/A	PRE	0	99	70	70
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	2.5 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
6 ZIDUA PRO	6 FL OZ/A	PRE	0	99	80	80
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
OUTLOOK	12 FL OZ/A	V3				
ENGENIA	12.8 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
7 VALOR SX	2 OZ/A	PRE	0	99	90	90
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
WARRANT	48 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
8 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	90	90
METRIBUZIN	6 OZ/A	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Part Rated				
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	25 25	25 25	25 25	25 25
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	4
9 ROUNDUP POWERMAX	32 FL OZ/A V3		0	99
FIERCE	3 OZ/A PRE			88
ROUNDUP POWERMAX	32 FL OZ/A PRE			
DUAL II MAGNUM	16 FL OZ/A V3			
XTENDIMAX	22 FL OZ/A V3			
ROUNDUP POWERMAX	32 FL OZ/A V3			
10 BOUNDARY	24 FL OZ/A PRE		0	99
ROUNDUP POWERMAX	32 FL OZ/A PRE			80
PREFIX	32 FL OZ/A V3			
XTENDIMAX	22 FL OZ/A V3			
ROUNDUP POWERMAX	32 FL OZ/A V3			
LSD P=.05			0.0	3.7
Standard Deviation			2.1	2.2
				1.3
				0.0
Replicate F	0.000	0.184	2.774	0.000
Replicate Prob(F)	1.0000	0.8337	0.0891	1.0000
Treatment F	0.000	702.456	1284.801	0.000
Treatment Prob(F)	1.0000	0.0001	0.0001	1.0000

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Part Rated				
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	40 14	40 14	40 14	40 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	34 DE-1	34 DE-1	34 DE-1	34 DE-1

Trt Treatment	Rate	Growth	5	6	7	8
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 AUTHORITY MAXX	5 OZ/A	PRE	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
3 AUTHORITY MTZ	14 OZ/A	PRE	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
4 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
5 AUTHORITY SUPREME	6.4 FL OZ/A	PRE	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	2.5 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
6 ZIDUA PRO	6 FL OZ/A	PRE	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
OUTLOOK	12 FL OZ/A	V3				
ENGENIA	12.8 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
7 VALOR SX	2 OZ/A	PRE	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
WARRANT	48 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
8 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	99	99
METRIBUZIN	6 OZ/A	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Part Rated				
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	40 14	40 14	40 14	40 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	34 DE-1	34 DE-1	34 DE-1	34 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	5	6	7	8
9 ROUNDUP POWERMAX FIERCE ROUNDUP POWERMAX DUAL II MAGNUM XTENDIMAX ROUNDUP POWERMAX	32 FL OZ/A V3 3 OZ/A PRE 32 FL OZ/A PRE 16 FL OZ/A V3 22 FL OZ/A V3 32 FL OZ/A V3	V3 PRE PRE V3 V3 V3	0	99	99	99
10 BOUNDARY ROUNDUP POWERMAX PREFIX XTENDIMAX ROUNDUP POWERMAX	24 FL OZ/A PRE 32 FL OZ/A PRE 32 FL OZ/A V3 22 FL OZ/A V3 32 FL OZ/A V3	PRE PRE V3 V3 V3	0	99	99	99
LSD P=.05 Standard Deviation			0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Part Rated				
Rating Date	6-26-2018	6-26-2018	6-26-2018	6-26-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	54 28	54 28	54 28	54 28
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	48 DE-1	48 DE-1	48 DE-1	48 DE-1

Trt Treatment	Rate	Growth	9	10	11	12
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 AUTHORITY MAXX	5 OZ/A	PRE	0	99	95	93
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
3 AUTHORITY MTZ	14 OZ/A	PRE	0	99	89	90
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
4 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	93	93
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
5 AUTHORITY SUPREME	6.4 FL OZ/A	PRE	0	99	87	88
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	2.5 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
6 ZIDUA PRO	6 FL OZ/A	PRE	0	99	95	95
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
OUTLOOK	12 FL OZ/A	V3				
ENGENIA	12.8 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
7 VALOR SX	2 OZ/A	PRE	0	99	93	95
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
WARRANT	48 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
8 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	99	99
METRIBUZIN	6 OZ/A	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type			W Weed	W Weed	W Weed
Pest Code			SETFA	AMBTR	IPOSS
Pest Name			Giant foxtail	Giant ragweed	Morning glory
Crop Code		GLXMA			
Crop Scientific Name		Glycine max			
Crop Name		Soybean			
Part Rated					
Rating Date		6-26-2018	6-26-2018	6-26-2018	6-26-2018
Rating Type		CROP	PERCENT	PERCENT	PERCENT
Rating Unit		INJURY	CONTROL	CONTROL	CONTROL
Rating Timing		4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.		54 28	54 28	54 28	54 28
Trt-Eval Interval		AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence		48 DE-1	48 DE-1	48 DE-1	48 DE-1
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	9	10	11
					12
9 ROUNDUP POWERMAX	32 FL OZ/A V3		0	99	95
FIERCE	3 OZ/A PRE				95
ROUNDUP POWERMAX	32 FL OZ/A PRE				
DUAL II MAGNUM	16 FL OZ/A V3				
XTENDIMAX	22 FL OZ/A V3				
ROUNDUP POWERMAX	32 FL OZ/A V3				
10 BOUNDARY	24 FL OZ/A PRE		0	99	99
ROUNDUP POWERMAX	32 FL OZ/A PRE				
PREFIX	32 FL OZ/A V3				
XTENDIMAX	22 FL OZ/A V3				
ROUNDUP POWERMAX	32 FL OZ/A V3				
LSD P=.05					2.5
Standard Deviation			0.0	0.0	1.5
					2.1
Replicate F			0.000	0.000	4.477
Replicate Prob(F)			1.0000	1.0000	0.0264
Treatment F			0.000	0.000	1249.439
Treatment Prob(F)			1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Part Rated				
Rating Date	7-24-2018	7-24-2018	7-24-2018	7-24-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	82 56	82 56	82 56	82 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	76 DE-1	76 DE-1	76 DE-1	76 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	16
1 UNTREATED CHECK			0	0	0	0
2 AUTHORITY MAXX	5 OZ/A	PRE	0	99	89	90
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
3 AUTHORITY MTZ	14 OZ/A	PRE	0	99	89	90
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
4 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	88	89
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
5 AUTHORITY SUPREME	6.4 FL OZ/A	PRE	0	99	92	93
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	2.5 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
6 ZIDUA PRO	6 FL OZ/A	PRE	0	99	95	95
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
OUTLOOK	12 FL OZ/A	V3				
ENGENIA	12.8 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
7 VALOR SX	2 OZ/A	PRE	0	99	93	95
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
WARRANT	48 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				
ROUNDUP POWERMAX	32 FL OZ/A	V3				
8 AUTHORITY ELITE	26 FL OZ/A	PRE	0	99	99	99
METRIBUZIN	6 OZ/A	PRE				
ROUNDUP POWERMAX	32 FL OZ/A	PRE				
ANTHEM MAXX	3.25 FL OZ/A	V3				
XTENDIMAX	22 FL OZ/A	V3				

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Part Rated				
Rating Date	7-24-2018	7-24-2018	7-24-2018	7-24-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	82 56	82 56	82 56	82 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	76 DE-1	76 DE-1	76 DE-1	76 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	13	14
			15	16
9 ROUNDUP POWERMAX	32 FL OZ/A V3		0	99
FIERCE	3 OZ/A PRE			95
ROUNDUP POWERMAX	32 FL OZ/A PRE			95
DUAL II MAGNUM	16 FL OZ/A V3			
XTENDIMAX	22 FL OZ/A V3			
ROUNDUP POWERMAX	32 FL OZ/A V3			
10 BOUNDARY	24 FL OZ/A PRE		0	99
ROUNDUP POWERMAX	32 FL OZ/A PRE			95
PREFIX	32 FL OZ/A V3			
XTENDIMAX	22 FL OZ/A V3			
ROUNDUP POWERMAX	32 FL OZ/A V3			
LSD P=.05				3.2
Standard Deviation			0.0	0.0
				1.9
				1.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000
				3.353
				0.0578
				730.115
				2640.978
				0.0001
				0.0001

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Part Rated
 Rating Date 10-9-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 159 133
 Trt-Eval Interval
 Days After Emergence 153 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	Yield
1	UNTREATED CHECK				6.9
2	AUTHORITY MAXX	5 OZ/A		PRE	17.4
	ROUNDUP POWERMAX	32 FL OZ/A		PRE	
	ANTHEM MAXX	3.25 FL OZ/A		V3	
	XTENDIMAX	22 FL OZ/A		V3	
	ROUNDUP POWERMAX	32 FL OZ/A		V3	
3	AUTHORITY MTZ	14 OZ/A		PRE	29.3
	ROUNDUP POWERMAX	32 FL OZ/A		PRE	
	ANTHEM MAXX	3.25 FL OZ/A		V3	
	XTENDIMAX	22 FL OZ/A		V3	
	ROUNDUP POWERMAX	32 FL OZ/A		V3	
4	AUTHORITY ELITE	26 FL OZ/A		PRE	20.6
	ROUNDUP POWERMAX	32 FL OZ/A		PRE	
	ANTHEM MAXX	3.25 FL OZ/A		V3	
	XTENDIMAX	22 FL OZ/A		V3	
	ROUNDUP POWERMAX	32 FL OZ/A		V3	
5	AUTHORITY SUPREME	6.4 FL OZ/A		PRE	22.9
	ROUNDUP POWERMAX	32 FL OZ/A		PRE	
	ANTHEM MAXX	2.5 FL OZ/A		V3	
	XTENDIMAX	22 FL OZ/A		V3	
	ROUNDUP POWERMAX	32 FL OZ/A		V3	
6	ZIDUA PRO	6 FL OZ/A		PRE	23.3
	ROUNDUP POWERMAX	32 FL OZ/A		PRE	
	OUTLOOK	12 FL OZ/A		V3	
	ENGENIA	12.8 FL OZ/A		V3	
	ROUNDUP POWERMAX	32 FL OZ/A		V3	
7	VALOR SX	2 OZ/A		PRE	26.8
	ROUNDUP POWERMAX	32 FL OZ/A		PRE	
	WARRANT	48 FL OZ/A		V3	
	XTENDIMAX	22 FL OZ/A		V3	
	ROUNDUP POWERMAX	32 FL OZ/A		V3	
8	AUTHORITY ELITE	26 FL OZ/A		PRE	21.6
	METRIBUZIN	6 OZ/A		PRE	
	ROUNDUP POWERMAX	32 FL OZ/A		PRE	
	ANTHEM MAXX	3.25 FL OZ/A		V3	
	XTENDIMAX	22 FL OZ/A		V3	

Could not calculate LSD (% mean diff) for columns 1,4,5,6,7,8,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Part Rated
 Rating Date 10-9-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 159 133
 Trt-Eval Interval
 Days After Emergence 153 DE-1

Trt	Treatment	Rate	Growth	
No.	Name	Rate Unit	Stage	20
9	ROUNDUP POWERMAX	32 FL OZ/A	V3	22.6
	FIERCE	3 OZ/A	PRE	
	ROUNDUP POWERMAX	32 FL OZ/A	PRE	
	DUAL II MAGNUM	16 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	ROUNDUP POWERMAX	32 FL OZ/A	V3	
10	BOUNDARY	24 FL OZ/A	PRE	38.1
	ROUNDUP POWERMAX	32 FL OZ/A	PRE	
	PREFIX	32 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	ROUNDUP POWERMAX	32 FL OZ/A	V3	
	LSD P=.05			12.36
	Standard Deviation			7.20
	Replicate F			0.788
	Replicate Prob(F)			0.4698
	Treatment F			3.745
	Treatment Prob(F)			0.0082

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE II

Trial ID: S18021 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: FMC-SOY1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: MATTHEW WIGGINS

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

26 DP-1 = 1 GLXMA 5-2-2018
41 DP-1 = 1 GLXMA 5-2-2018
55 DP-1 = 1 GLXMA 5-2-2018
83 DP-1 = 1 GLXMA 5-2-2018
160 DP-1 = 1 GLXMA 5-2-2018

ARM Action Codes

TY1 = $3.821053 * [18] * (100 - [19]) / 87$

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE II

Trial ID: S18021 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: FMC-SOY1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: MATTHEW WIGGINS

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 4-18-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-9-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
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City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: GLXMA Glycine max
Variety: AG38X6
Description: RR2X

Soybean

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 59 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Planting Date: 5-2-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-9-2018
Harvest Date: 10-9-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: HEGE
% Standard Moisture: 13.0

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 10
Replications: 3

Tillage Type: NOTILL no-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: LANTON

% Sand: 7 **% OM:** 4 **Texture:** SIL silt loam
% Silt: 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM
% Clay: 30 **CEC:** 22 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

University of Kentucky

Application Description

	A	B
Application Date:	5-3-2018	5-29-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	V3
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	78 F	82 F
% Relative Humidity:	65	81
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	SW	ENE
Soil Temperature, Unit:	61 F	75 F
Soil Moisture:	NORMAL	GOOD
% Cloud Cover:	10	20
Next Moisture Occurred On:	5-4-2018	5-30-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		V3 95
Height, Unit:		4 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:	1 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:	2 IN	4 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Height, Unit:	1 IN	2 IN

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA
Mix Size, Unit:	3 liters	3 liters
Propellant:	CO2	CO2

Date By Notes

University of Kentucky

4-18-2018	SARA	OVERSPRAYED WITH 2,4-D AND GLYPHOSATE PER SPONSOR REQUEST
5-7-2018	SARA	OVERSPRAYED WITH LIBERTY 32 FL OZ/A
5-11-2018	SARA	OVERSPRAYED WITH ROUNDUP POWERMAX 32 OZ/A + AMS 2.5%V/V

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE IV

Trial ID: S18023 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: SYN-SOY1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-24-2018	5-24-2018	5-24-2018	5-24-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	21 21	21 21	21 21	21 21
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	15 DE-1	15 DE-1	15 DE-1	15 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 BOUNDARY	1 QT/A	PRE	0	99	89	90
FLEXSTAR GT	3.5 PT/A	21DAY				
DUAL MAGNUM	1 PT/A	21DAY				
2 PREFIX	1 QT/A	PRE	0	99	89	90
SEQUENCE	2.5 PT/A	21DAY				
3 BOUNDARY	1 QT/A	PRE	0	99	90	90
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
4 BROADAXE XC	22 OZ/A	PRE	0	99	95	95
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
5 TAVIUM	56.5 FL OZ/A	PRE	0	99	90	90
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
6 TAVIUM	56.5 FL OZ/A	PRE	0	99	90	90
TAVIUM	56.5 FL OZ/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
7 AUTHORITY XL	7 OZ/A	PRE	0	99	95	95
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
8 VALOR XLT	3.5 OZ/A	PRE	0	99	90	90
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
LSD P=.05					1.0	.
Standard Deviation			0.0	0.0	0.6	0.0
Replicate F			0.000	0.000	0.467	0.000
Replicate Prob(F)			1.0000	1.0000	0.6365	1.0000
Treatment F			0.000	0.000	49.800	0.000
Treatment Prob(F)			1.0000	1.0000	0.0001	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,4,5,6,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-7-2018	6-7-2018	6-7-2018	6-7-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	35 14	35 14	35 14	35 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1

Trt Treatment	Rate	Growth	5	6	7	8
No. Name	Rate Unit	Stage				
1 BOUNDARY	1 QT/A	PRE	0	99	99	99
FLEXSTAR GT	3.5 PT/A	21DAY				
DUAL MAGNUM	1 PT/A	21DAY				
2 PREFIX	1 QT/A	PRE	0	99	93	95
SEQUENCE	2.5 PT/A	21DAY				
3 BOUNDARY	1 QT/A	PRE	0	99	98	98
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
4 BROADAXE XC	22 OZ/A	PRE	0	99	95	95
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
5 TAVIUM	56.5 FL OZ/A	PRE	0	99	96	96
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
6 TAVIUM	56.5 FL OZ/A	PRE	0	99	99	99
TAVIUM	56.5 FL OZ/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
7 AUTHORITY XL	7 OZ/A	PRE	0	99	95	95
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
8 VALOR XLT	3.5 OZ/A	PRE	0	99	95	95
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
LSD P=.05					2.4	1.9
Standard Deviation			0.0	0.0	1.4	1.1
Replicate F			0.000	0.000	2.882	1.615
Replicate Prob(F)			1.0000	1.0000	0.0895	0.2338
Treatment F			0.000	0.000	6.759	7.923
Treatment Prob(F)			1.0000	1.0000	0.0013	0.0006

Could not calculate LSD (% mean diff) for columns 1,2,4,5,6,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-21-2018	6-21-2018	6-21-2018	6-21-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	49 28	49 28	49 28	49 28
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	43 DE-1	43 DE-1	43 DE-1	43 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	9	10	11	12
1 BOUNDARY	1 QT/A	PRE	0	99	95	95
FLEXSTAR GT	3.5 PT/A	21DAY				
DUAL MAGNUM	1 PT/A	21DAY				
2 PREFIX	1 QT/A	PRE	0	99	89	90
SEQUENCE	2.5 PT/A	21DAY				
3 BOUNDARY	1 QT/A	PRE	0	99	95	93
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
4 BROADAXE XC	22 OZ/A	PRE	0	99	89	90
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
5 TAVIUM	56.5 FL OZ/A	PRE	0	99	83	85
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
6 TAVIUM	56.5 FL OZ/A	PRE	0	99	95	95
TAVIUM	56.5 FL OZ/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
7 AUTHORITY XL	7 OZ/A	PRE	0	99	90	89
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
8 VALOR XLT	3.5 OZ/A	PRE	0	99	85	83
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
LSD P=.05			.	.	1.8	2.3
Standard Deviation			0.0	0.0	1.0	1.3
Replicate F			0.000	0.000	3.098	3.500
Replicate Prob(F)			1.0000	1.0000	0.0769	0.0585
Treatment F			0.000	0.000	56.984	32.719
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001

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Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	7-19-2018	7-19-2018	7-19-2018	7-19-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	77 56	77 56	77 56	77 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	71 DE-1	71 DE-1	71 DE-1	71 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	16
1 BOUNDARY	1 QT/A	PRE	0	99	90	90
FLEXSTAR GT	3.5 PT/A	21DAY				
DUAL MAGNUM	1 PT/A	21DAY				
2 PREFIX	1 QT/A	PRE	0	99	85	85
SEQUENCE	2.5 PT/A	21DAY				
3 BOUNDARY	1 QT/A	PRE	0	99	89	89
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
4 BROADAXE XC	22 OZ/A	PRE	0	99	80	80
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
5 TAVIUM	56.5 FL OZ/A	PRE	0	99	75	75
PREFIX	1 QT/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
6 TAVIUM	56.5 FL OZ/A	PRE	0	99	85	85
TAVIUM	56.5 FL OZ/A	21DAY				
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
7 AUTHORITY XL	7 OZ/A	PRE	0	99	80	80
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
8 VALOR XLT	3.5 OZ/A	PRE	0	99	75	77
ROUNDUP POWERMAX	32 FL OZ/A	21DAY				
LSD P=.05					0.7	1.8
Standard Deviation			0.0	0.0	0.4	1.0
Replicate F			0.000	0.000	1.000	1.874
Replicate Prob(F)			1.0000	1.0000	0.3927	0.1900
Treatment F			0.000	0.000	595.429	82.443
Treatment Prob(F)			1.0000	1.0000	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,4,5,6,9,10,13,14 because error mean square = 0.

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-9-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 159 138
 Trt-Eval Interval
 Days After Emergence 153 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	
					20
1	BOUNDARY	1 QT/A		PRE	29.3
	FLEXSTAR GT	3.5 PT/A		21DAY	
	DUAL MAGNUM	1 PT/A		21DAY	
2	PREFIX	1 QT/A		PRE	19.2
	SEQUENCE	2.5 PT/A		21DAY	
3	BOUNDARY	1 QT/A		PRE	20.7
	PREFIX	1 QT/A		21DAY	
	ROUNDUP POWERMAX	32 FL OZ/A		21DAY	
4	BROADAXE XC	22 OZ/A		PRE	17.8
	TRICOR	4 OZ/A		PRE	
	PREFIX	2 PT/A		21DAY	
	ROUNDUP POWERMAX	32 FL OZ/A		21DAY	
5	TAVIUM	56.5 FL OZ/A		PRE	20.1
	PREFIX	1 QT/A		21DAY	
	ROUNDUP POWERMAX	32 FL OZ/A		21DAY	
6	TAVIUM	56.5 FL OZ/A		PRE	26.8
	TAVIUM	56.5 FL OZ/A		21DAY	
	ROUNDUP POWERMAX	32 FL OZ/A		21DAY	
7	AUTHORITY XL	7 OZ/A		PRE	17.4
	ROUNDUP POWERMAX	32 FL OZ/A		21DAY	
8	VALOR XLT	3.5 OZ/A		PRE	24.1
	ROUNDUP POWERMAX	32 FL OZ/A		21DAY	
	LSD P=.05				4.70
	Standard Deviation				2.69
	Replicate F				0.016
	Replicate Prob(F)				0.9842
	Treatment F				7.909
	Treatment Prob(F)				0.0006

Could not calculate LSD (% mean diff) for columns 1,2,4,5,6,9,10,13,14 because error mean square = 0.

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE IV

Trial ID: S18023 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: SYN-SOY1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: SCOTT CULLY

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

22 DP-1 = 1 GLXMA 5-2-2018
36 DP-1 = 1 GLXMA 5-2-2018
50 DP-1 = 1 GLXMA 5-2-2018
78 DP-1 = 1 GLXMA 5-2-2018
160 DP-1 = 1 GLXMA 5-2-2018

ARM Action Codes

TY1 = $3.821053 * [18] * (100 - [19]) / 87$

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE IV

Trial ID: S18023 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: SYN-SOY1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-2-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-9-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
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Investigator: Sara Carter **Title:** RESEARCH ANALYST
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Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

University of Kentucky

Crop Description

Crop 1: GLXMA Glycine max
Variety: AG38X6
Description: RR2X

Soybean

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 59 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Planting Date: 5-2-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-9-2018
Harvest Date: 10-9-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: HEGE
% Standard Moisture: 13

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT²
Replications: 3

Site Type: FIELD

field

Tillage Type: NOTILL no-till
Study Design: RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: LANTON
% Sand: 7 **% OM:** 4 **Texture:** SIL silt loam
% Silt: 63 **pH:** 6.5 **Soil Name:** LANTON SILT LOAM
% Clay: 30 **CEC:** 22 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2 MI

University of Kentucky

Application Description

	A	B
Application Date:	5-3-2018	5-24-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	21D
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	78 F
% Relative Humidity:	48	60
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	SW	SW
Soil Temperature, Unit:	61 F	73 F
Soil Moisture:	NORMAL	GOOD
% Cloud Cover:	10	20
Next Moisture Occurred On:	5-4-2018	5-28-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:	3	IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:	1 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:	2 IN	4 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Height, Unit:	1 IN	2 IN

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA
Mix Size, Unit:	3 liters	3 liters
Propellant:	CO2	CO2

Date	By	Notes
5-3-2018	SARA	ADDED 32 OZ/A LIBERTY TO PRE TREATMENTS
5-7-2018	SARA	OVERSPRAYED WITH 32 OZ/A LIBERTY

(S18023)

ARM 2018.3

University of Kentucky

5-11-2018 SARA OVERSPRAYED WITH 32 OZ/A ROUNDUP POWERMAX + AMS 2.5%V/V

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE V

Trial ID: S18024
Protocol ID: BASF-LL SOY
Project ID:

Location: LEXINGTON, KY Trial Year: 2018
Investigator: Sara Carter
Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	GLXMA				GLXMA
Crop Scientific Name	Glycine max				Glycine max
Crop Name	Soybean				Soybean
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018	6-11-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	2 WEEK
Days After First/Last Applic.	25 25	25 25	25 25	25 25	39 14
Trt-Eval Interval		BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1	33 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5
1	CHECK				0	0	0	0	0
2	ZIDUA	3.25	FL OZ/A	PRE	0	99	80	80	0
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	PREFERENCE	0.25	LB A/A	V3					
	AMS	2.5	LB/A	V3					
3	ZIDUA	3.25	FL OZ/A	PRE	0	99	85	85	0
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
4	ZIDUA	2.5	FL OZ/A	PRE	0	88	90	90	0
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
5	ZIDUA	2.5	FL OZ/A	PRE	0	90	90	90	0
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
6	ZIDUA	2	FL OZ/A	PRE	0	90	95	95	0
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
7	ZIDUA	2.5	FL OZ/A	PRE	0	88	95	95	0
	SENCOR	5	OZ WT/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
8	ZIDUA	2.5	FL OZ/A	PRE	0	80	95	95	0
	SENCOR	5	OZ WT/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	ZIDUA	2	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V4					
	AMS	2.5	LB/A	V3					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	GLXMA				GLXMA
Crop Scientific Name	Glycine max				Glycine max
Crop Name	Soybean				Soybean
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018	6-11-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK	2 WEEK
Days After First/Last Applic.	25 25	25 25	25 25	25 25	39 14
Trt-Eval Interval		BEFORE POST	BEFORE POST	BEFORE POST	AFTER POST
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1	33 DE-1

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	1	2	3	4	5
9 ZIDUA	3.25 FL OZ/A	PRE	0	85	88	88	0
LIBERTY 280	32 FL OZ/A	V3					
OUTLOOK	12.8 FL OZ/A	V3					
PREFERENCE	0.25 % V/V	V3					
AMS	2.5 LB/A	V3					
LIBERTY 280	32 FL OZ/A	V5					
PREFERENCE	0.25 % V/V	V5					
AMS	2.5 LB/A	V5					
10 ZIDUA	3.25 FL OZ/A	PRE	0	95	90	90	0
LIBERTY 280	32 FL OZ/A	V3					
PREFERENCE	0.25 % V/V	V3					
AMS	2.5 LB/A	V3					
LIBERTY 280	32 FL OZ/A	V5					
PREFERENCE	0.25 % V/V	V5					
AMS	2.5 LB/A	V5					
LSD P=.05			0.0	0.0	0.0	0.0	0.0
Standard Deviation			0.0	0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed		W Weed
Pest Code	SETFA	AMBTR	IPOSS		SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code				GLXMA	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Rating Date	6-11-2018	6-11-2018	6-11-2018	6-25-2018	6-25-2018
Rating Type	PERCENT	PERCENT	PERCENT	CROP	PERCENT
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	39 14	39 14	39 14	53 6	53 6
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	33 DE-1	33 DE-1	33 DE-1	47 DE-1	47 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	6	7	8	9	10
1	CHECK				0	0	0	0	0
2	ZIDUA	3.25	FL OZ/A	PRE	99	99	99	0	99
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	PREFERENCE	0.25	LB A/A	V3					
	AMS	2.5	LB/A	V3					
3	ZIDUA	3.25	FL OZ/A	PRE	99	99	99	0	99
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
4	ZIDUA	2.5	FL OZ/A	PRE	99	99	99	0	99
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
5	ZIDUA	2.5	FL OZ/A	PRE	99	99	99	0	99
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
6	ZIDUA	2	FL OZ/A	PRE	99	99	99	0	99
	VERDICT	5	FL OZ/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
7	ZIDUA	2.5	FL OZ/A	PRE	99	99	99	0	99
	SENCOR	5	OZ WT/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	OUTLOOK	12.8	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V3					
	AMS	2.5	LB/A	V3					
8	ZIDUA	2.5	FL OZ/A	PRE	99	99	99	0	96
	SENCOR	5	OZ WT/A	PRE					
	LIBERTY 280	32	FL OZ/A	V3					
	ZIDUA	2	FL OZ/A	V3					
	PREFERENCE	0.25	% V/V	V4					
	AMS	2.5	LB/A	V3					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	IPOSS		SETFA		
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail		
Crop Code				GLXMA			
Crop Scientific Name				Glycine max			
Crop Name				Soybean			
Rating Date	6-11-2018	6-11-2018	6-11-2018	6-25-2018	6-25-2018		
Rating Type	PERCENT	PERCENT	PERCENT	CROP	PERCENT		
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY	CONTROL		
Rating Timing	2 WEEK	2 WEEK	2 WEEK	4 WEEK	4 WEEK		
Days After First/Last Applic.	39 14	39 14	39 14	53 6	53 6		
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST		
Days After Emergence	33 DE-1	33 DE-1	33 DE-1	47 DE-1	47 DE-1		
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	6	7	8	9	10
9 ZIDUA	3.25 FL OZ/A	PRE	99	99	99	0	99
LIBERTY 280	32 FL OZ/A	V3					
OUTLOOK	12.8 FL OZ/A	V3					
PREFERENCE	0.25 % V/V	V3					
AMS	2.5 LB/A	V3					
LIBERTY 280	32 FL OZ/A	V5					
PREFERENCE	0.25 % V/V	V5					
AMS	2.5 LB/A	V5					
10 ZIDUA	3.25 FL OZ/A	PRE	99	99	99	0	99
LIBERTY 280	32 FL OZ/A	V3					
PREFERENCE	0.25 % V/V	V3					
AMS	2.5 LB/A	V3					
LIBERTY 280	32 FL OZ/A	V5					
PREFERENCE	0.25 % V/V	V5					
AMS	2.5 LB/A	V5					
LSD P=.05							2.8
Standard Deviation			0.0	0.0	0.0	0.0	1.6
Replicate F			0.000	0.000	0.000	0.000	1.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	0.3874
Treatment F			0.000	0.000	0.000	0.000	1082.667
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOSS	SETFA	AMBTR
Pest Name	Giant ragweed	Morning glory	Giant foxtail	Giant ragweed
Crop Code			GLXMA	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Rating Date	6-25-2018	6-11-2018	7-23-2018	7-23-2018
Rating Type	PERCENT	PERCENT	CROP	PERCENT
Rating Unit	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	53 6	39 14	81 34	81 34
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	47 DE-1	33 DE-1	75 DE-1	75 DE-1

Trt	Treatment	Rate	Growth	11	12	13	14	15
No.	Name	Rate Unit	Stage					
1	CHECK			0	0	0	0	0
2	ZIDUA	3.25 FL OZ/A	PRE	95	95	0	99	88
	VERDICT	5 FL OZ/A	PRE					
	LIBERTY 280	32 FL OZ/A	V3					
	PREFERENCE	0.25 LB A/A	V3					
	AMS	2.5 LB/A	V3					
3	ZIDUA	3.25 FL OZ/A	PRE	93	93	0	99	88
	VERDICT	5 FL OZ/A	PRE					
	LIBERTY 280	32 FL OZ/A	V3					
	OUTLOOK	12.8 FL OZ/A	V3					
	PREFERENCE	0.25 % V/V	V3					
	AMS	2.5 LB/A	V3					
4	ZIDUA	2.5 FL OZ/A	PRE	88	89	0	99	87
	VERDICT	5 FL OZ/A	PRE					
	LIBERTY 280	32 FL OZ/A	V3					
	PREFERENCE	0.25 % V/V	V3					
	AMS	2.5 LB/A	V3					
5	ZIDUA	2.5 FL OZ/A	PRE	95	95	0	99	89
	VERDICT	5 FL OZ/A	PRE					
	LIBERTY 280	32 FL OZ/A	V3					
	OUTLOOK	12.8 FL OZ/A	V3					
	PREFERENCE	0.25 % V/V	V3					
	AMS	2.5 LB/A	V3					
6	ZIDUA	2 FL OZ/A	PRE	93	93	0	99	88
	VERDICT	5 FL OZ/A	PRE					
	LIBERTY 280	32 FL OZ/A	V3					
	OUTLOOK	12.8 FL OZ/A	V3					
	PREFERENCE	0.25 % V/V	V3					
	AMS	2.5 LB/A	V3					
7	ZIDUA	2.5 FL OZ/A	PRE	98	98	0	99	96
	SENCOR	5 OZ WT/A	PRE					
	LIBERTY 280	32 FL OZ/A	V3					
	OUTLOOK	12.8 FL OZ/A	V3					
	PREFERENCE	0.25 % V/V	V3					
	AMS	2.5 LB/A	V3					
8	ZIDUA	2.5 FL OZ/A	PRE	95	95	0	96	93
	SENCOR	5 OZ WT/A	PRE					
	LIBERTY 280	32 FL OZ/A	V3					
	ZIDUA	2 FL OZ/A	V3					
	PREFERENCE	0.25 % V/V	V4					
	AMS	2.5 LB/A	V3					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	IPOSS		SETFA	AMBTR		
Pest Name	Giant ragweed	Morning glory		Giant foxtail	Giant ragweed		
Crop Code			GLXMA				
Crop Scientific Name			Glycine max				
Crop Name			Soybean				
Rating Date	6-25-2018	6-11-2018	7-23-2018	7-23-2018	7-23-2018		
Rating Type	PERCENT	PERCENT	CROP	PERCENT	PERCENT		
Rating Unit	CONTROL	CONTROL	INJURY	CONTROL	CONTROL		
Rating Timing	4 WEEK	4 WEEK	8 WEEK	8 WEEK	8 WEEK		
Days After First/Last Applic.	53 6	39 14	81 34	81 34	81 34		
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST		
Days After Emergence	47 DE-1	33 DE-1	75 DE-1	75 DE-1	75 DE-1		
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	11	12	13	14	15
9 ZIDUA	3.25 FL OZ/A	PRE	98	98	0	99	95
LIBERTY 280	32 FL OZ/A	V3					
OUTLOOK	12.8 FL OZ/A	V3					
PREFERENCE	0.25 % V/V	V3					
AMS	2.5 LB/A	V3					
LIBERTY 280	32 FL OZ/A	V5					
PREFERENCE	0.25 % V/V	V5					
AMS	2.5 LB/A	V5					
10 ZIDUA	3.25 FL OZ/A	PRE	99	98	0	99	99
LIBERTY 280	32 FL OZ/A	V3					
PREFERENCE	0.25 % V/V	V3					
AMS	2.5 LB/A	V3					
LIBERTY 280	32 FL OZ/A	V5					
PREFERENCE	0.25 % V/V	V5					
AMS	2.5 LB/A	V5					
LSD P=.05			3.1	3.0	.	2.8	2.2
Standard Deviation			1.8	1.7	0.0	1.6	1.3
Replicate F			1.089	2.305	0.000	1.000	1.588
Replicate Prob(F)			0.3578	0.1284	1.0000	0.3874	0.2316
Treatment F			817.746	904.163	0.000	1082.667	1510.013
Treatment Prob(F)			0.0001	0.0001	1.0000	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type	W Weed
Pest Code	IPOSS
Pest Name	Morning glory
Crop Code	
Crop Scientific Name	
Crop Name	
Rating Date	7-23-2018
Rating Type	PERCENT
Rating Unit	CONTROL
Rating Timing	8 WEEK
Days After First/Last Applic.	81 34
Trt-Eval Interval	AFTER POST
Days After Emergence	75 DE-1

Trt	Treatment	Rate	Growth	
No.	Name	Rate Unit	Stage	16
1	CHECK			0
2	ZIDUA	3.25 FL OZ/A	PRE	88
	VERDICT	5 FL OZ/A	PRE	
	LIBERTY 280	32 FL OZ/A	V3	
	PREFERENCE	0.25 LB A/A	V3	
	AMS	2.5 LB/A	V3	
3	ZIDUA	3.25 FL OZ/A	PRE	88
	VERDICT	5 FL OZ/A	PRE	
	LIBERTY 280	32 FL OZ/A	V3	
	OUTLOOK	12.8 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V3	
	AMS	2.5 LB/A	V3	
4	ZIDUA	2.5 FL OZ/A	PRE	88
	VERDICT	5 FL OZ/A	PRE	
	LIBERTY 280	32 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V3	
	AMS	2.5 LB/A	V3	
5	ZIDUA	2.5 FL OZ/A	PRE	89
	VERDICT	5 FL OZ/A	PRE	
	LIBERTY 280	32 FL OZ/A	V3	
	OUTLOOK	12.8 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V3	
	AMS	2.5 LB/A	V3	
6	ZIDUA	2 FL OZ/A	PRE	88
	VERDICT	5 FL OZ/A	PRE	
	LIBERTY 280	32 FL OZ/A	V3	
	OUTLOOK	12.8 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V3	
	AMS	2.5 LB/A	V3	
7	ZIDUA	2.5 FL OZ/A	PRE	95
	SENCOR	5 OZ WT/A	PRE	
	LIBERTY 280	32 FL OZ/A	V3	
	OUTLOOK	12.8 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V3	
	AMS	2.5 LB/A	V3	
8	ZIDUA	2.5 FL OZ/A	PRE	93
	SENCOR	5 OZ WT/A	PRE	
	LIBERTY 280	32 FL OZ/A	V3	
	ZIDUA	2 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V4	
	AMS	2.5 LB/A	V3	

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type W Weed
 Pest Code IPOSS
 Pest Name Morning glory
 Crop Code
 Crop Scientific Name
 Crop Name
 Rating Date 7-23-2018
 Rating Type PERCENT
 Rating Unit CONTROL
 Rating Timing 8 WEEK
 Days After First/Last Applic. 81 34
 Trt-Eval Interval AFTER POST
 Days After Emergence 75 DE-1

Trt	Treatment	Rate	Growth	
No.	Name	Rate Unit	Stage	16
9	ZIDUA	3.25 FL OZ/A	PRE	95
	LIBERTY 280	32 FL OZ/A	V3	
	OUTLOOK	12.8 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V3	
	AMS	2.5 LB/A	V3	
	LIBERTY 280	32 FL OZ/A	V5	
	PREFERENCE	0.25 % V/V	V5	
	AMS	2.5 LB/A	V5	
10	ZIDUA	3.25 FL OZ/A	PRE	98
	LIBERTY 280	32 FL OZ/A	V3	
	PREFERENCE	0.25 % V/V	V3	
	AMS	2.5 LB/A	V3	
	LIBERTY 280	32 FL OZ/A	V5	
	PREFERENCE	0.25 % V/V	V5	
	AMS	2.5 LB/A	V5	
	LSD P=.05			2.0
	Standard Deviation			1.2
	Replicate F			1.574
	Replicate Prob(F)			0.2344
	Treatment F			1793.684
	Treatment Prob(F)			0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13 because error mean square = 0.

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE V

Trial ID: S18024 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: BASF-LL SOY Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: GREG STAPLETON

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US

AMBTR, Ambrosia trifida, Giant ragweed = US

IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Plant-Eval Interval

26 DP-1 = 1 GLXMA 5-2-2018

40 DP-1 = 1 GLXMA 5-2-2018

54 DP-1 = 1 GLXMA 5-2-2018

82 DP-1 = 1 GLXMA 5-2-2018

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE V

Trial ID: S18024 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BASF-LL SOY Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: GREG STAPLETON

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 4-26-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
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Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: CZ3841
Description: LL

Planting Date: 5-2-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-9-2018
Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 6
Soil Temperature, Unit: 59 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

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Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 10
Replications: 3

Tillage Type: NOTILL no-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.25 MI

Application Description

	A	B	C
Application Date:	5-3-2018	5-28-2018	6-19-2018
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V3	V5
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	SARA CARTER
Air Temperature, Unit:	82 F	84 F	85 F
% Relative Humidity:	48	65	61
Wind Velocity, Unit:	8 MPH	6 MPH	4 MPH
Wind Direction:	SW	WSW	WNW
Soil Temperature, Unit:	61 F	75 F	79 F
Soil Moisture:	NORMAL	GOOD	GOOD
% Cloud Cover:	10	50	20
Next Moisture Occurred On:	5-4-2018	5-24-2018	6-20-2018

University of Kentucky

Crop Stage At Each Application

	A		B		C	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:			BBCH		BBCH	
Stage Majority, Percent:			V3	95	V5	95
Height, Unit:			4	IN	8	IN

Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W
Height, Unit:	1	IN	3	IN	5	IN
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W
Height, Unit:	2	IN	4	IN	6	IN
Pest 3 Code, Type, Scale:	IPOSS	W	IPOSS	W	IPOSS	W
Height, Unit:	1	IN	2	IN	4	IN

Application Equipment

	A		B		C	
Appl. Equipment:	ATV		ATV		BACKPACK	
Equipment Type:	ALTEVE		ALTEVE		BELSPR	
Operation Pressure, Unit:	30	PSI	30	PSI	30	PSI
Nozzle Type:	FLAT FAN		FLAT FAN		FLAT FAN	
Nozzle Size:	8004	DG	8004	DG	8004	DG
Nozzle Spacing, Unit:	20	IN	20	IN	20	IN
Boom Length, Unit:	10	FT	10	FT	10	FT
Boom Height, Unit:	30	IN	30	IN	30	IN
Ground Speed, Unit:	4	MPH	4	MPH	4	MPH
Carrier:	WATER		WATER		WATER	
Spray Volume, Unit:	24	GPA	24	GPA	24	GPA
Mix Size, Unit:	3	liters	3	liters	3	liters
Propellant:	CO2		CO2		CO2	

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE VI

Trial ID: S18025 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: DOW SOY2-LL Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: BOBBY HAYGOOD

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-30-2018	5-30-2018	5-30-2018	5-30-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	27 27	27 27	27 27	27 27
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 TRIVENCE	8 OZ/A	PRE	0	80	95	95
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
2 SURVEIL	2.8 OZ/A	PRE	0	80	95	95
METRIBUZIN	5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
3 CANOPY	2.25 OZ/A	PRE	0	90	95	95
BOUNDARY	24 FL OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
4 TRIVENCE	8 OZ/A	PRE	0	95	95	95
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
5 SURVEIL	2.8 OZ/A	PRE	0	95	95	95
METRIBUZIN	5 OZ/A	PRE				
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
6 ENVIVE	3.5 OZ/A	PRE	0	95	95	95
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
7 BROADAXE XC	22 OZ/A	PRE	0	80	90	90
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	28DAP				
ROUNDUP POWERMAX	32 FL OZ/A	28DAP				
8 CHECK			0	0	0	0
LSD P=.05			.	.	.	.
Standard Deviation			0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-13-2018	6-13-2018	6-13-2018	6-13-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	41 14	41 14	41 14	41 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1

Trt Treatment	Rate	Growth	5	6	7	8
No. Name	Rate Unit	Stage				
1 TRIVENCE	8 OZ/A	PRE	0	89	99	99
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
2 SURVEIL	2.8 OZ/A	PRE	0	89	99	99
METRIBUZIN	5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
3 CANOPY	2.25 OZ/A	PRE	0	89	99	99
BOUNDARY	24 FL OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
4 TRIVENCE	8 OZ/A	PRE	0	90	99	99
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
5 SURVEIL	2.8 OZ/A	PRE	0	99	99	99
METRIBUZIN	5 OZ/A	PRE				
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
6 ENVIVE	3.5 OZ/A	PRE	0	86	99	99
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
7 BROADAXE XC	22 OZ/A	PRE	0	99	99	99
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	28DAP				
ROUNDUP POWERMAX	32 FL OZ/A	28DAP				
8 CHECK			0	0	0	0
LSD P=.05			.	1.6	.	.
Standard Deviation			0.0	0.9	0.0	0.0
Replicate F			0.000	0.893	0.000	0.000
Replicate Prob(F)			1.0000	0.4317	1.0000	1.0000
Treatment F			0.000	3627.598	0.000	0.000
Treatment Prob(F)			1.0000	0.0001	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-27-2018	6-27-2018	6-27-2018	6-13-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	55 28	55 28	55 28	41 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	49 DE-1	49 DE-1	49 DE-1	35 DE-1

Trt Treatment	Rate	Growth	9	10	11	12
No. Name	Rate Unit	Stage				
1 TRIVENCE	8 OZ/A	PRE	0	73	93	95
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
2 SURVEIL	2.8 OZ/A	PRE	0	77	96	96
METRIBUZIN	5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
3 CANOPY	2.25 OZ/A	PRE	0	89	95	95
BOUNDARY	24 FL OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
4 TRIVENCE	8 OZ/A	PRE	0	80	93	95
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
5 SURVEIL	2.8 OZ/A	PRE	0	90	96	96
METRIBUZIN	5 OZ/A	PRE				
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
6 ENVIVE	3.5 OZ/A	PRE	0	78	95	95
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
7 BROADAXE XC	22 OZ/A	PRE	0	88	98	98
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	28DAP				
ROUNDUP POWERMAX	32 FL OZ/A	28DAP				
8 CHECK			0	0	0	0
LSD P=.05			.	12.5	4.3	4.3
Standard Deviation			0.0	7.1	2.5	2.5
Replicate F			0.000	0.907	1.687	2.306
Replicate Prob(F)			1.0000	0.4263	0.2206	0.1363
Treatment F			0.000	52.255	558.611	564.167
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	7-25-2018	7-25-2018	7-25-2018	7-25-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	83 56	83 56	83 56	83 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	77 DE-1	77 DE-1	77 DE-1	77 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	13	14	15	16
1 TRIVENCE	8 OZ/A	PRE	0	73	90	90
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
2 SURVEIL	2.8 OZ/A	PRE	0	77	90	90
METRIBUZIN	5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
3 CANOPY	2.25 OZ/A	PRE	0	89	95	93
BOUNDARY	24 FL OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
4 TRIVENCE	8 OZ/A	PRE	0	80	90	90
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
5 SURVEIL	2.8 OZ/A	PRE	0	90	89	90
METRIBUZIN	5 OZ/A	PRE				
ZIDUA	1.5 OZ/A	PRE				
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
6 ENVIVE	3.5 OZ/A	PRE	0	78	90	90
LIBERTY 280	29 FL OZ/A	28DAP				
EVERPREX	16 FL OZ/A	28DAP				
7 BROADAXE XC	22 OZ/A	PRE	0	88	95	95
TRICOR	4 OZ/A	PRE				
PREFIX	2 PT/A	28DAP				
ROUNDUP POWERMAX	32 FL OZ/A	28DAP				
8 CHECK			0	0	0	0
LSD P=.05			.	12.5	0.7	1.8
Standard Deviation			0.0	7.1	0.4	1.0
Replicate F			0.000	0.907	1.000	1.000
Replicate Prob(F)			1.0000	0.4263	0.3927	0.3927
Treatment F			0.000	52.255	18866.716	3004.429
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13 because error mean square = 0.

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE VI

Trial ID: S18025 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: DOW SOY2-LL Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: BOBBY HAYGOOD

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Plant-Eval Interval

28 DP-1 = 1 GLXMA 5-2-2018
42 DP-1 = 1 GLXMA 5-2-2018
56 DP-1 = 1 GLXMA 5-2-2018
84 DP-1 = 1 GLXMA 5-2-2018

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE VI

Trial ID: S18025 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: DOW SOY2-LL Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: BOBBY HAYGOOD

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-2-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: CZ3841
Description: LL

Planting Date: 5-2-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-9-2018

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 6
Soil Temperature, Unit: 59 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

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Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT²
Replications: 3

Site Type: FIELD

field

Tillage Type: NOTILL no-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.25 MI

Application Description

	A	B
Application Date:	5-3-2018	5-30-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	28DAP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	78 F
% Relative Humidity:	48	77
Wind Velocity, Unit:	8 MPH	5 MPH
Wind Direction:	SW	WSW
Soil Temperature, Unit:	59 F	74 F
Soil Moisture:	NORMAL	GOOD
% Cloud Cover:	10	20
Next Moisture Occurred On:	5-4-2018	5-30-2018

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Crop Stage At Each Application

	A		B
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA BSOY
Height, Unit:	4	IN	

Pest Stage At Each Application

	A		B
Pest 1 Code, Type, Scale:	SETFA	W	SETFA W
Height, Unit:	1	IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR W
Height, Unit:	2	IN	4 IN
Pest 3 Code, Type, Scale:	IPOSS	W	IPOSS W
Height, Unit:	1	IN	2 IN

Application Equipment

	A		B
Appl. Equipment:	ATV		ATV
Equipment Type:	ALTEVE		ALTEVE
Operation Pressure, Unit:	30	PSI	30 PSI
Nozzle Type:	FLAT FAN		FLAT FAN
Nozzle Size:	8004 DG		8004 DG
Nozzle Spacing, Unit:	20	IN	20 IN
Boom Length, Unit:	10	FT	10 FT
Boom Height, Unit:	30	IN	30 IN
Ground Speed, Unit:	4	MPH	4 MPH
Carrier:	WATER		WATER
Spray Volume, Unit:	24	GPA	24 GPA
Mix Size, Unit:	3	liters	3 liters
Propellant:	CO2		CO2

Date	By	Notes
5-3-2018	SARA	ADDED 32 OZ/A LIBERTY TO ALL TREATMENTS
5-7-2018	SARA	OVERSPRAYED WITH 32 OZ/A LIBERTY

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE VII

Trial ID: S18026 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: UPI-SOY-LL Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: TONY ESTES

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-28-2018	5-28-2018	5-28-2018	5-28-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	25 25	25 25	25 25	25 25
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	19 DE-1	19 DE-1	19 DE-1	19 DE-1

Trt Treatment	Rate	Growth				
No. Name	Rate Unit	Stage	1	2	3	4
1 UNTREATED			0	0	0	0
2 MOCCASIN MTZ	32 FL OZ/A	PRE	0	90	99	99
SCEPTER	2.1 OZ WT/A	PRE				
INTERLINE	32 FL OZ/A	EP				
AMS	2.5 % V/V	EP				
3 MOCCASIN MTZ	40 FL OZ/A	PRE	0	95	95	95
SCEPTER	2.1 OZ WT/A	PRE				
INTERLINE	32 FL OZ/A	EP				
AMS	2.5 % V/V	EP				
4 TRIPZIN ZC	42 FL OZ/A	PRE	0	95	95	95
SCEPTER	2.1 OZ WT/A	PRE				
INTERLINE	32 FL OZ/A	EP				
AMS	2.5 % V/V	EP				
LSD P=.05			0.0	0.0	0.0	0.0
Standard Deviation						
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13,14,16 because error mean square = 0.

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Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	GLXMA				GLXMA
Crop Scientific Name	Glycine max				Glycine max
Crop Name	Soybean				Soybean
Rating Date	6-11-2018	6-11-2018	6-11-2018	6-11-2018	6-25-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	4 WEEK
Days After First/Last Applic.	39 13	39 13	39 13	39 13	53 27
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	33 DE-1	33 DE-1	33 DE-1	33 DE-1	47 DE-1

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	5	6	7	8	9
1 UNTREATED			0	0	0	0	0
2 MOCCASIN MTZ	32 FL OZ/A	PRE	0	99	99	99	0
SCEPTER	2.1 OZ WT/A	PRE					
INTERLINE	32 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
3 MOCCASIN MTZ	40 FL OZ/A	PRE	0	99	99	99	0
SCEPTER	2.1 OZ WT/A	PRE					
INTERLINE	32 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
4 TRIPZIN ZC	42 FL OZ/A	PRE	0	99	99	99	0
SCEPTER	2.1 OZ WT/A	PRE					
INTERLINE	32 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
LSD P=.05			0.0	0.0	0.0	0.0	0.0
Standard Deviation							
Replicate F			0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13,14,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed		W Weed	
Pest Code		SETFA	AMBTR	IPOSS		SETFA	
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	
Crop Code					GLXMA		
Crop Scientific Name					Glycine max		
Crop Name					Soybean		
Rating Date		6-25-2018	6-25-2018	6-25-2018	7-23-2018	7-23-2018	
Rating Type		PERCENT	PERCENT	PERCENT	CROP	PERCENT	
Rating Unit		CONTROL	CONTROL	CONTROL	INJURY	CONTROL	
Rating Timing		4 WEEK	4 WEEK	4 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.		53 27	53 27	53 27	81 55	81 55	
Trt-Eval Interval		AFTER POST	AFTER POST	AFTER POST	AFTER POST	AFTER POST	
Days After Emergence		47 DE-1	47 DE-1	47 DE-1	75 DE-1	75 DE-1	
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	10	11	12	13	14
1 UNTREATED			0	0	0	0	0
2 MOCCASIN MTZ	32 FL OZ/A	PRE	98	96	96	0	90
SCEPTER	2.1 OZ WT/A	PRE					
INTERLINE	32 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
3 MOCCASIN MTZ	40 FL OZ/A	PRE	98	93	95	0	90
SCEPTER	2.1 OZ WT/A	PRE					
INTERLINE	32 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
4 TRIPZIN ZC	42 FL OZ/A	PRE	98	92	93	0	90
SCEPTER	2.1 OZ WT/A	PRE					
INTERLINE	32 FL OZ/A	EP					
AMS	2.5 % V/V	EP					
LSD P=.05			2.3	5.2	5.1	.	.
Standard Deviation			1.2	2.6	2.6	0.0	0.0
Replicate F			9.000	0.194	2.121	0.000	0.000
Replicate Prob(F)			0.0156	0.8290	0.2010	1.0000	1.0000
Treatment F			5365.563	959.065	1015.477	0.000	0.000
Treatment Prob(F)			0.0001	0.0001	0.0001	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13,14,16 because error mean square = 0.

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Pest Type		W Weed	W Weed		
Pest Code		AMBTR	IPOSS		
Pest Name		Giant ragweed	Morning glory		
Crop Code				GLXMA	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Rating Date		7-23-2018	7-23-2018	10-9-2018	
Rating Type		PERCENT	PERCENT	YIELD	
Rating Unit		CONTROL	CONTROL	BU	
Rating Timing		8 WEEK	8 WEEK		
Days After First/Last Applic.		81 55	81 55	159 133	
Trt-Eval Interval		AFTER POST	AFTER POST		
Days After Emergence		75 DE-1	75 DE-1	153 DE-1	
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	15	16	20
1 UNTREATED			0	0	3.3
2 MOCCASIN MTZ	32 FL OZ/A	PRE	89	90	36.5
SCEPTER	2.1 OZ WT/A	PRE			
INTERLINE	32 FL OZ/A	EP			
AMS	2.5 % V/V	EP			
3 MOCCASIN MTZ	40 FL OZ/A	PRE	87	88	44.8
SCEPTER	2.1 OZ WT/A	PRE			
INTERLINE	32 FL OZ/A	EP			
AMS	2.5 % V/V	EP			
4 TRIPZIN ZC	42 FL OZ/A	PRE	90	90	38.2
SCEPTER	2.1 OZ WT/A	PRE			
INTERLINE	32 FL OZ/A	EP			
AMS	2.5 % V/V	EP			
LSD P=.05			1.7	.	9.67
Standard Deviation			0.9	0.0	4.84
Replicate F			2.778	0.000	0.007
Replicate Prob(F)			0.1400	1.0000	0.9935
Treatment F			7888.112	0.000	44.286
Treatment Prob(F)			0.0001	1.0000	0.0002

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,13,14,16 because error mean square = 0.

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE VII

Trial ID: S18026 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: UPI-SOY-LL Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: TONY ESTES

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

26 DP-1 = 1 GLXMA 5-2-2018
40 DP-1 = 1 GLXMA 5-2-2018
54 DP-1 = 1 GLXMA 5-2-2018
82 DP-1 = 1 GLXMA 5-2-2018
160 DP-1 = 1 GLXMA 5-2-2018

ARM Action Codes

TY1 = $3.821053 * [18] * (100 - [19]) / 87$

University of Kentucky

NO TILL SOYBEAN POSTEMERGENCE VII

Trial ID: S18026 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: UPI-SOY-LL Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: TONY ESTES

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-2-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-9-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

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Crop Description

Crop 1: GLXMA Glycine max

Variety: CZ3841

Soybean

Description: LL

Planting Rate, Unit: 150000 S/A

Depth, Unit: 1.25 IN

Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 59 F

Soil Moisture: GOOD good

Seed Bed: SMOOTH smooth

Planting Date: 5-2-2018

Planting Method: PLANTD planted

Planting Equipment: FE field equipment

Emergence Date: 5-9-2018

Harvest Date: 10-9-2018

Harvested Width, Unit: 5 FT

Harvested Length, Unit: 38 FT

Harvest Equipment: HEGE

% Standard Moisture: 13.0

Pest Description

Pest 1 Type: W **Code:** SETFA *Setaria faberi*

Common Name: Giant foxtail

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*

Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea* sp.

Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT

Treated Plot Length: 44 FT

Treated Plot Area: 440 FT² **Treatments:** 4

Replications: 3

Site Type: FIELD

field

Tillage Type: NOTILL no-till

Study Design: RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6

% Silt: 62 **pH:** 6.4

% Clay: 32 **CEC:** 18

Texture: SIL silt loam

Soil Name: MAURY SILT LOAM

Fert. Level: E excellent

Soil Drainage: E excellent

Analyzed By:

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP

Distance, Unit: 2.25 MI

University of Kentucky

Application Description

	A	B
Application Date:	5-3-2018	5-29-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	EP
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	82 F
% Relative Humidity:	48	72
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	SW	WSW
Soil Temperature, Unit:	61 F	75 F
Soil Moisture:	NORMAL	GOOD
% Cloud Cover:	10	10
Next Moisture Occurred On:	5-4-2018	5-30-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:	5	IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:	1 IN	3 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:	2 IN	4 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Height, Unit:	1 IN	2 IN

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA
Mix Size, Unit:	3 liters	3 liters
Propellant:	CO2	CO2

Date	By	Notes
5-3-2018	SARA	OVERSPRAYED WITH 32 FL OZ/ACRE LIBERTY
5-7-2018	SARA	OVERSPRAYED WITH 32 FL OZ/ACRE LIBERTY

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-9-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 151 126
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	3
7 AUTHORITY MAXX	6.4 OZ WT/A	PRE	56.1
LIBERTY 280	32 FL OZ/A	V3-V5	
ANTHEM MAXX	3 FL OZ/A	V3-V5	
AMSOL	2 % V/V	V3-V5	
LL 42.22			
LSD P=.05			.
Standard Deviation			.

Crop Code
GLXMA, BSOY, Glycine max, Soybean = US

Rating Type
YIELD = yield

Rating Unit
BU = bushel

Plant-Eval Interval
152 DP-1 = 1 GLXMA 5-10-2018

ARM Action Codes
TY1 = 0.5479245*[1]*(100-[2])/87

University of Kentucky

SOYBEAN VARIETY

Trial ID: S18027 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: MON B7-01 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: DAN CHILDS

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-10-2018 **Planned Completion Date:** 10-30-2018
Completion Date: 10-9-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: GLXMA Glycine max
Variety: SEE TREATMENT LIST

Soybean

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 65 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Planting Date: 5-10-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-20-2018
Harvest Date: 10-9-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 265 FT
Harvest Equipment: HEGE
% Standard Moisture: 13.0

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Site and Design

Treated Plot Width: 15 FT
Treated Plot Length: 275 FT
Treated Plot Area: 4125 FT² **Treatments:** 7
Replications: 1

Site Type: FIELD field
Tillage Type: NOTILL no-till
Study Design: RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.5 MI

Application Description

	A	B
Application Date:	5-11-2018	6-5-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	V3-V5
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	82 F	75 F
% Relative Humidity:	62	42
Wind Velocity, Unit:	6 MPH	2 MPH
Wind Direction:	WSW	NNW
Soil Temperature, Unit:	66 F	72 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	20	0
Next Moisture Occurred On:	5-15-2018	6-10-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA	BSOY
Height, Unit:	6	IN

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Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAFAN
Nozzle Size:	8003 DG	TTI 003
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	15 FT	15 FT
Boom Height, Unit:	30 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Mix Size, Unit:	3 GAL	3 GAL
Propellant:	CO2	CO2

Date	By	Notes
5-11-2018	SARA	OVERSPRAYED WITH ROUNDUP
7-9-2018	SARA	OVERSPRAYED WITH ROUNDUP AND LIBERTY RESPECTIVELY

University of Kentucky

SOYBEAN VARIETY II

Trial ID: S18028 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: MON SB VAR Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: GLEN MURPHY

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-9-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 152 112
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt No.	Treatment Name	Rate	Growth Stage	
		Rate Unit		3
1	ROUNDUP WeatherMAX	22 FL OZ/A	EPP	64.5
	XTENDIMAX	22 FL OZ/A	EPP	
	VALOR SX	2 OZ/A	EPP	
	ROUNDUP WeatherMAX	22 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	WARRANT	3 PT/A	V3	
	AG 42X9			
2	ROUNDUP WeatherMAX	22 FL OZ/A	EPP	58.0
	XTENDIMAX	22 FL OZ/A	EPP	
	VALOR SX	2 OZ/A	EPP	
	ROUNDUP WeatherMAX	22 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	WARRANT	3 PT/A	V3	
	AG 41X8			
3	ROUNDUP WeatherMAX	22 FL OZ/A	EPP	63.6
	XTENDIMAX	22 FL OZ/A	EPP	
	VALOR SX	2 OZ/A	EPP	
	ROUNDUP WeatherMAX	22 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	WARRANT	3 PT/A	V3	
	AG 39X7			
4	ROUNDUP WeatherMAX	22 FL OZ/A	EPP	60.5
	XTENDIMAX	22 FL OZ/A	EPP	
	VALOR SX	2 OZ/A	EPP	
	ROUNDUP WeatherMAX	22 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	WARRANT	3 PT/A	V3	
	AG 38X8			
5	ROUNDUP WeatherMAX	22 FL OZ/A	EPP	66.7
	XTENDIMAX	22 FL OZ/A	EPP	
	VALOR SX	2 OZ/A	EPP	
	ROUNDUP WeatherMAX	22 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	WARRANT	3 PT/A	V3	
	AG 37X9			
6	ROUNDUP WeatherMAX	22 FL OZ/A	EPP	65.6
	XTENDIMAX	22 FL OZ/A	EPP	
	VALOR SX	2 OZ/A	EPP	
	ROUNDUP WeatherMAX	22 FL OZ/A	V3	
	XTENDIMAX	22 FL OZ/A	V3	
	WARRANT	3 PT/A	V3	
	AG 36X6			

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

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Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-9-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 152 112
 Trt-Eval Interval
 Days After Emergence 142 DE-1

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	3
7 LIBERTY 280	43 FL OZ/A	EPP	63.5
VALOR SX	2 OZ/A	EPP	
LIBERTY 280	32 FL OZ/A	V3	
ZIDUA	3.25 OZ/A	V3	
CZ 3601			
8 LIBERTY 280	43 FL OZ/A	EPP	56.9
VALOR SX	2 OZ/A	EPP	
LIBERTY 280	32 FL OZ/A	V3	
ZIDUA	3.25 OZ/A	V3	
CZ 3801			
9 LIBERTY 280	43 FL OZ/A	EPP	58.2
VALOR SX	2 OZ/A	EPP	
LIBERTY 280	32 FL OZ/A	V3	
ZIDUA	3.25 OZ/A	V3	
CZ 4222			
LSD P=.05			.
Standard Deviation			.

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

147 DP-1 = 1 GLXMA 5-15-2018

ARM Action Codes

TY1 = $0.2904 * [1] * (100 - [2]) / 87$

University of Kentucky

SOYBEAN VARIETY II

Trial ID: S18028 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: MON SB VAR Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: GLEN MURPHY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: SARA CARTER **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-10-2018 **Planned Completion Date:** 10-10-2018
Completion Date: 10-9-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: SARA CARTER **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: SEE TREATMENT LIST

Planting Rate, Unit: 150000 S/A	Planting Date: 5-15-2018
Depth, Unit: 1.5 IN	Planting Method: PLANTD planted
Row Spacing, Unit: 30 IN	Planting Equipment: FE field equipment
Rows per Plot: 6	Emergence Date: 5-20-2018
Soil Temperature, Unit: 70 F	Harvest Date: 10-9-2018
Soil Moisture: GOOD good	Harvested Width, Unit: 5 FT
Seed Bed: SMOOTH smooth	Harvested Length, Unit: 500 FT
	Harvest Equipment: HEGE
	% Standard Moisture: 13.0

University of Kentucky

Site and Design

Treated Plot Width: 15 FT
Treated Plot Length: 500 FT
Treated Plot Area: 7500 FT² **Treatments:** 9
Replications: 1

Site Type: FIELD field
Tillage Type: NOTILL no-till
Study Design: RACOBL Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.5 MI

Application Description

	A	B
Application Date:	5-10-2018	6-19-2018
Appl. Start Time:		11:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	EPP	V3
Application Placement:	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	78 F	89 F
% Relative Humidity:	60	53
Wind Velocity, Unit:	3 MPH	6 MPH
Wind Direction:	WSW	SSW
Soil Temperature, Unit:	65 F	79 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	30	10
Next Moisture Occurred On:	5-15-2018	6-20-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA	BSOY GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		V3 95
Height, Unit:		10 IN

University of Kentucky

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAFAI	FLAFAI
Nozzle Size:	TTI 003	TTI 003
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	15 FT	15 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Propellant:	CO2	CO2

Date	By	Notes
7-9-2018	SARA	OVERSPRAYED WITH ROUNDUP AND LIBERTY RESPECTIVELY

University of Kentucky

SOYBEAN VARIETY III

Trial ID: S18029 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: SYN-SOY VAR Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-10-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 149 62
 Trt-Eval Interval
 Days After Emergence 143 DE-1

Trt No.	Treatment Name	Rate	Growth Stage	
		Rate Unit		3
1	BROADAXE XC	22 FL OZ/A	PRE	54.9
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	S35-K9X			
2	BROADAXE XC	22 FL OZ/A	PRE	58.5
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	MIRAVIS TOP	13.7 FL OZ/A	R3	
	ENDIGO	4 FL OZ/A	R3	
	S35-K9X			
3	BROADAXE XC	22 FL OZ/A	PRE	51.2
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	S39-P5X			
4	BROADAXE XC	22 FL OZ/A	PRE	56.4
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	MIRAVIS TOP	13.7 FL OZ/A	R3	
	ENDIGO	4 FL OZ/A	R3	
	S39-P5X			
5	BROADAXE XC	22 FL OZ/A	PRE	53.3
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	S39-R9X			
6	BROADAXE XC	22 FL OZ/A	PRE	56.2
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	MIRAVIS TOP	13.7 FL OZ/A	R3	
	ENDIGO	4 FL OZ/A	R3	
	S39-R9X			

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-10-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 149 62
 Trt-Eval Interval
 Days After Emergence 143 DE-1

Trt	Treatment	Rate	Growth	
No.	Name	Rate Unit	Stage	3
7	BROADAXE XC	22 FL OZ/A	PRE	54.1
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	S42-B9XS			
8	BROADAXE XC	22 FL OZ/A	PRE	61.6
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	MIRAVIS TOP	13.7 FL OZ/A	R3	
	ENDIGO	4 FL OZ/A	R3	
	S42-B9XS			
9	BROADAXE XC	22 FL OZ/A	PRE	54.6
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	S43-V3X			
10	BROADAXE XC	22 FL OZ/A	PRE	69.0
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	MIRAVIS TOP	13.7 FL OZ/A	R3	
	ENDIGO	4 FL OZ/A	R3	
	S43-V3X			
11	BROADAXE XC	22 FL OZ/A	PRE	51.0
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	AG44X6			
12	BROADAXE XC	22 FL OZ/A	PRE	65.1
	TRICOR	4 OZ/A	PRE	
	PREFIX	1 QT/A	28DAP	
	ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
	XTENDIMAX	22 FL OZ/A	28DAP	
	MIRAVIS TOP	13.7 FL OZ/A	R3	
	ENDIGO	4 FL OZ/A	R3	
	AG44X6			

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

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Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-10-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 149 62
 Trt-Eval Interval
 Days After Emergence 143 DE-1

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	3
13 BROADAXE XC	22 FL OZ/A	PRE	58.8
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
S45-J3X			
14 BROADAXE XC	22 FL OZ/A	PRE	65.5
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
MIRAVIS TOP	13.7 FL OZ/A	R3	
ENDIGO	4 FL OZ/A	R3	
S45-J3X			
15 BROADAXE XC	22 FL OZ/A	PRE	63.8
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
S45-K5X			
16 BROADAXE XC	22 FL OZ/A	PRE	67.5
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
MIRAVIS TOP	13.7 FL OZ/A	R3	
ENDIGO	4 FL OZ/A	R3	
S45-K5X			
17 BROADAXE XC	22 FL OZ/A	PRE	64.3
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
S45-Z5XS			
18 BROADAXE XC	22 FL OZ/A	PRE	67.2
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
MIRAVIS TOP	13.7 FL OZ/A	R3	
ENDIGO	4 FL OZ/A	R3	
S45-Z5XS			

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Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-10-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 149 62
 Trt-Eval Interval
 Days After Emergence 143 DE-1

Trt Treatment No. Name	Rate Rate Unit	Growth Stage	
19 BROADAXE XC	22 FL OZ/A	PRE	52.6
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
AG48X8			
20 BROADAXE XC	22 FL OZ/A	PRE	61.7
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
MIRAVIS TOP	13.7 FL OZ/A	R3	
ENDIGO	4 FL OZ/A	R3	
AG48X8			
21 BROADAXE XC	22 FL OZ/A	PRE	57.0
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
A48-R2X			
22 BROADAXE XC	22 FL OZ/A	PRE	66.0
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
MIRAVIS TOP	13.7 FL OZ/A	R3	
ENDIGO	4 FL OZ/A	R3	
S48-R2X			
23 BROADAXE XC	22 FL OZ/A	PRE	61.0
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
S50-G9XS			
24 BROADAXE XC	22 FL OZ/A	PRE	66.4
TRICOR	4 OZ/A	PRE	
PREFIX	1 QT/A	28DAP	
ROUNDUP POWERMAX	32 FL OZ/A	28DAP	
XTENDIMAX	22 FL OZ/A	28DAP	
MIRAVIS TOP	13.7 FL OZ/A	R3	
ENDIGO	4 FL OZ/A	R3	
S50-G9XS			

LSD P=.05

Standard Deviation

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

Could not calculate LSD (% mean diff) for columns 3 because error mean square = 0.

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Rating Unit

BU = bushel

Plant-Eval Interval

149 DP-1 = 1 GLXMA 5-14-2018

ARM Action Codes

TY1 = $0.968 * [1] * (100 - [2]) / 87$

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SOYBEAN VARIETY III

Trial ID: S18029 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: SYN-SOY VAR Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: SCOTT CULLY

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: F/F fungicide, foliar treatment
Trial Status: F one-year/final
Initiation Date: 5-14-2018 **Planned Completion Date:** 10-30-2018
Completion Date: 10-10-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: SEE TREATMENT LIST

Planting Date: 5-14-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-20-2018
Harvest Date: 10-10-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 150 FT
Harvest Equipment: HEGE
% Standard Moisture: 13.0

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 69 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

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Site and Design

Treated Plot Width: 15 FT
Treated Plot Length: 330 FT
Treated Plot Area: 4950 FT² **Treatments:** 24 **Tillage Type:** NOTILL no-till
Replications: 1 **Study Design:** RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 1.5 MI

Application Description

	A	B	C
Application Date:	5-14-2018	6-5-2018	8-9-2018
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	28DAP	R3
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	SARA
Air Temperature, Unit:	85 F	78 F	87 F
% Relative Humidity:	65	68	48
Wind Velocity, Unit:	6 MPH	6 MPH	4 MPH
Wind Direction:	W	SW	SW
Soil Temperature, Unit:	69 F	72 F	76 F
Soil Moisture:	GOOD	GOOD	GOOD
% Cloud Cover:	20	20	70
Next Moisture Occurred On:	5-15-2018	6-10-2018	8-11-2018

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:			BBCH
Stage Majority, Percent:			R3 95
Height, Unit:		5 IN	40 IN

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Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	BACKPACK
Equipment Type:	ALTEVE	ALTEVE	BELSPR
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8003 DG	8003 DG	8003 DG
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	15 FT	15 FT	10 FT
Boom Height, Unit:	30 IN	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Mix Size, Unit:	3 GAL	3 GAL	3 GAL
Propellant:	CO2	CO2	CO2

Date	By	Notes
5-14-2018	SARA	OVERSPRAYED ENTIRE FIELD WITH ROUNDUP POWERMAX 36 OZ/A + AMS 2.5% V/V + NIS .25% V/V

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SOYBEAN POSTEMERGENCE

Trial ID: S18030 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN DTS1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail Giant ragweed Morning glory			
Crop Code	GLXMA				GLXMA
Crop Scientific Name	Glycine max				Glycine max
Crop Name	Soybean				Soybean
Rating Date	6-1-2018	6-1-2018	6-1-2018	6-1-2018	6-8-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK
Days After First/Last Applic.	7 7	7 7	7 7	7 7	14 14
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A
Days After Emergence	18 DE-1	18 DE-1	18 DE-1	18 DE-1	25 DE-1

Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	1	2	3	4	5
1 UNTREATED			0	0	0	0	0
2 ROUNDUP POWERMAX	22 FL OZ/A MP		0	90	95	90	0
XTENDIMAX	22 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
3 ROUNDUP POWERMAX	22 FL OZ/A MP		0	95	95	95	0
XTENDIMAX	22 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
CLASS ACT RIDION	0.5 % V/V MP						
4 ROUNDUP POWERMAX	22 FL OZ/A MP		0	95	95	95	0
XTENDIMAX	22 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
CLASS ACT RIDION	1 % V/V MP						
5 ROUNDUP POWERMAX	22 FL OZ/A MP		0	95	95	95	0
XTENDIMAX	22 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
AG 18047	0.5 % V/V MP						
6 ROUNDUP POWERMAX	22 FL OZ/A MP		0	95	95	95	0
XTENDIMAX	22 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
AG 18047	1 % V/V MP						
7 ROUNDUP POWERMAX	11 FL OZ/A MP		0	88	88	88	0
XTENDIMAX	11 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
8 ROUNDUP POWERMAX	11 FL OZ/A MP		0	88	88	88	0
XTENDIMAX	11 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
CLASS ACT RIDION	0.5 % V/V MP						
9 ROUNDUP POWERMAX	11 FL OZ/A MP		0	88	85	85	0
XTENDIMAX	11 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
CLASS ACT RIDION	1 % V/V MP						
10 ROUNDUP POWERMAX	11 FL OZ/A MP		0	88	85	85	0
XTENDIMAX	11 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
AG 18047	0.5 % V/V MP						

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9 because error mean square = 0.

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Pest Type		W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	IPOSS			
Pest Name		Giant foxtail	Giant ragweed	Morning glory			
Crop Code	GLXMA				GLXMA		
Crop Scientific Name	Glycine max				Glycine max		
Crop Name	Soybean				Soybean		
Rating Date	6-1-2018	6-1-2018	6-1-2018	6-1-2018	6-8-2018		
Rating Type	CROP	PERCENT	PERCENT	PERCENT	CROP		
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	INJURY		
Rating Timing	1 WEEK	1 WEEK	1 WEEK	1 WEEK	2 WEEK		
Days After First/Last Applic.	7 7	7 7	7 7	7 7	14 14		
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A		
Days After Emergence	18 DE-1	18 DE-1	18 DE-1	18 DE-1	25 DE-1		
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	1	2	3	4	5
11 ROUNDUP POWERMAX	11 FL OZ/A MP		0	90	90	90	0
XTENDIMAX	11 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
AG 18047	1 % V/V MP						
LSD P=.05		
Standard Deviation			0.0	0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed		W Weed
Pest Code	SETFA	AMBTR	IPOSS		SETFA
Pest Name	Giant foxtail	Giant ragweed	Morning glory		Giant foxtail
Crop Code				GLXMA	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Rating Date	6-8-2018	6-8-2018	6-8-2018	6-15-2018	6-15-2018
Rating Type	PERCENT	PERCENT	PERCENT	CROP	PERCENT
Rating Unit	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	14 14	14 14	14 14	21 21	21 21
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	21 DA-A	21 DA-A
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	32 DE-1	32 DE-1

Trt	Treatment	Rate	Growth	6	7	8	9	10
No.	Name	Rate Unit	Stage					
1	UNTREATED			0	0	0	0	0
2	ROUNDUP POWERMAX	22 FL OZ/A MP		90	99	98	0	80
	XTENDIMAX	22 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
3	ROUNDUP POWERMAX	22 FL OZ/A MP		90	99	99	0	90
	XTENDIMAX	22 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
	CLASS ACT RIDION	0.5 % V/V MP						
4	ROUNDUP POWERMAX	22 FL OZ/A MP		90	99	99	0	90
	XTENDIMAX	22 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
	CLASS ACT RIDION	1 % V/V MP						
5	ROUNDUP POWERMAX	22 FL OZ/A MP		92	99	99	0	89
	XTENDIMAX	22 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
	AG 18047	0.5 % V/V MP						
6	ROUNDUP POWERMAX	22 FL OZ/A MP		90	99	99	0	90
	XTENDIMAX	22 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
	AG 18047	1 % V/V MP						
7	ROUNDUP POWERMAX	11 FL OZ/A MP		81	99	98	0	83
	XTENDIMAX	11 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
8	ROUNDUP POWERMAX	11 FL OZ/A MP		83	99	99	0	83
	XTENDIMAX	11 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
	CLASS ACT RIDION	0.5 % V/V MP						
9	ROUNDUP POWERMAX	11 FL OZ/A MP		88	99	98	0	83
	XTENDIMAX	11 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
	CLASS ACT RIDION	1 % V/V MP						
10	ROUNDUP POWERMAX	11 FL OZ/A MP		87	99	98	0	80
	XTENDIMAX	11 FL OZ/A MP						
	ON TARGET	0.5 % V/V MP						
	AG 18047	0.5 % V/V MP						

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9 because error mean square = 0.

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Pest Type		W Weed	W Weed	W Weed		W Weed	
Pest Code		SETFA	AMBTR	IPOSS		SETFA	
Pest Name		Giant foxtail	Giant ragweed	Morning glory		Giant foxtail	
Crop Code					GLXMA		
Crop Scientific Name					Glycine max		
Crop Name					Soybean		
Rating Date		6-8-2018	6-8-2018	6-8-2018	6-15-2018	6-15-2018	
Rating Type		PERCENT	PERCENT	PERCENT	CROP	PERCENT	
Rating Unit		CONTROL	CONTROL	CONTROL	INJURY	CONTROL	
Rating Timing		2 WEEK	2 WEEK	2 WEEK	3 WEEK	3 WEEK	
Days After First/Last Applic.		14 14	14 14	14 14	21 21	21 21	
Trt-Eval Interval		14 DA-A	14 DA-A	14 DA-A	21 DA-A	21 DA-A	
Days After Emergence		25 DE-1	25 DE-1	25 DE-1	32 DE-1	32 DE-1	
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	6	7	8	9	10
11 ROUNDUP POWERMAX	11 FL OZ/A MP		88	99	99	0	82
XTENDIMAX	11 FL OZ/A MP						
ON TARGET	0.5 % V/V MP						
AG 18047	1 % V/V MP						
LSD P=.05			6.2	.	2.5	.	2.6
Standard Deviation			3.7	0.0	1.4	0.0	1.6
Replicate F			1.669	0.000	0.233	0.000	4.390
Replicate Prob(F)			0.2136	1.0000	0.7946	1.0000	0.0263
Treatment F			158.659	0.000	1268.945	0.000	838.226
Treatment Prob(F)			0.0001	1.0000	0.0001	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9 because error mean square = 0.

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Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOSS
Pest Name	Giant ragweed Morning glory	
Crop Code		
Crop Scientific Name		
Crop Name		
Rating Date	6-15-2018	6-15-2018
Rating Type	PERCENT	PERCENT
Rating Unit	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK
Days After First/Last Applic.	21 21	21 21
Trt-Eval Interval	21 DA-A	21 DA-A
Days After Emergence	32 DE-1	32 DE-1

Trt	Treatment	Rate	Growth		
No.	Name	Rate Unit	Stage	11	12
1	UNTREATED			0	0
2	ROUNDUP POWERMAX	22 FL OZ/A MP		99	95
	XTENDIMAX	22 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
3	ROUNDUP POWERMAX	22 FL OZ/A MP		99	96
	XTENDIMAX	22 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
	CLASS ACT RIDION	0.5 % V/V MP			
4	ROUNDUP POWERMAX	22 FL OZ/A MP		96	99
	XTENDIMAX	22 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
	CLASS ACT RIDION	1 % V/V MP			
5	ROUNDUP POWERMAX	22 FL OZ/A MP		99	99
	XTENDIMAX	22 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
	AG 18047	0.5 % V/V MP			
6	ROUNDUP POWERMAX	22 FL OZ/A MP		99	99
	XTENDIMAX	22 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
	AG 18047	1 % V/V MP			
7	ROUNDUP POWERMAX	11 FL OZ/A MP		99	98
	XTENDIMAX	11 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
8	ROUNDUP POWERMAX	11 FL OZ/A MP		99	99
	XTENDIMAX	11 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
	CLASS ACT RIDION	0.5 % V/V MP			
9	ROUNDUP POWERMAX	11 FL OZ/A MP		99	98
	XTENDIMAX	11 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
	CLASS ACT RIDION	1 % V/V MP			
10	ROUNDUP POWERMAX	11 FL OZ/A MP		99	98
	XTENDIMAX	11 FL OZ/A MP			
	ON TARGET	0.5 % V/V MP			
	AG 18047	0.5 % V/V MP			

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed
Pest Code		AMBTR	IPOSS
Pest Name		Giant ragweed Morning glory	
Crop Code			
Crop Scientific Name			
Crop Name			
Rating Date		6-15-2018	6-15-2018
Rating Type		PERCENT	PERCENT
Rating Unit		CONTROL	CONTROL
Rating Timing		3 WEEK	3 WEEK
Days After First/Last Applic.		21 21	21 21
Trt-Eval Interval		21 DA-A	21 DA-A
Days After Emergence		32 DE-1	32 DE-1

Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	11	12
11 ROUNDUP POWERMAX	11 FL OZ/A	MP	99	99
XTENDIMAX	11 FL OZ/A	MP		
ON TARGET	0.5 % V/V	MP		
AG 18047	1 % V/V	MP		
LSD P=.05			1.2	2.4
Standard Deviation			0.7	1.4
Replicate F			1.000	1.000
Replicate Prob(F)			0.3855	0.3855
Treatment F			5487.363	1351.366
Treatment Prob(F)			0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,9 because error mean square = 0.

University of Kentucky

SOYBEAN POSTEMERGENCE

Trial ID: S18030 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: WIN DTS1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: THOMAS HAYDEN

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Plant-Eval Interval

23 DP-1 = 1 GLXMA 5-9-2018
30 DP-1 = 1 GLXMA 5-9-2018
37 DP-1 = 1 GLXMA 5-9-2018

University of Kentucky

SOYBEAN POSTEMERGENCE

Trial ID: S18030 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: WIN DTS1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: THOMAS HAYDEN

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-9-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG38X6
Description: RR2X

Planting Date: 5-9-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-14-2018

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 6
Soil Temperature, Unit: 61 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

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Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 11
Replications: 3

Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP

Distance, Unit: 2.25 MI

Application Description

Application Date: 5-25-2018
Application Method: SPRAY
Application Timing: MP
Application Placement: BROFOL
Applied By: C H SLACK
Air Temperature, Unit: 86 F
% Relative Humidity: 49
Wind Velocity, Unit: 2 MPH
Wind Direction: S
Soil Temperature, Unit: 71 F
Soil Moisture: GOOD
% Cloud Cover: 40
Next Moisture Occurred On: 5-28-2018

Crop Stage At Each Application

Crop 1 Code, BBCH Scale: GLXMA BSOY
Height, Unit: 4 IN

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Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Height, Unit: 2 IN
Pest 2 Code, Type, Scale: AMBTR W
Height, Unit: 4 IN
Pest 3 Code, Type, Scale: IPOSS W
Height, Unit: 1.5 IN

Application Equipment

A

Appl. Equipment: ATV
Equipment Type: ALTEVE
Operation Pressure, Unit: 30 PSI
Nozzle Type: FLAFAI
Nozzle Size: TTI 003
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 18 GPA
Mix Size, Unit: 2.2 L
Propellant: CO2

University of Kentucky

SOYBEAN POSTEMERGENCE II

Trial ID: S18031 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: VAL-64.05 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOHN CRANMER

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-29-2018	5-29-2018	5-29-2018	5-29-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	20 4	20 4	20 4	20 4
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	15 DE-1	15 DE-1	15 DE-1	15 DE-1

Trt Treatment No. Name	Rate	Unit	Growth Stage	1	2	3	4
1 UNTREATED CHECK				0	0	0	0
2 ROUNDUP POWERMAX	32 FL OZ/A		EP	0	0	0	0
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
3 ZIDUA PRO	4.5 FL OZ/A		PRE	0	99	80	80
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
4 VALOR EZ1	2.5 FL OZ/A		PRE	0	99	80	80
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
5 FIERCE	3 OZ WT/A		PRE	0	99	88	88
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
6 FIERCE MTZ	1 PT/A		PRE	0	99	90	90
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
7 AUTHORITY MTZ	11 OZ WT/A		PRE	0	99	70	70
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
8 AUTHORITY SUPREME	7.7 FL OZ/A		PRE	0	99	70	70
SPARTAN	0.125 LB AI/A		PRE				
ZIDUA	0.125 LB AI/A		PRE				
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
9 FIERCE	3.75 OZ WT/A		PRE	0	99	95	95
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-29-2018	5-29-2018	5-29-2018	5-29-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	20 4	20 4	20 4	20 4
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	15 DE-1	15 DE-1	15 DE-1	15 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	4
10 FIERCE EZ	6 FL OZ/A	PRE	0	99
ROUNDUP POWERMAX	32 FL OZ/A	EP		90
XTENDIMAX	22 FL OZ/A	EP		
INTACT	0.5 % V/V	EP		
INDUCE	0.25 % V/V	EP		
LSD P=.05			0.0	0.0
Standard Deviation			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	34 18	34 18	34 18	34 18
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1

Trt Treatment	Rate	Unit	Growth Stage	5	6	7	8
1 UNTREATED CHECK				0	0	0	0
2 ROUNDUP POWERMAX	32 FL OZ/A	EP		0	99	99	99
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					
3 ZIDUA PRO	4.5 FL OZ/A	PRE		0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP					
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					
4 VALOR EZ1	2.5 FL OZ/A	PRE		0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP					
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					
5 FIERCE	3 OZ WT/A	PRE		0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP					
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					
6 FIERCE MTZ	1 PT/A	PRE		0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP					
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					
7 AUTHORITY MTZ	11 OZ WT/A	PRE		0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP					
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					
8 AUTHORITY SUPREME	7.7 FL OZ/A	PRE		0	99	99	99
SPARTAN	0.125 LB AI/A	PRE					
ZIDUA	0.125 LB AI/A	PRE					
ROUNDUP POWERMAX	32 FL OZ/A	EP					
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					
9 FIERCE	3.75 OZ WT/A	PRE		0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP					
XTENDIMAX	22 FL OZ/A	EP					
INTACT	0.5 % V/V	EP					
INDUCE	0.25 % V/V	EP					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	34 18	34 18	34 18	34 18
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1

Trt Treatment	Rate	Growth				
No. Name	Unit	Stage	5	6	7	8
10 FIERCE EZ	6 FL OZ/A	PRE	0	99	99	99
ROUNDUP POWERMAX	32 FL OZ/A	EP				
XTENDIMAX	22 FL OZ/A	EP				
INTACT	0.5 % V/V	EP				
INDUCE	0.25 % V/V	EP				
LSD P=.05			.	.	.	.
Standard Deviation			0.0	0.0	0.0	0.0
Replicate F			0.000	0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-26-2018	6-26-2018	6-26-2018	6-26-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	48 32	48 32	48 32	48 32
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	43 DE-1	43 DE-1	43 DE-1	43 DE-1

Trt Treatment	Rate	Unit	Growth Stage	9	10	11	12
1 UNTREATED CHECK				0	0	0	0
2 ROUNDUP POWERMAX	32 FL OZ/A		EP	0	99	90	90
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
3 ZIDUA PRO	4.5 FL OZ/A		PRE	0	99	92	90
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
4 VALOR EZ1	2.5 FL OZ/A		PRE	0	99	90	90
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
5 FIERCE	3 OZ WT/A		PRE	0	99	90	90
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
6 FIERCE MTZ	1 PT/A		PRE	0	99	90	90
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
7 AUTHORITY MTZ	11 OZ WT/A		PRE	0	99	95	90
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
8 AUTHORITY SUPREME	7.7 FL OZ/A		PRE	0	99	95	90
SPARTAN	0.125 LB AI/A		PRE				
ZIDUA	0.125 LB AI/A		PRE				
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				
9 FIERCE	3.75 OZ WT/A		PRE	0	99	95	95
ROUNDUP POWERMAX	32 FL OZ/A		EP				
XTENDIMAX	22 FL OZ/A		EP				
INTACT	0.5 % V/V		EP				
INDUCE	0.25 % V/V		EP				

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-26-2018	6-26-2018	6-26-2018	6-26-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	48 32	48 32	48 32	48 32
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	43 DE-1	43 DE-1	43 DE-1	43 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	9	10
10 FIERCE EZ	6 FL OZ/A	PRE	0	99
ROUNDUP POWERMAX	32 FL OZ/A	EP		95
XTENDIMAX	22 FL OZ/A	EP		95
INTACT	0.5 % V/V	EP		
INDUCE	0.25 % V/V	EP		
LSD P=.05			0	1.6
Standard Deviation			0.0	0.9
Replicate F			0.000	1.000
Replicate Prob(F)			1.0000	0.3874
Treatment F			0.000	3094.334
Treatment Prob(F)			1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	GLXMA				GLXMA
Crop Scientific Name	Glycine max				Glycine max
Crop Name	Soybean				Soybean
Rating Date	7-24-2018	7-24-2018	7-24-2018	7-24-2018	10-9-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	YIELD
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	76 60	76 60	76 60	76 60	153 137
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	
Days After Emergence	71 DE-1	71 DE-1	71 DE-1	71 DE-1	148 DE-1

Trt No.	Treatment Name	Rate	Unit	Growth Stage	13	14	15	16	20
1	UNTREATED CHECK				0	0	0	0	3.2
2	ROUNDUP POWERMAX	32 FL	OZ/A	EP	0	99	88	88	23.0
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					
3	ZIDUA PRO	4.5 FL	OZ/A	PRE	0	99	88	88	27.8
	ROUNDUP POWERMAX	32 FL	OZ/A	EP					
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					
4	VALOR EZ1	2.5 FL	OZ/A	PRE	0	99	88	88	26.6
	ROUNDUP POWERMAX	32 FL	OZ/A	EP					
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					
5	FIERCE	3 OZ	WT/A	PRE	0	99	88	88	24.6
	ROUNDUP POWERMAX	32 FL	OZ/A	EP					
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					
6	FIERCE MTZ	1 PT	A	PRE	0	99	88	88	23.5
	ROUNDUP POWERMAX	32 FL	OZ/A	EP					
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					
7	AUTHORITY MTZ	11 OZ	WT/A	PRE	0	99	90	90	23.6
	ROUNDUP POWERMAX	32 FL	OZ/A	EP					
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					
8	AUTHORITY SUPREME	7.7 FL	OZ/A	PRE	0	99	88	88	23.3
	SPARTAN	0.125 LB	AI/A	PRE					
	ZIDUA	0.125 LB	AI/A	PRE					
	ROUNDUP POWERMAX	32 FL	OZ/A	EP					
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					
9	FIERCE	3.75 OZ	WT/A	PRE	0	99	88	88	34.1
	ROUNDUP POWERMAX	32 FL	OZ/A	EP					
	XTENDIMAX	22 FL	OZ/A	EP					
	INTACT	0.5 %	V/V	EP					
	INDUCE	0.25 %	V/V	EP					

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed	
Pest Code		SETFA	AMBTR	IPOSS	
Pest Name		Giant foxtail	Giant ragweed	Morning glory	
Crop Code	GLXMA				GLXMA
Crop Scientific Name	Glycine max				Glycine max
Crop Name	Soybean				Soybean
Rating Date	7-24-2018	7-24-2018	7-24-2018	7-24-2018	10-9-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT	YIELD
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL	BU
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK	
Days After First/Last Applic.	76 60	76 60	76 60	76 60	153 137
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST	
Days After Emergence	71 DE-1	71 DE-1	71 DE-1	71 DE-1	148 DE-1
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	13	14	15
10 FIERCE EZ	6 FL OZ/A	PRE	0	99	90
ROUNDUP POWERMAX	32 FL OZ/A	EP			87
XTENDIMAX	22 FL OZ/A	EP			24.0
INTACT	0.5 % V/V	EP			
INDUCE	0.25 % V/V	EP			
LSD P=.05					3.1
Standard Deviation			0.0	0.0	0.0
Replicate F			0.000	0.000	0.000
Replicate Prob(F)			1.0000	1.0000	1.0000
Treatment F			0.000	0.000	0.000
Treatment Prob(F)			1.0000	1.0000	1.0000
					1.000
					0.3874
					698.707
					0.0001
					1.526
					0.2442
					27.094
					0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,12,13,14,15 because error mean square = 0.

University of Kentucky

SOYBEAN POSTEMERGENCE II

Trial ID: S18031 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: VAL-64.05 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOHN CRANMER

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

20 DP-1 = 1 GLXMA 5-9-2018
34 DP-1 = 1 GLXMA 5-9-2018
48 DP-1 = 1 GLXMA 5-9-2018
76 DP-1 = 1 GLXMA 5-9-2018
153 DP-1 = 1 GLXMA 5-9-2018

ARM Action Codes

TY1 = $3.821053 * [18] * (100 - [19]) / 87$

University of Kentucky

SOYBEAN POSTEMERGENCE II

Trial ID: S18031 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: VAL-64.05 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOHN CRANMER

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-9-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-9-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

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Crop Description

Crop 1: GLXMA Glycine max
Variety: AG38X6
Description: RR2X

Soybean

Planting Rate, Unit: 150000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 61 F
Soil Moisture: GOOD good
Seed Bed: SMOOTH smooth

Planting Date: 5-9-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: 5-14-2018
Harvest Date: 10-9-2018
Harvested Width, Unit: 5 FT
Harvested Length, Unit: 38 FT
Harvest Equipment: HEGE
% Standard Moisture: 13.0

Pest Description

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

Pest 2 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 3 Type: W **Code:** IPOSS *Ipomoea sp.*
Common Name: Morning glory

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT

Site Type: FIELD field

Treated Plot Area: 440 FT² **Treatments:** 10
Replications: 3

Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY

% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.25 MI

University of Kentucky

Application Description

	A	B
Application Date:	5-9-2018	5-25-2018
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	EP
Application Placement:	BROSOI	BROFOL
Applied By:	C H SLACK	C H SLACK
Air Temperature, Unit:	84 F	84 F
% Relative Humidity:	45	60
Wind Velocity, Unit:	8 MPH	6 MPH
Wind Direction:	SSW	SW
Soil Temperature, Unit:	61 F	71 F
Soil Moisture:	NORMAL	GOOD
% Cloud Cover:	0	20
Next Moisture Occurred On:	5-15-2018	5-28-2018

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Height, Unit:		4 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:		1 IN
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:		3 IN
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W
Height, Unit:		1 IN

Application Equipment

	A	B
Appl. Equipment:	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA
Mix Size, Unit:	3 liters	3 liters
Propellant:	CO2	CO2

University of Kentucky

SOYBEAN POSTEMERGENCE III

Trial ID: S18032 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: VAL-64.01 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOHN CRANMER

Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	IPOSS
Pest Name	Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA		
Crop Scientific Name	Glycine max		
Crop Name	Soybean		
Rating Date	5-29-2018	5-29-2018	5-29-2018
Rating Type	CROP	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	20 5	20 5	20 5
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	15 DE-1	15 DE-1	15 DE-1

Trt Treatment	Rate	Growth	1	2	3	4
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 LIBERTY 280	29 FL OZ/A	EP	0	99	80	80
AMS	2.5 LB/A	EP				
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
3 FIERCE	3 OZ WT/A	PRE	0	99	88	88
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
4 BOUNDARY	2 PT/A	PRE	0	99	80	80
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
5 AUTHORITY ELITE	25 FL OZ/A	PRE	0	99	80	80
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
6 ZIDUA PRO	4.5 FL OZ/A	PRE	0	99	88	88
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
7 FIERCE MTZ	1 PT/A	PRE	0	99	95	95
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
8 FIERCE	3.75 OZ WT/A	PRE	0	99	95	95
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
9 AUTHORITY SUPREME	7.7 FL OZ/A	PRE	0	99	80	80
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	5-29-2018	5-29-2018	5-29-2018	5-29-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	3 WEEK	3 WEEK	3 WEEK	3 WEEK
Days After First/Last Applic.	20 5	20 5	20 5	20 5
Trt-Eval Interval	BEFORE POST	BEFORE POST	BEFORE POST	BEFORE POST
Days After Emergence	15 DE-1	15 DE-1	15 DE-1	15 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	1	2
			3	4
10 FIERCE EZ	6 FL OZ/A	PRE	0	99
LIBERTY 280	29 FL OZ/A	+EP		90
SELECT MAX	6 FL OZ/A	+EP		
AMS	2.5 LB/A	+EP		
NIS	0.25 % V/V	+EP		
LSD P=.05			0.0	0.0
Standard Deviation			0.0	0.0
Replicate F			0.000	0.000
Replicate Prob(F)			1.0000	1.0000
Treatment F			0.000	0.000
Treatment Prob(F)			1.0000	1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	34 14	34 14	34 14	34 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1

Trt Treatment	Rate	Growth	5	6	7	8
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 LIBERTY 280	29 FL OZ/A	EP	0	93	99	99
AMS	2.5 LB/A	EP				
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
3 FIERCE	3 OZ WT/A	PRE	0	99	99	99
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
4 BOUNDARY	2 PT/A	PRE	0	99	99	99
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
5 AUTHORITY ELITE	25 FL OZ/A	PRE	0	99	99	99
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
6 ZIDUA PRO	4.5 FL OZ/A	PRE	0	99	99	99
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
7 FIERCE MTZ	1 PT/A	PRE	0	99	99	99
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
8 FIERCE	3.75 OZ WT/A	PRE	0	99	99	99
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
9 AUTHORITY SUPREME	7.7 FL OZ/A	PRE	0	99	99	99
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-12-2018	6-12-2018	6-12-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK
Days After First/Last Applic.	34 14	34 14	34 14	34 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	29 DE-1	29 DE-1	29 DE-1	29 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	5	6
			7	8
10 FIERCE EZ	6 FL OZ/A	PRE	0	99
LIBERTY 280	29 FL OZ/A	+EP		99
SELECT MAX	6 FL OZ/A	+EP		
AMS	2.5 LB/A	+EP		
NIS	0.25 % V/V	+EP		
LSD P=.05			1.6	
Standard Deviation			0.0	0.0
Replicate F			0.000	1.000
Replicate Prob(F)			1.0000	0.3874
Treatment F			0.000	3495.040
Treatment Prob(F)			1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-26-2018	6-26-2018	6-26-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	48 28	48 28	48 28	34 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	43 DE-1	43 DE-1	43 DE-1	29 DE-1

Trt Treatment	Rate	Growth	9	10	11	12
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 LIBERTY 280	29 FL OZ/A	EP	0	99	99	99
AMS	2.5 LB/A	EP				
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
3 FIERCE	3 OZ WT/A	PRE	0	96	93	93
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
4 BOUNDARY	2 PT/A	PRE	0	98	89	90
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
5 AUTHORITY ELITE	25 FL OZ/A	PRE	0	99	89	90
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
6 ZIDUA PRO	4.5 FL OZ/A	PRE	0	98	92	92
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
7 FIERCE MTZ	1 PT/A	PRE	0	98	92	92
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
8 FIERCE	3.75 OZ WT/A	PRE	0	96	95	95
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
9 AUTHORITY SUPREME	7.7 FL OZ/A	PRE	0	96	90	90
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	6-26-2018	6-26-2018	6-26-2018	6-12-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	4 WEEK	4 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	48 28	48 28	48 28	34 14
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	43 DE-1	43 DE-1	43 DE-1	29 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	9	10
			11	12
10 FIERCE EZ	6 FL OZ/A	PRE	0	96
LIBERTY 280	29 FL OZ/A	+EP		95
SELECT MAX	6 FL OZ/A	+EP		95
AMS	2.5 LB/A	+EP		
NIS	0.25 % V/V	+EP		
LSD P=.05			.	2.6
Standard Deviation			0.0	1.5
				2.9
				2.8
				1.7
				1.6
Replicate F			0.000	7.154
Replicate Prob(F)			1.0000	0.0052
Treatment F			0.000	1232.130
Treatment Prob(F)			1.0000	0.0001
				914.904
				972.470
				0.0001

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	7-24-2018	7-24-2018	7-24-2018	7-24-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	76 56	76 56	76 56	76 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	71 DE-1	71 DE-1	71 DE-1	71 DE-1

Trt Treatment	Rate	Growth	13	14	15	16
No. Name	Rate Unit	Stage				
1 UNTREATED CHECK			0	0	0	0
2 LIBERTY 280	29 FL OZ/A	EP	0	99	95	95
AMS	2.5 LB/A	EP				
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
3 FIERCE	3 OZ WT/A	PRE	0	96	88	88
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
4 BOUNDARY	2 PT/A	PRE	0	98	86	85
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
5 AUTHORITY ELITE	25 FL OZ/A	PRE	0	99	82	80
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
6 ZIDUA PRO	4.5 FL OZ/A	PRE	0	98	84	80
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
7 FIERCE MTZ	1 PT/A	PRE	0	98	82	80
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
8 FIERCE	3.75 OZ WT/A	PRE	0	96	83	85
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				
9 AUTHORITY SUPREME	7.7 FL OZ/A	PRE	0	96	80	80
LIBERTY 280	29 FL OZ/A	+EP				
SELECT MAX	6 FL OZ/A	+EP				
AMS	2.5 LB/A	+EP				
NIS	0.25 % V/V	+EP				

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOSS
Pest Name		Giant foxtail	Giant ragweed	Morning glory
Crop Code	GLXMA			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	7-24-2018	7-24-2018	7-24-2018	7-24-2018
Rating Type	CROP	PERCENT	PERCENT	PERCENT
Rating Unit	INJURY	CONTROL	CONTROL	CONTROL
Rating Timing	8 WEEK	8 WEEK	8 WEEK	8 WEEK
Days After First/Last Applic.	76 56	76 56	76 56	76 56
Trt-Eval Interval	AFTER POST	AFTER POST	AFTER POST	AFTER POST
Days After Emergence	71 DE-1	71 DE-1	71 DE-1	71 DE-1
Trt Treatment	Rate	Growth		
No. Name	Rate Unit	Stage	13	14
			15	16
10 FIERCE EZ	6 FL OZ/A	PRE	0	96
LIBERTY 280	29 FL OZ/A	+EP		95
SELECT MAX	6 FL OZ/A	+EP		95
AMS	2.5 LB/A	+EP		
NIS	0.25 % V/V	+EP		
LSD P=.05			.	2.6
Standard Deviation			0.0	1.5
				3.5
				2.0
				0.0
Replicate F			0.000	7.154
Replicate Prob(F)			1.0000	0.0052
Treatment F			0.000	1232.130
Treatment Prob(F)			1.0000	0.0001
				551.873
				0.000
				1.0000

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type
 Pest Code
 Pest Name
 Crop Code GLXMA
 Crop Scientific Name Glycine max
 Crop Name Soybean
 Rating Date 10-9-2018
 Rating Type YIELD
 Rating Unit BU
 Rating Timing
 Days After First/Last Applic. 153 133
 Trt-Eval Interval
 Days After Emergence 148 DE-1

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	Yield
					20
1	UNTREATED CHECK				2.0
2	LIBERTY 280	29 FL OZ/A	EP		41.7
	AMS	2.5 LB/A	EP		
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		
3	FIERCE	3 OZ WT/A	PRE		19.9
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		
4	BOUNDARY	2 PT/A	PRE		18.1
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		
5	AUTHORITY ELITE	25 FL OZ/A	PRE		16.7
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		
6	ZIDUA PRO	4.5 FL OZ/A	PRE		19.6
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		
7	FIERCE MTZ	1 PT/A	PRE		26.9
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		
8	FIERCE	3.75 OZ WT/A	PRE		22.2
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		
9	AUTHORITY SUPREME	7.7 FL OZ/A	PRE		17.6
	LIBERTY 280	29 FL OZ/A	+EP		
	SELECT MAX	6 FL OZ/A	+EP		
	AMS	2.5 LB/A	+EP		
	NIS	0.25 % V/V	+EP		

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,7,8,9,13,16 because error mean square = 0.

University of Kentucky

Pest Type	
Pest Code	
Pest Name	
Crop Code	GLXMA
Crop Scientific Name	Glycine max
Crop Name	Soybean
Rating Date	10-9-2018
Rating Type	YIELD
Rating Unit	BU
Rating Timing	
Days After First/Last Applic.	153 133
Trt-Eval Interval	
Days After Emergence	148 DE-1

Trt Treatment	Rate	Growth	
No. Name	Rate Unit	Stage	20
10 FIERCE EZ	6 FL OZ/A	PRE	16.8
LIBERTY 280	29 FL OZ/A	+EP	
SELECT MAX	6 FL OZ/A	+EP	
AMS	2.5 LB/A	+EP	
NIS	0.25 % V/V	+EP	
LSD P=.05			3.09
Standard Deviation			1.80

Replicate F	2.709
Replicate Prob(F)	0.0936
Treatment F	90.015
Treatment Prob(F)	0.0001

University of Kentucky

SOYBEAN POSTEMERGENCE III

Trial ID: S18032 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: VAL-64.01 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOHN CRANMER

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
AMBTR, Ambrosia trifida, Giant ragweed = US
IPOSS, Ipomoea sp., Morning glory = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

Plant-Eval Interval

20 DP-1 = 1 GLXMA 5-9-2018
34 DP-1 = 1 GLXMA 5-9-2018
48 DP-1 = 1 GLXMA 5-9-2018
76 DP-1 = 1 GLXMA 5-9-2018
153 DP-1 = 1 GLXMA 5-9-2018

ARM Action Codes

TY1 = $3.821053 * [18] * (100 - [19]) / 87$

University of Kentucky

SOYBEAN POSTEMERGENCE III

Trial ID: S18032 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: VAL-64.01 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOHN CRANMER

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-9-2018 **Planned Completion Date:** 10-15-2018
Completion Date: 10-9-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

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Crop Description

Soybean

Crop 1: GLXMA Glycine max

Variety: DYNAGRO S42LL63

Description: LL

Planting Rate, Unit: 150000 S/A

Depth, Unit: 1.25 IN

Row Spacing, Unit: 30 IN

Rows per Plot: 6

Soil Temperature, Unit: 61 F

Soil Moisture: GOOD good

Seed Bed: SMOOTH smooth

Planting Date: 5-9-2018

Planting Method: PLANTD planted

Emergence Date: 5-14-2018

Harvest Date: 10-9-2018

Harvested Width, Unit: 5 FT

Harvested Length, Unit: 38 FT

Harvest Equipment: HEGE

% Standard Moisture: 13.0

Pest Description

Pest 1 Type: W Code: SETFA Setaria faberi

Common Name: Giant foxtail

Pest 2 Type: W Code: AMBTR Ambrosia trifida

Common Name: Giant ragweed

Pest 3 Type: W Code: IPOSS Ipomoea sp.

Common Name: Morning glory

Site and Design

Site Type: FIELD field

Treated Plot Width: 10 FT

Treated Plot Length: 44 FT

Treated Plot Area: 440 FT2 Treatments: 10

Replications: 3

Tillage Type: CONTIL conventional-till

Study Design: RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY

% Sand: 6 % OM: 2.6

Texture: SIL silt loam

% Silt: 62 pH: 6.4

Soil Name: MAURY SILT LOAM

% Clay: 32 CEC: 18

Fert. Level: E excellent

Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal

Closest Weather Station: SPINDLETOP

Distance, Unit: 2.5 MI

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Application Description

	A	B	C
Application Date:	5-9-2018	5-24-2018	5-29-2018
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	+EP
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	C H SLACK	C H SLACK	C H SLACK
Air Temperature, Unit:	84 F	78 F	82 F
% Relative Humidity:	45	68	82
Wind Velocity, Unit:	8 MPH	6 MPH	6 MPH
Wind Direction:	SSW	SW	SE
Soil Temperature, Unit:	61 F	71 F	74 F
Soil Moisture:	NORMAL	GOOD	GOOD
% Cloud Cover:	0	10	20
Next Moisture Occurred On:	5-15-2018	5-28-2018	5-30-2018

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Height, Unit:	4 IN	5 IN	

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:	2 IN	2.5 IN	
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:	4 IN	4 IN	
Pest 3 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Height, Unit:	1 IN	1.5 IN	

Application Equipment

	A	B	C
Appl. Equipment:	ATV	ATV	ATV
Equipment Type:	ALTEVE	ALTEVE	ALTEVE
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8004 DG	8004 DG	8004 DG
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	30 IN	30 IN	30 IN
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	24 GPA	24 GPA	24 GPA
Mix Size, Unit:	3 liters	3 liters	3 liters
Propellant:	CO2	CO2	CO2

Trt No Treatment Application Comment

2 APPLIED +EP 6/13/18

University of Kentucky

NON CROP BARE GROUND

Trial ID: NC18001 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BAYER-NC1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOSHUA JONES

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMACH	IPOSS	SETFA
Pest Name	Giant foxtail	Giant ragweed	Smooth pigweed	Morning glory	Giant foxtail
Crop Code					
Crop Scientific Name					
Crop Name					
Rating Date	5-24-2018	5-24-2018	5-24-2018	5-24-2018	5-31-2018
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	2 WEEK	2 WEEK	2 WEEK	2 WEEK	3 WEEK
Days After First/Last Applic.	14 14	14 14	14 14	14 14	21 21
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	21 DA-A
Days After Emergence					

Trt No.	Treatment Name	Rate Unit	Growth Stage	1	2	3	4	5
1	UNTREATED			0	0	0	0	0
2	BALANCE BEAN	2 OZ/A PRE		95	95	98	95	95
3	BALANCE BEAN	3 OZ/A PRE		95	99	99	90	95
4	CALLISTO	5 OZ/A PRE		75	99	95	99	70
5	SENCOR	8 OZ/A PRE		20	70	95	99	18
6	ZIDUA	1.5 OZ/A PRE		99	94	95	70	99
7	DUAL II MAGNUM	21 OZ/A PRE		99	70	99	99	99
8	WARRANT	48 OZ/A PRE		99	50	90	70	99
9	SPARTAN	6 OZ/A PRE		95	95	99	95	90
10	REFLEX	16 OZ/A PRE		95	90	99	95	95
11	VALOR SX	2 OZ/A PRE		95	95	85	95	95
12	XTENDIMAX	22 OZ/A PRE		20	85	99	85	20
13	ENLIST ONE	2 PT/A PRE		85	90	99	90	80
14	OUTLOOK	13 OZ/A PRE		99	70	90	70	99
15	SHARPEN	1 OZ/A PRE		20	70	95	70	20
16	BOUNDARY	32 OZ/A PRE		99	85	95	70	99
	LSD P=.05			.	3.4	1.0	.	4.3
	Standard Deviation			0.0	2.0	0.6	0.0	2.6
	Replicate F			0.000	1.000	1.000	0.000	1.000
	Replicate Prob(F)			1.0000	0.3798	0.3798	1.0000	0.3798
	Treatment F			0.000	466.302	5274.263	0.000	578.855
	Treatment Prob(F)			1.0000	0.0001	0.0001	1.0000	0.0001

Could not calculate LSD (% mean diff) for columns 1,4 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	AMACH	IPOSS	SETFA	AMBTR
Pest Name	Giant ragweed	Smooth pigweed	Morning glory	Giant foxtail	Giant ragweed
Crop Code					
Crop Scientific Name					
Crop Name					
Rating Date	5-31-2018	5-31-2018	5-31-2018	6-7-2018	6-7-2018
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Timing	3 WEEK	3 WEEK	3 WEEK	4 WEEK	4 WEEK
Days After First/Last Applic.	21 21	21 21	21 21	28 28	28 28
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	28 DA-A	28 DA-A
Days After Emergence					

Trt Treatment No. Name	Rate Unit	Growth Stage	6	7	8	9	10
1 UNTREATED			0	0	0	0	0
2 BALANCE BEAN	2 OZ/A PRE		95	91	93	89	88
3 BALANCE BEAN	3 OZ/A PRE		96	94	89	95	95
4 CALLISTO	5 OZ/A PRE		96	95	93	57	92
5 SENCOR	8 OZ/A PRE		73	95	93	18	73
6 ZIDUA	1.5 OZ/A PRE		87	95	73	98	84
7 DUAL II MAGNUM	21 OZ/A PRE		80	99	96	99	83
8 WARRANT	48 OZ/A PRE		57	99	70	99	63
9 SPARTAN	6 OZ/A PRE		95	99	95	90	88
10 REFLEX	16 OZ/A PRE		90	95	90	92	90
11 VALOR SX	2 OZ/A PRE		95	88	90	95	93
12 XTENDIMAX	22 OZ/A PRE		85	95	85	20	85
13 ENLIST ONE	2 PT/A PRE		90	95	90	77	88
14 OUTLOOK	13 OZ/A PRE		70	99	70	99	73
15 SHARPEN	1 OZ/A PRE		70	99	70	20	73
16 BOUNDARY	32 OZ/A PRE		87	99	70	99	82
LSD P=.05			4.7	6.3	4.1	7.2	8.0
Standard Deviation			2.8	3.8	2.4	4.3	4.8
Replicate F			0.103	1.966	0.137	0.475	1.284
Replicate Prob(F)			0.9023	0.1577	0.8728	0.6267	0.2918
Treatment F			220.812	123.916	278.316	206.731	67.268
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,4 because error mean square = 0.

University of Kentucky

Pest Type	W Weed	W Weed
Pest Code	AMACH	IPOSS
Pest Name	Smooth pigweed	Morning glory
Crop Code		
Crop Scientific Name		
Crop Name		
Rating Date	6-7-2018	6-7-2018
Rating Type	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT
Rating Timing	4 WEEK	4 WEEK
Days After First/Last Applic.	28 28	28 28
Trt-Eval Interval	28 DA-A	28 DA-A
Days After Emergence		

Trt No.	Treatment Name	Rate	Growth Unit	Stage	11	12
1	UNTREATED				0	0
2	BALANCE BEAN	2 OZ/A	PRE		83	86
3	BALANCE BEAN	3 OZ/A	PRE		88	89
4	CALLISTO	5 OZ/A	PRE		92	90
5	SENCOR	8 OZ/A	PRE		88	85
6	ZIDUA	1.5 OZ/A	PRE		92	78
7	DUAL II MAGNUM	21 OZ/A	PRE		96	89
8	WARRANT	48 OZ/A	PRE		90	70
9	SPARTAN	6 OZ/A	PRE		96	92
10	REFLEX	16 OZ/A	PRE		95	89
11	VALOR SX	2 OZ/A	PRE		95	90
12	XTENDIMAX	22 OZ/A	PRE		79	85
13	ENLIST ONE	2 PT/A	PRE		92	88
14	OUTLOOK	13 OZ/A	PRE		95	73
15	SHARPEN	1 OZ/A	PRE		82	73
16	BOUNDARY	32 OZ/A	PRE		96	73
	LSD P=.05				7.1	6.6
	Standard Deviation				4.2	4.0
	Replicate F				6.766	1.423
	Replicate Prob(F)				0.0038	0.2567
	Treatment F				90.858	93.642
	Treatment Prob(F)				0.0001	0.0001

Could not calculate LSD (% mean diff) for columns 1,4 because error mean square = 0.

University of Kentucky

NON CROP BARE GROUND

Trial ID: NC18001 Location: LEXINGTON, KY Trial Year: 2018
Protocol ID: BAYER-NC1 Investigator: Sara Carter
Project ID: Study Director: CHARLES SLACK
Sponsor Contact: JOSHUA JONES

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US

AMBTR, Ambrosia trifida, Giant ragweed = US

AMACH, Amaranthus hybridus, Smooth pigweed = US

IPOSS, Ipomoea sp., Morning glory = US

Rating Unit

PERCENT = percent

University of Kentucky

NON CROP BARE GROUND

Trial ID: NC18001 Location: LEXINGTON, KY Trial Year: 2018
 Protocol ID: BAYER-NC1 Investigator: Sara Carter
 Project ID: Study Director: CHARLES SLACK
 Sponsor Contact: JOSHUA JONES

General Trial Information

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Investigator: Sara Carter **Title:** RESEARCH ANALYST

Discipline: H herbicide
Trial Status: F one-year/final
Initiation Date: 5-10-2018
Completion Date: 8-1-2018

Trial Location

City: LEXINGTON **Country:** USA United States
State/Prov.: KENTUCKY
Postal Code: 40511

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: CHARLES SLACK **Title:** RESEARCH SPECIALIST
Organization: UNIVERSITY OF KENTUCKY
Address: 415 PLANT SCIENCE BUILDING **Phone No.:** 859-218-0747
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-227-3355
Postal Code: 40546-0312 **E-mail:** cslack@uky.edu

Investigator: Sara Carter **Title:** RESEARCH ANALYST
Organization: UNIVERSITY OF KENTUCKY
Address: 105 PLANT SCIENCE BUILDING **Phone No.:** 859-259-1914
City+State/Prov: LEXINGTON, KY **Mobile No.:** 859-559-6710
Postal Code: 40546-0312 **E-mail:** sara.carter@uky.edu

Pest Description

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

Pest 2 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 3 Type: W **Code:** AMACH Amaranthus hybridus
Common Name: Smooth pigweed

Pest 4 Type: W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory

University of Kentucky

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 44 FT
Treated Plot Area: 440 FT² **Treatments:** 16
Replications: 3

Site Type: FIELD field
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MAURY
% Sand: 6 **% OM:** 2.6 **Texture:** SIL silt loam
% Silt: 62 **pH:** 6.4 **Soil Name:** MAURY SILT LOAM
% Clay: 32 **CEC:** 18 **Fert. Level:** E excellent
Soil Drainage: E excellent

Moisture and Weather Conditions

Overall Moisture Conditions: ABONOR above normal
Closest Weather Station: SPINDLETOP **Distance, Unit:** 2.5 MI

Application Description

A
Application Date: 5-10-2018
Application Method: SPRAY
Application Timing: PRE
Application Placement: BROSOI
Applied By: C H SLACK
Air Temperature, Unit: 80 F
% Relative Humidity: 45
Wind Velocity, Unit: 5 MPH
Wind Direction: SW
Soil Temperature, Unit: 63 F
Soil Moisture: GOOD
% Cloud Cover: 10
Next Moisture Occurred On: 5-15-2018

Pest Stage At Each Application

A
Pest 1 Code, Type, Scale: SETFA W
Pest 2 Code, Type, Scale: AMBTR W
Pest 3 Code, Type, Scale: AMACH W
Pest 4 Code, Type, Scale: IPOSS W

University of Kentucky

Application Equipment

A

Appl. Equipment: ATV
Equipment Type: ALTEVE
Operation Pressure, Unit: 30 PSI
Nozzle Type: FLAT FAN
Nozzle Size: 8004 DG
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 10 FT
Boom Height, Unit: 30 IN
Ground Speed, Unit: 4 MPH
Carrier: WATER
Spray Volume, Unit: 24 GPA
Mix Size, Unit: 3 L
Propellant: CO2